

HISTORY OF
PSYCHIATRY AND
MEDICAL
PSYCHOLOGY

Edwin R. Wallace IV

John Gach

EDITORS

History of Psychiatry and Medical Psychology

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With an Epilogue on Psychiatry and the
Mind-Body Relation

Edited by

Edwin R. Wallace, IV, MA, MD, MACPsych

University of South Carolina

Columbia, SC

and

John Gach

Randallstown, MD



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Edwin R. Wallace, IV
University of South Carolina
Columbia, SC, USA

John Gach
Randallstown, MD, USA

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*In Memoriam to Three Master Psychiatrists and
Historians of Their Discipline*

Stanley Jackson, M.D. (1921–2000)
Professor Emeritus of Psychiatry and History, and the
History of Medicine, Yale University

George Mora, M.D. (1923–2006)
Medical Director, Astor Home for Children,
Rhinebeck, NY

Herbert Weiner, M.D., Dr. med (hon.) (1921–2002)
Professor Emeritus UCLA Neuropsychiatric Institute

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Preface

Most of the prefatory issues are extensively elaborated upon in the Prolegomenon, which also contains the complete references to the texts and authors discussed below.

Nevertheless, the “Preface” would be grossly incomplete without touching on some of these issues, books, and scholars. Too, many of this book’s chapters (e.g., Mora’s, Marx’s, D. B. Weiner’s) examine and “reference” important earlier, as well as contemporary, general histories of psychiatry and specialized monographs; in German, French, Italian, and Spanish. Also, in his 1968 *Short History of Psychiatry*, discussed below, Ackerknecht (pp. xi–xii) references important nineteenth and earlier-twentieth century psychiatric histories in English, French, and German. Such citations will of course not be repeated here. Finally, thanks to several publishers’ re-editions of dozens of classical psychiatric texts; one can consult their bibliographies as well. See “Prolegomenon” for references to these splendid series.

In a rough-and-ready sense, medical history began in classical Greece—for example, *On Ancient Medicine*. While traditionally included in the Hippocratic corpus, this text seems more likely to have been written by a non- or even anti-Hippocratic doctor. Moreover, the Hippocratic and other schools were hardly as secular as we now suppose. *On Epilepsy*, for example, does not so much declare the prevalent denotation of it as the “sacred disease” erroneous as it does that it is no more nor less sacred than any other disease. Historical and archaeological studies of ancient Egyptian, Mesopotamian, Indian, Chinese, and Greek medicines confirm that they arose first, from a common root with animism and magic; and then from a close association with religion and the priesthood. Latter nineteenth and twentieth century cultural anthropologists have found this to be the case in contemporary nonliterate societies as well. The first medicine to begin secularizing was Chinese—in the immediate post-Confucian period. Moreover, a propos Western medical historians’ emphasis on the ancient Near East, Greece, and Rome, it is significant that Indian surgery led the world for quite some time—and that Indian doctors used the rauwolfia root (i.e., today’s antipsychotic and antihypertensive “reserpine”) to treat certain cases of madness.

Otherwise, the first medical “histories” were simple chronicles of lives of the great doctors and the movements they founded—often in prefaces or introductions to particular treatises or textbooks. In the history of medical psychology this was the case as well (see Marx’s chapters for nineteenth century German examples). These nineteenth century psychiatrist/historians combed the prior medical psychological literature for alleged “anticipators”—that is, “justifiers”—of their own particular orientations. Hence their particular psychiatric lens colored their interpretations of earlier doctors and texts; as opposed to the Rankian historian’s attempt to first enter into and appreciate the earlier figure’s mind-set and text in its own right before attempting to establish the relationship between prior trends, workers, and texts to recent and present ones. D. D. Davis, M.D., who translated Pinel’s *Treatise on Insanity* into English in 1806, appended a 40-page historical “Introduction” to his translation. The “Introduction” in Esquirol’s two-volume textbook surpasses the historiography of most of those of his predecessors; and in 1869 René Semelaigne published what might be called the first true history of the field. The long-lived Semelaigne would write subsequent historical books—including several biographical anthologies. In England, Daniel Hack Tuke did a volume of admirable essays on the subject in 1882. However, as with history generally, it was the German-speaking lands that pioneered in medical/psychiatric history. Physicians were first rigorously educated in the 13-year *Gymnasia*: in history, philosophy and its history, literature, and in the ancient (Greek and Latin) and several modern foreign languages—as well as of course in mathematics and natural philosophy or science.

In the premedical part of their university curricula they studied some medical history, or pursued intensive training in it throughout their medical educations—in institutes for the history of medicine such as

Karl Sudhoff's in Leipzig. They also pursued hard-nosed medical basic and clinical science training; but they had the humanistic skills to do first-class archivally-based historical research in the original languages and sources too. And a fair percentage of students did their M.D. theses in medical history.

Sudhoff was the first great medical historian; and he founded the first serious international journal of the subject, still subtitled "*Sudhoff's Archive*." He brought rigorous, primary source/archival, scientific/critical Rankian historical research methodology to medical history (see Chapter 1 for much on Ranke). It is no accident that he trained the first eminent British historian of medicine, Charles Singer; as well as the first eminent medical historians to come to America: Henry Sigerist and Oswei Temkin in 1929 (at the Hopkins Institute for the History of Medicine). Oswei Temkin, who later became Director of the Baltimore Institute; lived over 100 years, and was probably the greatest twentieth century scholar of the subject (see "Prolegomenon"). His (1977) *The Double Face of Janus and Other Essays in the History of Medicine* not only anthologizes his finest papers, but begins with a substantial history of medical history itself—including a fascinating social history of the early twentieth century period at the Leipzig Institute. Lloyd Stevenson, M.D., Ph.D., was Director of the Hopkins Institute when Wallace was there in 1978. Stevenson had been a doctoral student under Temkin's direction, in the late-1940s, and spoke highly of a semester-long series of lectures by Temkin on the history of psychiatry. When Wallace asked Temkin about them, he replied, "Oh, I threw them away. They weren't good enough to publish; and others have already done the work by now." If only Temkin had been less humble, we would have 400 important manuscript pages on our subject's history! They would undoubtedly have been stronger than Zilboorg's—which latter learned most of the medical history he knew from Sigerist and Temkin.

Physician historians, by virtue of their scientific and clinical training, focused mainly on "historizing" theoretical, investigative, descriptive/diagnostic, and therapeutic developments and issues within medicine and its basic sciences themselves. This would become known as "internalist" medical history—as opposed to history which emphasizes the sociocultural, political-economic, and general intellectual context within which medical science and practice unfolded. The influx of social and cultural Ph.D. historians into departments of the history of science and medicine brought an important "externalist" balance to overly "internalist" history. Indeed, a social historian, Richard Shryock, Ph.D., succeeded Sigerist as Director of the Hopkins Institute in the 1950s. This externalist twist increased in the late 1960s/early 1970s, and picked up considerable steam during the 1980s and '90s. In fact, for a time externalist approaches tried to narrate and explain science/medical/psychiatric history without reference to these disciplines' internal development or problematics and attempted solutions to them. Fortunately the pendulum has swung toward midpoint; with an appreciation that any balanced history must address both sets of factors.

Still, there is not only a paucity of up-to-date, English-language *general* psychiatric histories, but serious deficiencies in their comprehensiveness, nonpartisanship, assumptive starting points, interpretations, research rigor and methodology, and even the veridicality of many of their assertions (more later, in Chapter 1). Regrettably, the paper-bound (1967) edition of Gregory Zilboorg's (and George Henry's) (1941), *The History of Medical Psychology* (omitting Henry's competent 1941 chapter on organic psychiatry—as well as Henry Hurd's on hospital psychiatry!), is still readily available. It is the text and the edition most used in psychiatric residencies; as is Franz Alexander and Sheldon Selesnick's (1966) similarly problematic and poorly end-noted, though somewhat more comprehensive, *The History of Psychiatry* (still in print with Mentor paperbacks).

For example, in a 1962 survey Knoff found Zilboorg's the standard text in residencies where psychiatric history was taught at all; and in 1973 Werman found similarly, as did Wallace in a 1990 survey. Since Alexander and Selesnick's 1966 publication of their book, it has run a close-second to Zilboorg's as the text of choice. Shorter's 1997 *History of Psychiatry* (limiting its purview to the modern period) has, regrettably, been somehow lost in the shuffle.

Otherwise, the two best introductory texts are seldom used at all: Erwin Ackerknecht's and George Mora's. The former's book, the revised second edition of *Short History of Psychiatry* (109 pages), appeared simultaneously in the German-language original and an English-language translation (by Sula Wolf) in 1968. Ackerknecht was Director of the Institute for the History of Medicine at the University of

Zurich and a world-class scholar of nineteenth century French medicine. He also authored the best short history of medicine generally in 1982 (revised and expanded edition). Wallace had the pleasure of knowing Ackerknecht during his 1978 visit to the Hopkins Institute for the History of Medicine. Trained not only in medicine and its history, but also ethnology, his breadth of knowledge was incredible. He was, however, a man of strong opinions. For instance, he told Wallace, in no uncertain terms, that Freud was a “charlatan” and Jung “a scoundrel”! Regrettably, this caused him to overfocus on neurobiological psychiatry, to the detriment of psychosocial/psychotherapeutic orientations—and to German Romantic psychiatry, which he summarily dismissed. One of our book’s authors, Otto Marx, studied under him in the latter 1960s. In light of his preceptor’s biases, it is interesting that Marx went on to become one of the world’s foremost scholars of Romantic medicine and psychiatry.

George Mora (whom we are proud to count among our writers) studied medicine and its history at the University of Genoa, where he was awarded the M.D. He pursued historical, as well as psychiatric and child psychiatric training, in Italy, Switzerland, and America. For a time he studied with Gregory Zilboorg, becoming able to sort the wheat from the chaff. His history of psychiatry comprised the opening chapter in *The Comprehensive Textbook of Psychiatry* from its 1967 through its 1980 editions. It is this last, “Historical and Theoretical Trends in Psychiatry,” about 100 pages (with an excellent bibliography of primary and secondary sources), which has constituted the best English-language introductory treatment of psychiatry’s history to date. It also reflects—like all Mora’s work—his extensive mastery of ancient and modern European languages. See Chapter 1 for more on these and other surveys.

While some good comprehensive histories exist (e.g. Leibbrand and Wettley’s and others), they have not, regrettably, been English-language translated. However, Yale’s M.D., Ph.D. medical/psychiatric historian, George Rosen, wrote the seminal *Madness in Society* in 1968; he subtitled it *Essays in the Historical Sociology of Mental Illness*. Mark Micale and Roy Porter edited *Discovering the History of Psychiatry* in 1994. It comprises excellent historiographical essays by experienced scholars on a variety of topics and issues. Micale and Porter’s reflective introductory essay is worth the price of the volume. This book is also a gold-mine of primary and secondary sources in several languages. There is, furthermore, William Bynum and Roy Porter’s invaluable edited 2-volume *Anatomy of Madness* (1983–1989). These and other important books are “referenced” in Chapters 1 and 2. And of course Ellenberger’s monumental 1970 *Discovery of the Unconscious: The History of Dynamic Psychiatry* is a model for sound psychiatric historical work. In this context, see Mark Micale’s edited collection of Ellenberger’s unpublished papers, which includes the editor’s monograph-length biographical, historical, and historiographical essay: *Beyond the Unconscious* (1993).

Somewhat earlier noteworthy English-language texts include A. Deutsch’s (1937) *The Mentally Ill in America*; J. K. Hall *et al.*’s. (1944), *One Hundred Years of American Psychiatry*; W. Bromberg’s (1954), *Man Above Humanity: A History of Psychotherapy*; K. Jones’s (1955 and 1960), *Lunacy, Law, and Conscience 1744–1845* and *Mental Health and Social Policy 1845–1959*; D. Leigh’s (1961), *The Historical Development of British Psychiatry*; of course R. Hunter and Ida Macalpine’s (1963) magisterial *Three Hundred Years of Psychiatry 1535–1860*; and our own N. Tomes’s *Thomas Kirkbride: A Generous Confidence*.

In short, there is a crying need for an up-to-date and comprehensive introductory English-language text on the *general history* of psychiatry and medical psychology. It is this need we hope to have met.

While the book is comprehensive in its coverage of periods and many of psychiatry’s topics and interfaces as well, the latter are so potentially exhaustive as to require separate volumes in and of themselves. Unfortunately, a number of quite-competent chapters had to be omitted due to space restraints, on Adler’s individual psychology; Jung’s analytical psychology; phenomenological and existential psychiatry/psychology; popular twentieth century psychotherapies; Anglo-American forensic psychiatry; British hospital psychiatry; child psychiatry; psychiatry and popular culture; psychiatry and religion; feminism and psychiatry; and medical/psychiatric history and postmodernism.

Moreover, as Erwin Ackerknecht asserted in his short history, little serious work has been done on “Baroque” (or seventeenth century) psychiatry. Although we do not have a separate chapter on it, Jackson’s essay on melancholia and depression deals with some of its major physician and lay writers, and

Wallace's Chapter 26 treats some of its major philosophical psychologists (who are really more important than the physicians). See also Hunter and Macalpine's aforementioned *Three Hundred Years of Psychiatry* on the "Baroque." If this book does well, we anticipate a supplementary volume with these and other essays. Meanwhile, see Howells's aforementioned book on a number of national psychiatries; and Ellenberger's on Adlerian and Jungian psychiatry (as well as on Janet). For phenomenological and existential psychiatry/psychology see Ellenberger's and Rollo May's introductory chapters on them; as well as the anthology of translations of key texts by figures such as Binswanger and Minkowski: *Existence*, eds. Ellenberger, May, and Angel (Basic, 1958).

We have attempted to maintain as much coherence and thematic unity as is achievable with an edited book. Where indicated, authors have had access to one another's essays. Ideally, of course, this volume would have come from a single and quite singular pen. However, far too much detailed archival and monographic work remains to be done before such could become the case. It is doubtful that any but the tersest overview (like Ackerknecht's) could be produced by a single author; and the thematic unity thereby attained (e.g., Zilboorg, Alexander and Selesnick, and Ackerknecht) could well be as much a factual, methodological, and interpretative loss as a literary gain. And that one mind could master the pertinent secondary and tertiary—much less primary—sources, and the countless pertinent interfaces, is near-unbelievable. What is wanting is a multi-volume "*Handbuch*"—in the true Germanic sense of the term—arranged both by periods and special topics; each single-authored by an expert in his or her field: a psychiatric version of the *Cambridge Ancient, Medieval, and Modern History*.

Nevertheless, we believe this book fills a gap. Moreover, the history of clinical psychology is treated in a number of places (see, e.g., Chapters 2, 21, and 22). Nancy Tomes's essay is totally devoted to the twentieth century—long rise of clinical psychology, social work, and psychiatric nursing. Because of this, as well as because many issues pertinent to all the mental health disciplines are treated herein, we hope this book will prove useful to teachers of their histories as well. Even so, we are not so smug or purblind as to call it "*A Handbook*."

History, like science, is never a finalizing or "definitive" enterprise. It is a never-ending and self-revising one in light of novel vantages, methodologies, and data. This is especially true of a field like psychiatry which, again (historically and presently), overlaps a plethora of human disciplines and concerns. Indeed, as Simon (Chapter 3) points out, epistemologically the very subject matter of psychiatric history is disputable. This multifariousness probably explains why psychiatry has attracted, in recent decades, far more professional historians and social scientists than any other medical specialty.

Our scholars come from a variety of national, professional, and academic historical backgrounds. For example, although only 3 of our 17 writers are not U.S. residents (i.e., Crabtree is Canadian and Berrios and Healy are British), a significant percentage of them were born, reared, and educated (at least partly) elsewhere: George Mora (Italy and Switzerland); Dora Weiner (Germany and France); Herbert Weiner (Austria and England); Otto Marx (Germany and Switzerland); and Stanley Jackson (Canada). Thus, ours is hardly as purely an American enterprise as it might seem at first blush. And American scholars, such as Hannah Decker, are steeped in European general and intellectual history.

Most of our non-M.D. essayists have also had training or experience in one or another of the mental health disciplines. All are well published in their particular psychiatric historical subspecialties. Their chapters yield various mixtures of "internalist" and "externalist," or intellectual and social historical, purviews (to be elaborated on in Chapter 1). None, however, is insensitive to this dialectic and to the necessary complementarity of both purviews. Moreover, attention is given to the provocative ideas and revisionist medical/psychiatric history of Foucault—in several places, including Edwin Wallace's, George Mora's, and Dora Weiner's chapters.

Clinical psychiatric (and M.D. psychoanalytic) readers will find some of the essays provocative and controversial: for example, Gilman's on schizophrenia as concept; Healy's on psychopharmacology; Tomes's on the history of the mental health professions; and Gifford's on the social (i.e., institutional) history of American psychoanalysis—especially because of his consistent advocacy for lay analysis. As editors, we have persistently protected their purviews and arguments, as they are well researched and

reflect—as does all “historying”—various stances on their material. *However, we have reserved the editorial right for commentary and critique, when deemed necessary.*

Moreover, any profession needs periodic cage-rattling. In this sense even anti-psychiatric writers such as Szasz, Laing, Goffman, Foucault, and Scull offer some corrective points of view—despite the extremity of their overall claims. Many of the possible standpoints on historical issues, when inspected more deeply, turn out to be complementary rather than contradictory. Others reflect competing positions which are, however, evidentially decideable. For example, Jackson and Berrios differ on the importance of the affective or “felt emotional” aspect of major depression—as opposed to its perceptual/cognitive disturbances, vegetative signs, and diffuse somatic complaints—as medical diagnostic criteria for melancholia or major depressions, even though both are widely respected scholars of psychiatric nosology. Simon’s chapter on classical antiquity figures in the controversy as well; for ancient medical descriptions of “melancholia” hammer home that we would almost certainly consider many of them to be schizophrenic. But, in deliberating on Berrios and Jackson *vis-à-vis* one another; we must carefully avoid making it a war over words. By this I mean that the classical Greek concept of “melancholia” was a broad umbrella indeed: *incorporating descriptions of both major depressives and schizophrenics. The substantive issue is whether, as Jackson contends, “felt emotional pain” was consistently—throughout Western medical history—a nosographical desideratum for depression/melancholia; or whether, as Berrios maintains, it only became prominent in earlier nineteenth century European (especially French) psychiatry.*

Each man read the other’s essay (as well as Simon’s). This led Jackson to add a proviso on the complexity of the issue. Part of the difficulty is that each scholar is concerned with somewhat different material. Much of Jackson’s focus is on the pre- and proto-psychiatric literature (much of it by laymen)—and as much with individual depressives’ accounts, as with those of their doctors. Indeed, Berrios is hardly arguing that no melancholic ever struggled with dysphoric emotion prior to the early nineteenth century! Instead, his emphasis is on *medical diagnostic habits and diagnostic criteria in the modern centuries*—that is, seventeenth through twentieth—with italics on nineteenth century psychiatric practice. In this light, Berrios is indeed correct that dysphoric affect received increased nosographic attention with the progressive consolidation of the psychiatric profession throughout the 1800s.

The Introduction: Synopsis and Overview, which immediately follows this Preface, is the reader’s Baedeker to the book as a whole. As to the book’s format, it is divided into four major sections: Prolegomenon; Periods (subdivided into “Proto-Psychiatry” and “The Growth of Psychiatry as a Medical Specialty”); Concepts and Topics (subdivided into “Concepts” and “Topics”); and Epilogue: Psychiatry and the Mind-Body Relation. Arguably, the mind-body relation is the hottest topic in today’s psychiatry, given the ongoing warfare among the biopsychosocial, psychological, psychosocial/cultural, and neuropsychiatric approaches.

In conclusion, this text is intended to serve as: (1) a reference book; (2) an introduction and bibliography for the novice; (3) a resource for courses and seminars on the history of psychiatry and the mental health disciplines—whether in universities, graduate schools, or professional training programs; (4) a collection of well-researched and stimulating essay-length monographs for serious students and scholars; (5) a demonstration of numerous interpretative and methodological strategies in psychiatric/psychological history; and (6) good reading for those who are, unabashedly, just plain aficionados of medical and psychiatric/psychological history.

Introduction: Synopsis and Overview

In what follows we sketch a rough map of the territory you will traverse in this book. The synopses and commentaries in no way substitute for carefully reading each essay. Nor do they try to transform the volume from a set of mutually aware, chronologically and topically organized chapters into the unified treatment that could come only from a single Olympian pen. Much detailed monographic work remains to be done on important figures, periods, topics, national psychiatries, “schools,” and so forth. Moreover, we do not yet have enough unbiased historical distance from more recent events to forge an “objective” account of their goings-on.

Our contributing scholars have occasionally written overlapping and complementary (concurrent or diverging, but often supplementary) treatments of similar subjects. Still, their assumptions, methods, sources, and syntheses never completely coincide. As previously illustrated, disparate views of similar periods or topics promote awareness of epistemic problems; perhaps eventually resolvable, but hardly peculiar to history writing alone. Such plural perspectives pervade medicine generally and the social and natural sciences too. Indeed, multiple takes on a given subject matter are often necessary to optimally appreciate and understand it (see Chapter 1).

The chapters exemplify numerous conceptual and methodological facets of the historical enterprise; some of which are also pertinent to epistemological issues in general medicine, psychiatry, psychology, psychoanalysis, and the social and natural sciences (as also clarified in the “Prolegomenon”). The interdisciplinary, albeit distinguished, backgrounds of our authors should serve to broaden the reader’s critical sensibilities. Writers have had access to one another’s developing essays where appropriate; and have cooperated with one another and with the editors to minimize redundancy, and enhance the book’s coherence and integration. Overlap is, of course, always a problem for edited books. Although the editors have tried to minimize it, some is inevitable for the coherence of the papers, as in the not wholly similar discussions of Reil by both Dora Weiner and Otto Marx. The divergent emphases and interpretations among some of our authors will interest the serious student of history quite as much as the convergences: for the former point to the necessity for further exploration and analysis; as well as sometimes revealing differences in historical, psychiatric, and metaphysical-epistemological commitments.

Section One: Prolegomenon

Chapter 1: Historiography: Philosophy and Methodology of History, with Special Emphasis on Medicine and Psychiatry; and an Appendix on “Historiography” as the History of History. By necessity of the subject matter, this is by far the longest essay in this book. In the opening chapter Edwin Wallace canvasses the literature of historiography both for history in general and for the history of medicine and psychiatry in particular. The chapter is divided into two sections, “philosophy” and “methodology.” In the first part Wallace discusses the writing of history with regard to subject matter, theory and data, history as relationship, historicism and positivism, causation, and the nature of the discipline. Beginning with an extensive discussion of the nature of history’s subject matter, the chapter proceeds to a detailed analysis of the complex and much-debated issue of the relationship of theory and facts in history and of the role of interpretation. Addressing directly the issue of whether historical truth is possible, Wallace concludes that it is possible to ascertain a kind of objective truth through historical investigation, albeit one based in intersubjectivity. In the next subsection, dealing with history as relationship, Wallace views the relationship of the historian to his or her subject as roughly parallel to the relationship between analyst and

analysis and in psychoanalysis. We learn in this section that the historical inquirer needs to think and feel his or her way into the mind-set and cultural ambience of the subject, must in effect develop an empathic bond—all the while remaining aware of the difference between the subject's time and place (with its distinct values) and the researcher's own. In the section dealing with historicism, positivism, and covering laws the author discusses the difference between the empirically oriented historicist approach initiated by Leopold von Ranke (the father of scientific history) and approaches like Hempel's that emphasize abstract categories that are exemplified by historical facts. The section on causation examines at length the many theories of historical causation, including whether it even makes sense to speak of "causes" for historical events. Ultimately Wallace favors a modified version of Maurice Mandelbaum's model of historical causation. Here the opposition of internalist and externalist approaches to history is first explored in detail, though it has already been mentioned several times. In the last section of this part the nature of history as a discipline is discussed, with its methods compared to those of other human and natural sciences, with which it turns out it has much in common. However, its "genius" and the objects of its study (human beings and their actions) forever keep it distinct from the natural sciences.

In the second part the author takes up the issue of methodology in history. In the first section, on critical method, he shows that the roots of the critical method lie in seventeenth century philology and biblical scholarship, with the problem of establishing the authenticity of texts originally being the primary task. Wallace compares the objective critical methodology that emerged from these earlier disciplines with what one might call its twentieth century anti-historical reaction. These critics range from Charles Beard through Hayden White, Foucault, and Derrida and his postmodernist epigones. They have adopted radically relativist positions that in some cases question the possibility of objectivity in history; and in others (e.g., Barthes and the postmodernists) reject the very notion of stable texts that exist apart from the co-constructive acts of readers. Wallace deems the radical relativists as generally being both wrong and wrong-headed. However, he examines Foucault's work—both *pro* and *con*—in many places throughout both chapters of the *Prolegomenon* (including a Postscript in Chapter 2); as well as in places in his Epilogue chapters. Other writers, such as Dora Weiner and George Mora, do so as well.

It is in this section that the discussion turns more directly to medicine and psychiatry and to the historiographical problems involved in doing and writing their histories. The work and approaches of many historians are discussed here, ranging from the great nineteenth century American W. H. Prescott to Henri Ellenberger and the authors included in this book. Wallace shows how good historians, including those working in the history of psychiatry, use techniques such as retrodiction for testing specific hypotheses about historical causation. He also shows how Karl Popper's falsification test can easily be met by historians and describes in some detail specific instances of good and bad history-writing in psychiatry and psychoanalysis. For example, he shows that Gregory Zilboorg's hypothesis that witches were all either psychotics or hysterics has subsequently been falsified by historical research. He also regards the fact that, nearly alone among the disciplines even pretending to be scientific, history is still written in prose accessible to nonhistorians. The last natural science for which this was true was biology up until the death of Darwin, since which time its texts are no longer comprehensible without quite specific training (unless, of course, written with lay people in mind).

In the second section of the second part of Chapter 1 Wallace takes up the thorny and much-discussed issue of "presentism," beginning with the origin of the concept in Herbert Butterfield's *The Whig Interpretation of History* in 1931. Here we see how until quite recently the histories of medicine and psychiatry have been written almost exclusively by clinician-historians from an internalist viewpoint, virtually to the exclusion of all outside social and economic factors. Discussed here are numerous problems that have marked disciplinary histories in medicine and psychiatry, not least the propensity for identifying "predecessors" and "anticipators" of modern trends (which is "Whiggish" in the extreme). The author shows in exquisite detail the need for those who wish to write history to soak-in the periods and authors in whom they are interested; and always to appreciate that the specific issues and problems faced by those in the past are never identical with present-day ones, and must be understood in their own terms.

In the third section of the second part of Chapter 1 the author confronts directly the opposition of internalism and externalism, which has already intruded into prior sections. Here it is examined in detail, as is its specific appearance in psychiatry and medicine. Here the division is discussed not in the philosophical terms of the first part of the chapter, but primarily “in terms of the dichotomy between intellectual and social history.” Here Wallace takes on Foucault directly as well as several of the well-known social science critics of psychiatry like Scull and Rothman. Wallace argues that such critics, who emphasize entirely externalist factors, go too far in ignoring the also constitutive reality of intellectual issues. From Wallace’s point of view neither approach by itself is satisfactory—the history of psychiatry, as an instance, cannot be credibly chronicled and comprehended merely by addressing either just external socioeconomic or internal intellectual factors.

In the fourth section of the second part of Chapter 1 Wallace casts his net more widely, examining extensions of psychiatry (which often meant psychoanalysis and its offshoots) into other areas, such as psychobiography. He shows in some detail how and why Freud’s pathographies of Leonardo, Moses, and Daniel Paul Schreber set a very bad model, which was unfortunately followed by many psychohistorians, literary critics, and art historians. He excoriates the notion of “putting on the couch” entire cultures, eras, or historical personages even absent relevant historical information. He goes on to discuss Erik Erikson’s “Great Man” historical model as manifested in his famous biographies of Martin Luther and Gandhi and shows how it is possible to a limited extent to use analytic concepts for historical and biographical reconstruction, but only with great care.

In the next section Wallace grapples with historical psychology, addressing the issue of how human experience and concepts of personhood have changed over time. Briefly discussed here are the twentieth century cultural anthropologists—quite influential in the mid-twentieth century—and Zevedai Barbu, whose 1961 book helped to popularize both the idea and the term “historical psychology.” Then the author turns to novel forms of healing that have emerged in Western cultures over time, including nineteenth century forms such as homeopathy and phrenology and religious mental healing as well as twentieth century forms like the 12-step movements, of which Alcoholics Anonymous was the first, and the many religiopsychological latter-twentieth century movements. The author then turns to a brief narrative history of the concept of selfhood from its near nonexistence in pre-classical Greece through its emergence in modern times as a post-Renaissance phenomenon.

Next Wallace takes up “Utility”—the use and usefulness of history for nonhistorians, for example, clinicians. Here we see the obverse of the “presentist” coin, for even though history ought not be interpreted and written from the vantage point of the present, even so it can be relevant in the present. Here Wallace discusses several specific instances in which a lack of historical awareness led to baneful policy choices: the movement to legalize heroin for American addicts in the 1960s and 1970s; and, spurred by antipsychiatrists and social critics, the (all too successful) movement to deinstitutionalization, resulting in the dumping of many thousands of mental patients on the streets, where their local communities left them to rot. Wallace also argues here that in a field such as psychotherapy, in which it is not at all clear which methods are best, it might well make sense to “keep alive” various even quite nonstandard treatment modalities in the hope of eventual integration of the most useful and (ultimately) scientifically proven methods, with the others left to wither—in other words, a kind of Darwinian competition of methods. Wallace goes on to discuss the problem of “outsiders,” specifically in psychoanalysis, in which the orthodox mainstream traditionally shunted aside, as radicals and quacks, innovators like the neo-Freudians and, discussed here at considerable length, the important American innovator Harry Stack Sullivan. Wallace discusses how Sullivan’s neologisms, which actually referred to novel concepts relating the intrapsychic to the interpersonal, were ridiculed. Next Wallace takes up the nineteenth and twentieth century history of the individual and group identity of psychiatrists and in the conclusion waxes optimistically about the future of the history of psychiatry as a discipline; through also decrying the lack of exposure of psychiatric residents to the history of the field. There is an annotated Appendix on “Historiography as the History of History.”

Chapter 2: Contextualizing the History of Psychiatry and Psychology and Psychoanalysis. Wallace provides an annotated bibliography with essays, and a Chronology of the History of American Medicine and Psychiatry (meant to supplement Roy Porter’s referenced “Chronology of European Medicine and Psychiatry”). Attempts to provide a broad interdisciplinary context for the general history of psychiatry; apropos the ultimate goal of incorporating it in the history of civilization. The chapter is divided into six sections, a couple with subsections. A terse narrative history of medicine occupies much of “Section E.”

Section Two: Periods

The first part of Section Two, *Proto-psychiatry*, chronicles the prehistory of the field before about the end of the eighteenth century, when psychiatry became a discrete discipline with its own institutional trappings. The second part of this section, *The Growth of Psychiatry as a Medical Specialty*, tells the tale of a goodly part of psychiatry’s history as a discipline.

Proto-Psychiatry

Defining the territory of psychiatric history is itself an epistemologically controversial task, since prior to the late eighteenth century there was no psychiatric specialty in any currently recognizable sense. Before then, so-called “mad-doctors” were medical generalists with peripheral or central interests in mental disorders. Their involvement with the mentally ill was primarily pecuniary, since the “mad-doctors,” who often had not even earned M.D.s, treated the mad in private asylums.

Asylums, as Dora Weiner points out in her three chapters, were directed almost exclusively by lay administrators. While gradually spreading to other places and cultures, psychiatry has remained largely Westernized even in the hands of indigenous physicians. Psychiatry as a medical specialty first arose in Western Europe and was for decades restricted to it and North America. In the United States academically based psychiatry departments were few and far between until the 1940s (Johns Hopkins, the Menninger School, Michigan, Yale and Harvard being earlier twentieth century exceptions), while medical undergraduates got little, if any, exposure to even didactic clinical psychiatry.

Before World War II, most American psychiatrists were trained in on-the-job stints at state hospitals, with the majority of members board-certified in psychiatry and neurology simply “grandfathered” in. Once there, they developed comprehensive written board examinations and increasingly brief, superficial, mainly diagnostically oriented live-patient encounters. Both ensured the failure of most residency-trained, board-eligible youngsters. Despite protests in the 1990s and some board-grade retrenchments, the written and oral board exams—the latter being both far more subjective and neurobiologically/diagnostically-based—continue to have by far the highest percentage of first-time and successive failures of any medical specialty board in the United States, Canada, Australia, or Great Britain (consistently at least 50%). What is the matter here? Does the Board mistrust the residency-accreditation procedures of its own parent organization—the American Psychiatric Association?

Finally, there is the plethora of time- and place-bound sociocultural factors that make the proper purview of the history of mental disorders itself a function of present-day theoretical, nosological, and investigative bias. Hence our subdivision of the book’s initial chapters under “*Proto-Psychiatry*,” which we by no means intend to mean a not-as-good or somehow defective psychiatry. Rather, these chapters discuss historical figures, ideas, and treatment methods that today fall within the rubric of psychiatry. As we believe our authors make abundantly clear, it is not at all the case that today we necessarily always do “better” than our ancient, medieval, and Renaissance forebears. Instead, notions of and terms used for “mental illness” or “disorder” often differ greatly from one epoch to another, parsing reality in ways unique to each individual society, so that we can at best have limited comprehension of what the terms and ideas meant to their native users. We must take care not to read our own suppositions about the way the world is into the terminology, ideas, and practices of those not sharing our world-view.

We must strive to avoid the post-Rankian historical sin of presentism or anachronism: reading the past as inexorably leading to our current reality and littering it with “precursors” of present-day heroes and “anticipators” of current assumptions, techniques, and theories. The challenge is similar to that faced by the cultural anthropologist: how to describe patterns of behavior and thought alien to one’s own without descending into relativism, which allows for no comparative judgments or social scientific causal explanations.

So, by “*Proto-Psychiatry*” we mean what came first chronologically, the first part of a story that from our point of view today must be included in any comprehensive account of psychiatry’s past—all the while recognizing that it is not psychiatry at all, except from the point of view of a culture in which psychiatry has already come into existence as a discrete field of theory and practice. The forms of madness in other times and places are not necessarily our own.

Chapter 3: Mind and Madness in Classical Antiquity. Our coverage of antiquity is limited largely to classical—and some preclassical—Greece (Simon’s chapter) and to bits and pieces of the Hellenistic and Roman periods (e.g., Simon’s, Berrios’s, and Jackson’s chapters). Pertinent aspects of ancient Near and Far Eastern cultures are still largely “unhistoried”; although in Chapter 2 Wallace includes a short essay on ancient Egyptian medicine and “psychology.” Simon, a psychoanalyst and classicist, is at home with the Greeks. Like his great predecessor E. R. Dodds, Simon illuminates his subject matter with soberly applied psychoanalytic insights.

Simon’s essay, like others in this collection, addresses a number of psychiatric history’s conceptual and methodological issues. For example, he asks, “Does all of religious experience and all religious phenomena pertain to the history of psychiatry?”—a problem for psychiatry generally, and not just for its historiography. How much of psychiatry’s “history” is really a Whiggish attempt to “create an illustrious or interesting past for one or another feature of modern psychiatry, sometimes by way of showing how far we have come from a primitive and naive view, and sometimes to show that our seemingly modern concept has indeed the authority and dignity of millennia behind it?” He suggests, with thought-provoking tolerance, that since contemporary psychiatry itself is in flux, the history-writing of the field “should be in a state of relaxing of boundaries and preconceptions, gathering more knowledge of diverse areas, and then later returning to the attempt at synthesis and the study of the precise relationship between antiquity and the present.”

Readers, whatever their backgrounds, will find Simon’s historically and philosophically disciplined literary imagination mind broadening and stimulating—as when he presents the healing options open to a hypothetical ancient mental sufferer. His chapter not only outlines his period’s pertinence for psychiatric history, but also provides original information and theses such as his discussion of folk-healing and charms. He sees humoral theory as bridging official medical praxis and popular, often supernatural, notions like possession and exorcism. Formulas such as “black mood equals black bile” were really ways to express mind-body unity and perhaps, as Foucault suggested, simultaneously to give guilt-free explanations of patients’ problems and support for the claims of physicians (for which see also Jackson’s chapter). Studies by psychiatric anthropologists of contemporary nonliterate societies’ notions of possession, hexing, and healing support his thesis. Simon describes for classical antiquity the molding of time and place specific modes of presentation of madness by cultural and professional factors—an issue of keen ethnographic, historiographic, and clinical relevance that readers will encounter elsewhere in this volume as well. Finally, Simon grasps a central epistemological issue in psychiatric historiography: the relations of the “mental” to the “psychopathological” and the “medical” to the “philosophical,” arguing, for example, that there was a self-consciously psychotherapeutic strain in ancient philosophy.

Chapter 4: Mental Disturbances, Unusual Mental States, and Their Interpretation during the Middle Ages. Mora begins his chapter with a caveat about the paucity of reliable and detailed medieval descriptions of what we likely would consider “mental illness.” This historiographically useful warning reminds us of the importance of knowing the limits of possible knowledge, hence bracing temptations to mythohistory.

Suicide, Mora tells us, became abhorrent only with Christianity’s hegemony. Medieval writers emphasized anger and despair about salvation as suicide’s key features. They interpreted suicide as the outcome of wars between vice and virtue, with the soul as a neutral battleground. Such culturally conditioned

explanations helped to shape the disordered person's sense of self. Might they even, through centuries of intervening thinkers, have contributed to lines and habits of thought eventuating much later in conflict psychologies such as Herbart's and Freud's (including the latter's global concept of Eros versus Thanatos)? In any event, though their moral theological points of view precluded purely psychopathological thinking about suicide, these authors did emphasize the despair and anger stressed by modern writers. Likewise, they acknowledged categories such as melancholia and clerical nosology's own milder form of it known as "*acedia*" (see Jackson).

Contrary to Foucault, Mora does not believe that a madness-tolerating Middle Ages was replaced by a rationalistic seventeenth century antipathy toward it. Mora documents ample iconographic, literary, and religious evidence indicating that there was a medieval aversion toward madness as well. In a curious twist, many modern psychiatrist-historians (e.g., Zilboorg) and "psychohistorians" (beginning with Freud himself) have used psychiatric concepts and diagnoses to manifest their own aversion toward medieval and Renaissance religious figures, denominations, and institutions. See also Wallace's "Prolegomenon" on the aforementioned issues.

Other important points from Mora's chapter, too numerous to expatiate upon here, must be left to the reader's discovery: Medieval concepts of personhood and their impact on the possibilities for concepts of "mental illness"; the role of rising vernacular languages, sagas, and ballads of courtly love in shaping popular psychology and subsequent broadly psychological theorizing; near the period's end, the dawning of the bourgeoisie, with its nuclear family; preliminary treatments of witchcraft phenomena, which are examined more closely in Mora's chapter on the Renaissance; increased scapegoating and penance accompanying great later medieval catastrophes such as: the Hundred Years War, the Black Death, the Avignon Papacy, the Muslim onslaught in the east; and, finally, the role of gender in the patterning of miracles and in forming medieval notions of the causes of sin.

Chapter 5: Renaissance Conceptions and Treatments of Madness. Mora has here penned another historically and historiographically useful essay, which ranges from more traditionally historical documents, through ethnological/anthropological, literary, social psychological, and iconographic/pathographic artistic sources and perspectives, to shades of the author's former teacher, Gregory Zilboorg, whose psychopathologizing of witchcraft Mora has reevaluated.

As part of his study of the impact of literary and artistic forms on both experiences and descriptions of madness, Mora charts the complex and fascinating story of the relationship between folly and madness. Perhaps this represents a continuation, yet modification, of medieval depictions of the wild man with tinkers and bells—possibly, in part, a way of reducing through ridicule fears of the madman's posited angry and dangerous side. Quite possibly nineteenth century descriptive psychiatric concepts such as "bizarre" have their roots in such images (also see Gilman's chapter for a discussion of the "bizarre" regarding schizophrenia). Popular experiences of personhood, the phenomenology and behavior of the insane, and public perceptions and descriptions of madness probably determined, and were in turn shaped by, the literary and iconographic forms to which Mora alludes.

An important aspect of Mora's chapter is its treatment of witchcraft. For some time psychiatrist-historians from Pinel through Zilboorg, Alexander and Selesnick, and even the ethnologically informed Ackerknecht blithely diagnosed accused witches as hysterical or psychotic (usually schizophrenic, manic, or toxic "organic"). Their Renaissance forerunner in such nosologizing history was Johannes Weyer, though his diagnoses of witches were *theologico-psychopathological* ones—*satanically induced* hallucinations and delusions. Freud, too, helped pave the way with pathographies such as that on the Devil-pact-making artist Christoph Haitzmann; as well as with his psychopathologizing of animistic, magical, and religious beliefs and practices. By contrast, psychoanalytic anthropologists such as Melford Spiro, Bryce Boyer, Waud Kracke, and Robert Levine have pointed out the failure of such historians to consider the institutionalized aspects of witchcraft experiences and behavior. Socioeconomic historians such as MacFarlane have noted their inattention to the economic incentives for accusations, as well as to the reality-distorting mental mechanisms in the accusers themselves. And social psychologists such as

Nicholas Spanos have applied attribution theory, and focused on such factors as duress, suggestion, and brain-washing in the “confessions” of alleged witches. Finally, explicitly antipsychiatric writers such as Szasz, Goffman, and Foucault have addressed many of the same issues, as well as those of power and monetary motives in the psychopathologizing interpretations of psychiatrists in practice as well as psychiatrist-historians.

Mora uses many of the foregoing tools and adds a few of his own. Like many, he turns to nineteenth and twentieth century ethnographic studies of witches, sorcerers, and shamans in contemporary nonliterate cultures to bolster the historical thesis that hardly all Renaissance witches were insane—either by their own culture’s standards or by ours. While useful and suggestive, such evidence, and the comparative method, can themselves be problematic. For one thing, their usage is a bit like the old-school cultural evolutionists’ blithe equation of contemporary “primitive” institutions and behaviors with those of prehistoric societies. This includes otherwise superlative medical historians such as Henry Sigerist and Erwin Ackerknecht. For another thing, many social and cultural anthropologists have documented that ostensibly universalistic terms like “witchcraft” and “shamanism” often refer to widely differing institutionalized forms.

Mora applies Warburg’s notions that Renaissance rationalism was reacting to underlying fears of chaos unleashed by the dawning scientific ideas of an infinite universe. As did Zilboorg, Mora sees institutionalized misogynistic trends operating as well, since most of the accused seem to have been women, particularly single, peripheral, and economically dependent ones. He distinguishes between large- and small-scale witchcraft accusations, the latter frequently serving to reduce local factionalisms unresolvable through the usual legal channels. Comparative studies suggest that economic incentives for accusations were insufficient—especially in large-scale accusations with their costly procedures and trials.

Mora points out that the most pervasive Renaissance attitude toward witches was that they were not insane. Indeed, proof of insanity was one of the few viable defenses of accused witches—since pacts with Satan were deemed fully voluntary. The mad seem more often to have been considered victims of witchcraft than witches themselves—an idea supported by transtemporal studies of the phenomena in New England, in Europe, and in nineteenth and twentieth century nonliterate cultures. From the reports of faints and “seizures” by accusers in the presence of the accused, one might infer that the former were more frequently disturbed than the latter. Apropos the bearing of more recent events on modes of historical interpretation, Mora cites episodes such as Nazism and the Holocaust, the hippie drug movement of the 1960s, and the psychopharmacological revolution as possibly contributing to social scapegoating and toxin theories of Renaissance witchcraft and Medieval “epidemics” such as Saint Vitus’ dance. In fine, while some “witches” probably were mentally ill, they seem to have been in the minority.

Finally, Mora’s treatments of Weyer and the important Girolamo Cardano are seminal in themselves, quite apart from their connection with witchcraft. Despite Weyer’s contemporary significance, he did not directly influence later psychiatric perspectives until he was rediscovered by Charcot and other nineteenth century psychological physicians, who used him to dignify their own work on hysteria and related phenomena. In contrast, Cardan, a prototypical “Renaissance man,” was widely influential—both in his own time and later.

Chapter 6: The Madman in the Light of Reason. Enlightenment Psychiatry: Part I. In this chapter Dora Weiner argues that the vast bulk of the insane were more peaceable and lived at home “in familial embarrassment.” So much for the widespread conversation between Reason and Madness which Foucault proclaimed. History has recorded primarily those individuals who were least manageable and most publicly disruptive, hence needing confinement beyond the means of typical families. Many homeless and mad found refuge in the Church, although the more violent were often shackled in prisons and dungeons. And yes, the later Enlightenment did indeed free them from their chains. At times Foucault almost sees this as a regression, and not progress!

The English “trade in lunacy” began in the late seventeenth century for wealthy families only, who turned their insane over to private madhouses. The Asylum Act of 1800 attempted to regulate this but lacked real teeth for half a century. As of 1788, only 1,300 mad were locked in various Parisian institutions.

Most European mental hospitals had relatively few patients—though it is true, per Foucault’s thesis, that they were incarcerated in the interests of the social order. However, this was less because they were mad *per se*, as Foucault believed, than because they were violent and agitated.

Elsewhere, too, Weiner finds little support for Foucault’s famous thesis. For example, when French revolutionaries raided the hospitals of the Brothers of Charity, they were surprised to find all inmates legitimately psychotic, not politically imprisoned. To wit, the famous *lettres de cachet* were seldom used. In short, Weiner suggests about psychiatry—or rather about madness and its sociopolitically institutionalized handling—that “humanitarianism and democracy were the decisive influences that improved the lot of the insane in the eighteenth century.” The impulses of Christian charity had become diverted to secular causes—including the care of the mentally ill. Still, there were national differences, with Protestant German states establishing more public provision for the mad than did France or Britain, though the French private madhouses (*Maisons de santé*) were generally better than the British, due to closer supervision by the French authorities.

Still, religious hospitals such as those of the Brothers of Charity were the best and most orderly European facilities for the insane. Gerieux and Libet argue, she notes, that Catholic charity actually inaugurated the humane treatment and care first attributed to the late-Enlightenment French secular “innovators.” Apropos traditional medical hubris, consider also her contention that M.D.’s played relatively small roles in treating the mad—even in institutions specifically for the disturbed. This, she suspects, suggests that the Enlightenment was unsure whether the insane were criminal, sinful, deviant, or sick. More pragmatically, since most of the chronically hospitalized were probably incurable, there was no need for medical attention other than for surgery or for general “somatic” problems. Finally, she speaks to the impact Locke and other philosophers emphasizing experience had on the theory of moral treatment—that is, the hospital milieu as a meliorative environment.

Of course Foucault, in his Nietzschean transvaluation of all values, views late eighteenth/early nineteenth century moral treatment as nothing but a more subtle form of social control. Again, it almost seems as if he felt the mad somehow more “free” when they were in chains and cages. One of Foucault’s biographers, David Macey, noted that several reviewers of *Madness and Civilization* commented on his strong animus against doctors (see Prolegomenon).

The Growth of Psychiatry as a Medical Specialty

Chapter 7: The Madman in the Light of Reason. Enlightenment Psychiatry: Part II. Dora Weiner’s second chapter brings us to the story of psychiatry *per se*—that is, as an explicit medical specialty. She begins with the discovery, to which she contributed, of the mythic nature of psychiatry’s “Pinel-as-chain breaker” story. Actually it was Citizen Pussin, the Bicêtre’s lay administrator, who, as Pinel freely acknowledged, first loosened the fetters of patients and noted the beneficent effects. Thus began the series of observations eventuating in mid-twentieth century demonstrations of the hospital milieu’s potentially therapeutic impact. Weiner’s account of Esquirol’s and Pinel’s son, Scipion’s, motives in propagating this tale are as fascinating as finding that the legend is false (a prime example of the falsifiability of historical propositions).

Further enriching the book’s exemplification of historical methodology, she weaves her chapter around an analysis and comparison of the key works of ten prominent mad-doctors and alienists. If Pinel is dethroned in one way, he is elevated in another and even more significant one. He is crowned midwife of the psychiatric specialty in any modern sense. His orientation was broader and in many respects more scientific and humanistic than that of his successors for quite some time—attending, as a former internist, to what we would deem the “biomedical” as well as to the “psychosocial.” Hence, Pinel’s orientation was

holistic—and not purely psychological, as Foucault would have us believe: that is, the latter’s thesis that Pinel somehow invented “*mental illness*”; which for Foucault meant “nonphysical” illness. Thus Foucault was erroneously projecting his own interactional dualism into Pinel. Apart from Pinel, only the Englishman Crichton, exporter of British associationist ideas to the Continent, receives high marks; Reil, whom Marx also treats in Chapter 9, is praised in some ways (e.g., his mental functionalism) and criticized in others (e.g., his obscurity and overspeculativeness). By contrast, Chiarugi, while contributing administratively and also as a mind-body functionalist, is judged mediocre—with the others falling in between. Of note in light of psychiatry’s subsequent and present-day course, she sees “psychological” versus “organic” as the clearest dividing line among most of the ten—though Marx will claim in Chapters 9 and 10 that, for the Germans at least, these divisions have been overdrawn. However, in many instances, Marx does characterize nineteenth century German psychiatrists along these lines.

Finally, her demonstration that from the outset psychiatrists have tended to be excessively nationalistic and home-language bound, as well as her appreciation of ethnolinguistic perspectives, are more than historically pertinent to present-day psychiatrists, many of whom—especially Anglophone psychiatrists—are monolingual.

Chapter 8: Philippe Pinel in the Twenty-First Century: The Myth and the Message. Dora B. Weiner caps her two Enlightenment chapters with this bracing retrospective. The myth of Pinel as chain-breaker, demolished by herself and the late Gladys Swain; has nevertheless lived on through the nineteenth century into the present—especially in France. In this light, she discusses recent historical tales to that effect. This mythology has obscured the actual achievements of Pinel in: the improvement of asylum conditions, the application of broadly psychosocial (including milieu) therapeutic approaches, psychiatric history-taking, nosography, broadly-numerical assessments of courses of illness and responses to treatment, the inauguration of clinical teaching in psychiatry, and of course the hammering-out of a new medical specialty. She attends to the important role of a powerful Catholic nursing order at the Salpêtrière; and the complex jockeying for power between themselves and Pinel and the Asylum physicians. Prior to the Revolution Catholic orders (both Brothers and Sisters) had provided the best “psychiatric” care. Professor Weiner undermines the contention of several historians that it was really secular nursing which effected any real progress in asylum care; as well as their claims that Pinel and other physicians had little or no direct patient contact. After Pinel’s retirement in his mid-seventies; French psychiatry progressively abandoned his inclusion of psychological understanding and milieu-management; in favor of purely somatic theories and therapies—including etiological and nosological emphases on brain pathology. Pinel got bad press from many of this new breed—such as Broussais. However, his theoretical and therapeutic approaches have been hailed by some of the most important twentieth century psychiatric historians such as Henri Ellenberger, Henri Ey, Gladys Swain, Marcel Gauchet and, of course, Dora B. Weiner. And he influenced a subsequent generation of French psychiatrists centering around his former pupil, Jean D. Esquirol (also one of the earliest psychiatric historians).

Chapter 9: German Romantic Psychiatry: Part I. A long-time student of Romantic psychiatry, Marx begins his story by pointing up—as he was among the first to do—the overdrawn, though time-honored, distinction between the so-called “*Psychikers*” and “*Somatikers*” in the nineteenth century German-speaking states. That division only applied to certain aspects and figures of its earliest period—such as Heinroth versus Jacobi. Their battle of words was not, Marx feels, a signal feature of even the early nineteenth century.

Rather than view the Romantics through our current lens, tinged as it is by present-day psychosocial-biomedical splits and dualistic conflict, Marx advocates that we first try to see the world through their, rather than our, eyes. Like many of our authors, Marx begins his history by sketching the sociopolitical, cultural, and general intellectual background. He enunciates the different trajectory of the German Enlightenment (*Aufklärung*)—rationalist and analytically empirical, yet appreciative of feeling, metaphysics, and morality—from that in France and especially Great Britain. The categorization of knowledge and the segregation of philosophy, pure science, and applied science that we take for granted

did not yet exist. German university professors were more eclectic and often spanned several “fields” (in our current sense). Syntheses of speculative “scientific” theories (such as iatromechanism and iatrochemistry) with clinical medicine characterized the German states since Paracelsus and the Renaissance, through the early eighteenth century Dutch Boerhaave, and on to the later vitalists, Romantic Naturphilosophes, and electromagnetist-psychicists. Indeed, Marx points out that Hippocratic medical philosophy was significantly present in German medicine until the early nineteenth century.

In large part Marx’s chapter is an historically and linguistically sophisticated exegesis of representative Romantic and earlier nineteenth century German psychiatric writers, most notably the more psychologically inclined, though not un-“somatic” syncretistic theoretician Reil, who coined the term “psychiatry”; the metaphysical and “psychomoralistic” physician Heinroth, who espoused a sharp mind-body dichotomy and limited psychopathology to a sphere of ontologically mental and not somatic origin; and, finally, the “somatically” inclined Friedreich and Jacobi.

Still, Marx drives home the difficulty discriminating between “somaticists” and “psychicists,” for each partook of elements characterizing the other—for example, the psychologically integrative facets of Heinroth’s work and his coining the term “psychosomatic.” Moreover, their graphic German psychiatric terms are often ambiguous and interpretable both abstractly and concretely, and in many ways—“*Seele*,” to cite an obvious example. While early nineteenth century German psychiatric literature was more philosophical and speculative, theorizing in England and France, too, preceded the more empirical and pragmatic work. Moreover—and importantly—Mora chides presentistic assumptions that novel medical theories went hand in hand with equally innovative practices, when for much of its history psychiatry’s theory changed before its practice, which was usually re-rationalized to accord with transformations in theory (see also Jackson’s Chapter). This was true of eighteenth/early nineteenth century internal medicine too. Despite their problematic features from our contemporary perspective, the Romantics made, asserts Marx, significant contributions to psychiatry’s subsequent development. His next chapter reviews another dimension of Romantic psychiatry—its care of the mentally ill—and divagates on more clinical and nosological issues as well as on additional important writers of the time.

Chapter 10: German Romantic Psychiatry: Part II. Marx here continues the early-to-mid nineteenth century saga begun in Chapter 8, again attending to the pertinent sociocultural and political background. Marx deals in this chapter with hospital reform—a story somewhat similar to that in America (see Grob’s chapter), where initially the mentally ill were lumped with the homeless poor and other economically dependent or socially peripheral classes. Psychiatrists such as Reil, and medical laymen such as Pastor Wagnitz, lobbied for dramatic improvement in the care and housing of the mentally ill; as well as for their segregation from cripples, criminals, the poor, and other socioeconomically marginal or deviant groups. The Napoleonic wars, secularization with its concomitant closing of monasteries, and growing popular pressure for sweeping changes; all pulled the plight of the mad along with them. More asylums were established specifically for them, though conditions were unsalutary and often harshly oppressive.

Substantial improvements began in 1805, when doctors such as Langermann and Jacobi augmented the new German hospital psychiatry. Marx interprets the important texts of Jacobi, Nasse, and others—with their potpourri of the quaint and the genuinely innovative, of which Kieser’s theologico-magnetic metaphysics is a sterling example. Once more, theory and treatment rarely moved hand in hand. Somatically oriented writers like Jacobi fell back on largely psychosocial and psychotherapeutic techniques, partly, of course, because of the paucity of novel or tried-and-true biomedical treatments.

Noting that the oversimplified characterization of these psychiatrists as “Romantics” becomes even less accurate as the first half of the nineteenth century advances, Marx ends with analyses of Ideler and Feuchtersleben. These writers more equally weighted “mental” and “organic” factors, striving for holistic theoretical and therapeutic approaches. Feuchtersleben was often epistemologically sophisticated. Marx remarks on his careful case histories and psychogenetic formulations of patients. Whatever their shortcomings, Romantic alienists were struggling to clarify, comprehend, and relate the “mental” to the “organic” and to hammer out a separate and coherent professional identity.

Marx ends with a caveat against presentistic moralizing—such as charges that certain late eighteenth to early nineteenth century “somatic” therapies (e.g., unexpected dunkings and other “shock treatments”) were mainly motivated by physician and staff cruelty. Actually, they were more often serious efforts to help troubled persons who were otherwise seemingly hopeless. Consider that Rush’s pervasive bloodletting was determined partly by Cullen and Brown’s theories of madness. Finally, Marx correctly avers that much additional close scholarship is necessary before more aptly characterizing these doctors and drawing more general conclusions about them.

Chapter 11: Descriptive Psychiatry and Psychiatric Nosology during the Nineteenth Century. Psychiatric orientations and “schools” have varied not only in their classificatory systems, but also in the extent of their interest in nosology and diagnosis as well (e.g., “biological” versus Meyerian or psychoanalytic). For this and other reasons (pervasively deficient science of psychopathology, perennially unresolved nosological taxonomic debates, and constantly clashing etiological/pathogenetic presuppositions and theories), sound historical studies are eminently useful for present-day psychiatric investigation and practice. Many of the essays in this volume touch on the psychopathological and psychiatric diagnostic enterprise—for example, Jackson’s, Gilman’s, Grob’s, Brown’s, Wallace’s. Berrios focuses in his chapter on nineteenth century developments. Many recent writers have treated historical and contemporary psychodiagnostic endeavors from purely sociopolitical, economic, and gender-oriented perspectives. While the work of antipsychiatrists such as Szasz, social scientists such as Goffman, social historians such as Rothman, and philosophical historians such as Foucault point toward quandaries ignored too long by practicing psychiatrists, clinician-historians, and historians of psychiatry; their efforts are often as unbalanced as those of the traditionalists they oppose.

Berrios’s chapter is an important counterweight to externalist extremes. He knows how such authors can be handicapped by lack of clinical exposure and consequent ignorance of the epistemological, therapeutic, and political-economic issues confronting psychiatric doctors *in situ*. Still, he appreciates the contributions made by social, political, and economic historians, recognizing the potential pitfalls of the more internalist approach of his chapter. On occasion his scholarly historical asides reflect the long-time English penchant for biological and descriptive-psychiatric orientations. It is noteworthy that Berrios’ corpus (including important books like his 1996 *Mental Symptoms*) integrates historical and philosophical perspectives—something many of our authors strive for as well.

Aware of the pathoplastic role sociocultural factors play even in such syndromes as delirium and dementia, he views causes as complex phenomena. Berrios reconstructs and analyzes the evolution of nineteenth century nosography along four parameters (psychopathologic, etiologic, pathogenetic, and taxonomic), relating them to three non-psychiatric intellectual currents: (1) psychopathology or psychiatric “semiology” (the science of signs) to eighteenth century linguistics and sign theory; (2) etiological and pathogenetic theories to developments in general medicine; and (3) taxonomic approaches to eighteenth century metaphors of order and novel nineteenth century “empirical principles.”

Berrios depicts these as interacting “like wheels within wheels, against the wider movement of the practice of alienism.” Among the many nineteenth century advances itemized, he emphasizes the growing attention to “subjective” or phenomenological (patient experiential) dimensions. By melding sophisticated, contextually informed internalist accounts such as Berrios’s with externalist, sociopolitical/cultural approaches like Grob’s (this volume); it is possible to paint a more complete picture of psychiatric history—that includes views from both inside and outside the discipline. Berrios’s is a rich historiographical, historical, and epistemological essay that requires, and well repays, close study.

Chapter 12: Biological Psychiatry in the Nineteenth and Twentieth Centuries. All too scarce are sound historical treatments of organic as opposed to psychoanalytic or psychosocial psychiatry. Henry’s 1941 chapter in Zilboorg’s *History of Medical Psychology* and Ackerknecht’s slim 1968 volume, *A Short History of Psychiatry*, are still among the best on “organic” psychiatry. Gach helps to fill this gap with his chapter. He focuses most extensively on its neurobiological and psychopharmacological aspects—other somatic aspects being addressed elsewhere: for example, in Brown’s, Berrios’s, Healy’s, and H. Weiner’s chapters—as well as of course in the Epilogue.

Gach's piece is more philosophically neutral than Zilboorg's or Alexander and Selesnick's pro-psychological and -psychoanalytic histories and Ackerknecht's more "organicist" and anti-psychotherapeutic/psychosomatic one. In complement to Marx, he looks at Griesinger's more neuroanatomical/pathological and "somatic" side—though we must not forget that Griesinger was philosophically a functionalist, and that his clinical techniques did not exclude psychotherapeutic methods. The author shows how Griesinger's monist materialism reduced mental events to brain events, essentially through an argument that looks suspiciously like psychophysical parallelism. Gach roots Griesinger's ideas in the French rather than German medical tradition, anchoring them ultimately in the eighteenth century works of La Mettrie.

Gach details the figures, findings, and events making later nineteenth century German academic psychiatry, with its pathoanatomic/histological orientation, preeminent in its day. Three-fourths of the German-speaking universities had chairs of psychiatry by the 1880s, and hardly a chair holder was not involved in neuroanatomical and neuropathological discoveries. Nonetheless, as in contemporary general medicine, clinical treatment lagged behind basic scientific discoveries. Like much of neurology until relatively recently, later nineteenth century psychiatry was "long" on diagnosis and pathological correlation and "short" on treatment—rendering the geometrically enlarging asylums custodial warehouses for chronic untreatables—both "neurological" as well as "psychiatric."

Because of the initial absence of therapies for the "organic mental" syndromes, the lack of demonstrable neuropathological findings in the many so-called "functionally" disturbed, and the drowning press for outpatient medical treatment by the many nonspecifically "nervous" sufferers; neurologists/neuroanatomists, such as Forel and Freud, moved toward explicitly psychotherapeutic approaches. (However, Freud never abandoned his neurobiological perspectives on the so-called "functional" cases he treated psychoanalytically—see Wallace's Chapter 25). Still, organic enthusiasm in Germany, and in the European and American psychiatries influenced by Germany, waxed large until well after the turn of the twentieth century. It received temporarily sustaining injections from the unfolding neuropathological elucidations and somatic treatments of key syndromes such as general paresis, pellagra, and beriberi, therapies such as the convulsive treatments, and psychosurgical techniques. Gach shows how the search throughout most of the nineteenth century for biological explanations and cures of general paresis—the AIDS of the nineteenth century—was the engine that drove biological psychiatric research. Eventually, however, as such patients' conditions were ameliorated or alleviated, and as neurology gradually co-opted those disorders with demonstrably neuropathological geneses and etiologies; psychiatry was left with enlarging proportions of apparently functional syndromes, unresponsive to contemporary somatic remedies. While stimulating the rise and proliferation of psychological/psychotherapeutic methods in Europe and North America, German academic psychiatry has stayed fairly "organically" and "descriptively" oriented, the various psychologically inspired and social-community approaches having developed mostly alongside and not within it—for example, contemporary German psychoanalysis (see Decker's chapter and Wallace's 25). Twentieth century American psychiatry has remained one of the few national psychiatries incorporating—though hardly always integrating—both psychosocial and neurobiological theories and therapies, though it, too, has seen periods of hegemony of one or the other, most recently by the neurobiological/pharmacological stance.

From its background in the mid-nineteenth century German mechanistic backlash against the antecedent vitalism, the story weaves through the many strands of the biological tradition in psychiatry, with copious citation of individual figures, texts, and discoveries. More than any other person, Griesinger seems to have given the most impetus to psychiatry's biomedical and neurobiological program. He influenced those American alienists first heeding the call by neurologists for psychiatry to become more "medical" and "scientific." The new leaders of American psychiatry quoted Griesinger's dictum that "psychiatric disease is brain disease" while cleaving to a theologically inspired dualism: mental illness necessarily being caused by brain dysfunctions, since the immortal soul is separate and free from the body's corruptions. By contrast, Griesinger's inclusion of some psycho- and socio-therapeutic measures was pragmatic and consistent with his largely functionalist position on the mind-body relation. Gach regards Griesinger as a metaphysical materialist monist (the world is a single kind and it is physical), though one can as easily construe him as a psychophysical parallelist or dual-aspect theorist of materialist

stripe (the world consists of both minds and things that do not causally interact; instead mental events are, as it were, alternate views or descriptions of physical events). One has to consider Spinoza's much-earlier philosophical psychology to grasp, as Wallace suggests; the difficulty of decisively pigeon-holing mind-body positions: that is, Spinoza has features of both parallelism and dual-aspect monism.

Finally, although Gach stands in sensible silence before the mind-body conundrum, and although he is excited about biological psychiatry's scientific and clinical future; Gach is aware of its social, moral, and political dimensions—and sensitive to the negative possibilities of its metaphysical reductionism for concepts of the human being.

Chapter 13: The Intersection of Psychopharmacology and Psychiatry in the Second Half of the Twentieth Century. Healy's chapter begins with a brief survey of the early history of psychopharmacology in the 1930s beginning with Bleckwenn and Meduna. The story tout court begins with the introduction of the phenothiazines in the early 1950s. Healy succinctly details the story from the initial discovery by the French military surgeon Henri Laborit through its first use with psychotics by Delay, Deniker, and Baruk. The endorsement of the effects of chlorpromazine by the illustrious Department of Psychiatry in Paris was, Healy argues, important for its spread through the psychiatric community. He shows how at the start it was quite unclear exactly what these new drugs actually did or how they worked. Smith Kline & French brought chlorpromazine to market in 1955, ushering in the modern era of psychopharmacology. Delay and Deniker regarded the phenothiazines as a chemical form of encephalitis lethargica—as neuroleptics (seizing rather than paralyzing nerves). The discovery two years later of the neuroleptic properties of haloperidol seemed to confirm their concept. With the marketing of clozapine in the late 1980s the terms “neuroleptic” and “major tranquilizer” were replaced by “antipsychotic.”

Next Healy chronicles the discovery and history of imipramine, detailing the somewhat ambiguous role Roland Kuhn played in its introduction as an antidepressant. Healy shows how unenthusiastic Geigy was about the drug initially, since they had actually been looking to market an antipsychotic. Geigy did not think that there was a large market for an antidepressant. He goes on to tell the story of the development of isoniazid and iproniazid, drugs first introduced in 1951 for tuberculosis but then used experimentally by Max Lurie and Harry Salzer for treating depression—Lurie apparently coined the term “antidepressant” in 1952. As Healy writes, “Lurie and Salzer's work sank without a trace,” for the quite externalist reasons, first, that isoniazid was not patentable since it had originally been synthesized in 1912; second, that by the time they had completed their second study chlorpromazine had already hit the market; and third, that they were private practitioners without institutional support. Next he shows how reserpine met the same fate despite its proven efficacy as an antidepressant. (Nevertheless, reserpine was used as an antipsychotic in nonresponders to the more-customarily prescribed “major tranquilizers”: for example, phenothiazines and butyrophenones). Next in line is a consideration of Nathan Kline's discovery of iproniazid's antidepressant effects. Roche was reluctant to market iproniazid as an antidepressant—indeed, because of reported problems in its use with tuberculosis, they had been considering withdrawing the drug. Iproniazid's fate turned out to be quite different because Kline, a Lasker Prize winner, was already famed as the discoverer of the psychotropic effects of reserpine. He publicized the results of the drug's effects in the 24 patients he had given it to, and, within months, it was being widely used. Kline was awarded a second Lasker Prize for this work. Healy next details the story of the introduction of meprobamate just after chlorpromazine hit the market. The success of meprobamate as a tranquilizer led to the benzodiazepines becoming tranquilizers. Meprobamate was almost entirely an American drug dispensed by psychiatrists in office practice, and was virtually not marketed in Europe.

In what Healy calls “the Middle Years” many copycat drugs were introduced to emulate the success of chlorpromazine, though “there was little connection between the use of these drugs and theories of psychosis.” Healy shows how the transmethylaton hypothesis, which reigned theoretically in biopsychiatry in the 1950s and 1960s, was entirely replaced from 1975 to 1995 by the dopamine hypothesis, which emerged from the discovery of the D2 receptor and the psychotomimetic properties of the amphetamines. Healy shows that, despite lack of supporting evidence, Crow's hypothesis of two types of schizophrenia won wide support. According to Crow, one type (“positive schizophrenia”) involved pathology of the

dopamine system, while the other (“negative schizophrenia”) entailed brain cell loss and ventricular enlargement. Healy suggests that the megadose treatments that began to be used in the 1970s and 1980s may have actually created the physical problems they allegedly were designed to palliate—though it is hard to know. Moreover, in the U.S. at least; such mega dosing was much-more prominent in some areas than others—for example California. Generally it was used by a minority of American psychiatrists; and fell into desuetude by the latter 1970s.

Healy goes on to consider the very serious problem that tardive dyskinesia has posed for biopsychiatrists and the drug companies. Healy shows how the introduction of neuroleptics dovetailed with the antipsychiatry movement to lead to the phenomenon of deinstitutionalization. Tardive dyskinesia became a major weapon in the armory of antipsychiatry, for juries were quite likely to believe it was a drug-induced problem. It must be emphasized that, in the heyday of antipsychotic use; neither psychiatrists nor pharmaceutical houses had any reason to suspect the extent to which “T.D.” would eventually occur. Moreover, it is surprising—given “T.D.’s” disfiguring symptoms—that relatively few patients complain much about it.

Healy then backtracks to show how two other trends resulted both in the growing influence of pharmaceutical companies over psychiatry and in the birth of antipsychiatry: the first war on drugs that began in 1914 with the Harrison Act and the mass movement after World War II of American psychiatrists into office practice. Healy argues that chlorpromazine and the new pharmaceuticals had indeed led to a deinstitutionalization—but of psychiatry and psychiatrists rather than of patients. Conditions such as depression, anxiety, and personality disorders came within the psychiatrist’s purview. Healy contends that, while the antipsychiatric thesis that madness is a sociopolitical, rather than a medical, condition has not stood the test of time; its other claim that psychiatry has been drawn into managing quotidian conditions is demonstrably correct.

Tardive dyskinesia decreased the production of antipsychotics, with clozapine taking 20 years before it was marketed in the late 1980s. Why did it eventually come to market, asks Healy? Because it was the one antipsychotic that did not produce tardive dyskinesia (apart from the less therapeutically predictable reserpine).

Healy then tells the tale of the selective serotonin reuptake inhibitors (SSRIs), discussing the important roles played by Frank Ayd, Paul Kielholz, Arvid Carlsson, and Merck, showing how they were marketed as direct successors to tricyclic antidepressants; even though in fact they work differently and produce variable effects with mood disorders. Healy adopts a strong externalist position in viewing the central problem faced by psychiatry and psychopharmacology in the 1960s as “how to distinguish drugs that restored social order from drugs that subverted the social order.” Of course psychotropics can be parsed along many other parameters as well.

In the section on psychopharmacology and science Healy shows how the use of statistics and probability theory created a market in risks, with clinical trials being used to assess statistically the efficacy of treatment. Healy is not sanguine, to say the least, that clinical trials have ever shown “that anything worked.” In line with this, he notes that the major psychotropics were all discovered without them. He applies the aforementioned contentions to most pharmaceuticals in general internal medicine as well. To properly appreciate Healy’s at-first seemingly bizarre assertions; one must differentiate his uses of “treatment” and “risk-management.” By the former he appears to mean *actual etiologically—based cure of a disease or syndrome*. By the latter he seems to mean *reduction of symptom intensity and the pernicious effects of the disorder*. He is thus correct that few, if any, drug-studies have demonstrated once-and-for-all causal, or etiological, cures (outside of certain infections and antimicrobials). *However many double-blind controlled drug studies—in psychiatry and elsewhere—have clearly attested to considerable symptomatic improvement*. Wallace notes, repeatedly in the Prologue and Epilogue, that psychiatry, like internal medicine, manages infinitely more than it cures. But this is not grounds for either pessimism or therapeutic nihilism.

In the concluding section on psychopharmacology and new markets Healy argues that the future of psychopharmacology, now in the hands of large and immensely profitable multinational corporations, lies

largely in a new form of “risk management” conjoined with rating scales that assess norms and deviations from the norm. He uses the example of the tremendous growth in anorexia nervosa since the 1970s, which, he argues, would not have happened without the proliferation of both weighing scales and normative ideas about weight. Healy concludes that the future lies more in lifestyle drugs like Viagra than in traditional medicines addressed to ameliorate specific diseases. Perhaps, but what about major depressives and bipolars; whose numbers show no signs of diminishing—to say nothing of schizophrenia? In sum, all treating and investigative clinicians can profit from seriously attending to Healy’s mind-broadening—although at times jarring—essay.

Section Three: Concepts and Topics

Concepts

Chapter 14: A History of Melancholia and Depression. Jackson’s chapter hammers home the impact of theory on medical modes of describing depression, as well as their likely effect on the phenomenology and self-image of patients. Ample current clinical and ethnographic evidence suggests that things are no different today. Jackson gives the various clinical descriptions of depression by important medical writers—many of whom were not doctors (Celsus, for example)—from classical Greece through medieval European, Byzantine, and Arabic sources up to modern times. The Hippocratics and Galen stressed fear and sadness, while Rufus included delusions as well. Such early writers canonized a description of depression that influenced how the syndrome was depicted by subsequent physicians from Avicenna to the sixteenth and seventeenth centuries.

In the sixteenth century guilt was often added to the medical pictures—perhaps, suggests Jackson, because of the Reformation’s accent on personal responsibility and accountability, though one must keep in mind its countercurrents of theistic determinism. Intriguingly, some recent empirical studies undercut the importance of guilt in present-day depressive constellations.

In the 1600s Willis split hypochondriasis from melancholia and depression. As Berrios mentions, the nineteenth century generally increased the emphasis on affective shadings and tone. Apart from possible temporal and cultural changes in the syndrome’s modal manifestations, changed descriptions may reflect altered medical presuppositions—casting historical doubt on the *Diagnostic and Statistical Manual of Mental Disorders* third and fourth editions’ claims to atheoreticism, which there are already ample epistemological reasons for questioning.

The impact of depressive phenomenology on medical theories of the disorder is well attested, though the determination can just as well proceed from existing theories about depression and continue reciprocally with each reinforcing the other, as the patients’ iatrogenically produced symptoms seem to verify the theories. Still, the extent to which affect is emphasized in depression and melancholia varies a great deal, as Berrios points out. Explanations invoking stagnation or deceleration of vascular, neural, or other bodily fluids likely reflected the appearance of and metaphors for the patients’ manifest slowing or stasis. The great Scots medical theoretician, Cullen, emphasized, in the later 1700s, depleted nerve energy in neural flow. This seems to reflect an inextricably mutual determination between lay phenomenology and metaphor on one hand and medical theory, description, and therapy on the other. In an earlier paper Jackson cogently stressed the phenomenology of energy as the *ur-ground* of natural science concepts of energy. Furthermore, classicists furnish ample evidence for the anthropomorphic origin of scientific concepts as essential as those of “causation” and “force.” Ironically, it is from such originally experience-rooted philosophical anthropologies and cosmological notions that modern science, including prominent visions of medicine and *psychiatry*, has built the progressively mechanistic ontology that has turned round to dehumanize man himself!

Like Berrios, Jackson reminds us that medical theories often changed, with treatments remaining initially the same. He considers the “principle of equilibrium” the central therapeutic tenet throughout.

This comprises two secondary principles: (1) the “elimination of excess and supplementation of deficiency” and (2) the “contraries”—the administration of opposites to neutralize excess and restore balance. Indeed, the role of concepts and metaphors of balance–imbalance in Greek classical thought in general has been extraordinary—right on down to present-day popular, humanistic, natural and social science, and medicopsychiatric thought and practice. This needs emphasizing only because the pervasiveness and obviousness of such ideas tend to preclude our explicit awareness of their epistemological status. Since the world appears to be as we experience and cognize it through our time-and-space bound cultures; it requires considerable training and effort even to be able to conceive of its being otherwise. It is the problem of Husserl’s “natural mode”; which led him to the *epoché*—which brackets questions about the existence of an external world and objects; and strives for only “thick descriptions” of phenomena as presented to consciousness. One can of course learn from Husserl, without cleaving to his epistemic relativism—indeed almost solipsism; and *pari passu* for cultural anthropological takes.

If, as Jackson points out, medical theories may change without treatments doing likewise; history also tells us that medical axioms, theories, descriptions, and therapies may evolve together or separately in any number of combinations and permutations—often in such a manner that it is difficult or impossible to conjecture reliably about the causal sequences among them. While both scholars (Jackson and Berrios) concur on many points discussed in their chapters (such as nineteenth century psychiatry’s increasing diagnostic emphasis on the affective manifestations of the depressive syndrome); they part company over the measure of temporal continuity in clinical descriptions of apparent melancholia and depression—partly touched on in the Preface. The divergences of historians are in many ways more interesting than their agreements. They may mean simply that each writer has grasped different parts of the proverbial elephant; and is comprehending not so much an incorrect, as an incomplete, version of events.

Chapter 15: Constructing Schizophrenia as a Category of Mental Illness. Gilman gives us an historically, literarily, linguistically, and epistemologically sensitive and well-informed meditation on a paradigmatic psychiatric nosological notion. Physician-readers unselfconsciously subscribing to a purely realist position on the ontology of disease or “disorder” will find the author’s approach uncomfortably novel. By focusing on the history and prehistory of the *idea of schizophrenia*; Gilman successfully avoids the perils of naive realism, radical idealism, or an antipsychiatric stance. As in science and medicine generally, taxonomies in psychiatry partly reflect theoretical and methodological precommitments, the story of which Gilman tells; rather than that of the nature and measure of the input coming from the patients themselves (i.e., the intersubjectively empirical aspects).

The use of descriptive adjectives such as “bizarre” signals a precommitment by physicians to a particular brand of interpretation. At first referring to madness quite broadly, the term became reserved for more specifically schizophrenic varieties of thought disorder; which calls to mind the concept-shaping and restricting role of language noted by the anthropologist/linguists Sapir and Whorf. (It must be noted, however, that important aspects of the Sapir-Whorf hypothesis have been thrown into question by contemporary linguists and anthropologists.) We touch here on a huge and controversial philosophical literature on the relations between thinking and language—including of course metaphors as well (see Wallace, Chapter 2).

Gilman reveals yet another example of psychiatrists turning round on the traces of their past and misusing them to create precursors for their own favored notions: for example, Pick’s retroactive 1891 designation of Morel as an important “anticipator” of his own nosological thinking. Gilman’s use of aesthetic and iconographic perspectives enhance this history, as does his invocation of cultural factors in certain changing patient presentations, a well-known instance of which is the waning of the catatonia figuring so prominently in Kahlbaum’s descriptions. Like Dora Weiner, Gilman addresses the impact of national and political prejudices on formulations of the schizophrenia concept, in addition to which he traces the development of the degeneration/deterioration paradigm with its legacy of therapeutic pessimism toward schizophrenia (gradually, but not entirely, overcome).

Kraepelin’s prospective, natural-historical approach to the illness was a significant addition, paving the way, suggests Gilman, for Freud’s psychogenetic/dynamic perspective on the disorder, as well as influencing

the somewhat more optimistic Bleuler. The chapter traces many other currents as well, including the impact on schizophrenia theorists of early sexological writers on masturbatory insanity. The author criticizes certain presuppositions and methods in hallowed transcultural diagnostic and epidemiological studies and points out the close temporal and geographic/cultural associations between the rise of genetic psychiatry and of racist eugenic doctrines. One can hardly read the chapters by Berrios and Gilman without some effect on one's diagnostic thinking and practice.

Chapter 16: The Concept of Psychosomatic Medicine. Herbert Weiner, perhaps the leading late twentieth century proponent for and historian of psychosomatic medicine, begins his chapter by interpreting medicine's dualism as not really between minds and bodies but between structure and function: knowledge of the former is revealed by corpses spread out on a pathologist's table; while knowledge of the latter results from the study of sick persons. Though the German "*Psychiker*" J. C. A. Heinroth apparently coined the term "psychosomatic" (originally—and significantly—hyphenated), the subject matter did not become defined until the first third of the twentieth century. Key for the very possibility of a psychosomatic medicine was the slow recognition of emotions as psychological.

In the United States Helen Flanders Dunbar, both in her important 1933 bibliography and through her editorship of the journal *Psychosomatic Medicine*, shaped the emerging field. Most of the early American contributors either were psychoanalysts or were strongly influenced by psychoanalysis (e.g., Franz Alexander). The chief interests of these investigators lay in detailing the psychogenesis of specific diseases, not in working out the psychophysiology of the emotions. In the first American textbook of psychosomatic medicine (1943), Weiss and English articulated a broader perspective on disease, which included social factors.

In the section of his chapter titled "Toward a Medicine of Living Persons," Weiner returns to a dichotomy originating in Hippocratic medicine: the causes of diseases are inferred from and correlated with material changes in the body, while the physician's ethos "consists of prescriptions about the relationship of the doctor to his patient." The reader is given a guided tour of the history of medical thought as it relates to recognition of the importance of the emotions, from Hippocrates through Galen, the School of Salerno, Francis Bacon, and Descartes. Next we are led through the ideas of the vitalist Stahl, reacting to Descartes, then William Cullen, Benjamin Rush, and Henry Holland. In the late nineteenth century D. Hack Tuke recommended the use of "psycho-therapeutics" in treating physical disease. In the twentieth century a number of German physicians reacted to the medical monism that ensued from the mid-nineteenth century work of Virchow, Schleiden, and others (see the chapter by Gach for a discussion). Rudolf von Krehl, Gustav von Bergmann, and Viktor von Weiszäcker attempted to articulate what von Weiszäcker called an anthropological medicine—medicine with a soul (or at least a human face).

The section titled "The Role of the Emotions (Passions and Affections) in the History of Psychosomatic Medicine" walks us through the history of the functionalist approach in medicine, for only living bodies can experience emotions. Again beginning with the ancient Greeks, we work up to modern times. Weiner regards Thomas Sydenham as particularly important. Sydenham generically referred to what were later called "neuroses" as "hysteria" and placed them squarely in the psychological camp. In general Weiner regards hysteria as, historically, the paradigmatic malady for an emerging psychosomatic medicine. This entire section constitutes a detailed chronological history of the treatment of the mind-body problem in medicine and psychiatry—resumed in Weiner's "Epilogue" chapter, but with a much stronger philosophical, scientific, and clinical tenor in the latter. Let us mention only two of Weiner's landmarks: Bordeau's specification in the eighteenth century of the importance of what later would be called the endocrine glands; and the great nineteenth century French physiologist Magendie's discrimination between willed movements and muscular contractions, with the former being influenced by instincts and passions. The British physician Joseph Adams outlined a multifactorial concept of disease in 1814, according to which it was not diseases per se but a susceptibility to them that was inherited. The German Romantics, expectably, thought that mind and the emotions played an important role in disease (most notably Heinroth). (Marx's chapters offer a detailed discussion of the Romantics.)

Finally we come to Darwin, whom Weiner regards as crucially important. Darwin's recognition in *The Expression of the Emotions* that emotions and their associated motor patterns were one and indivisible, rather than one causing the other, is for Weiner a watershed event. With Darwin emotions were for the first time recognized as organismic responses, be they adaptive or maladaptive. Reaching Freud, Weiner specifies his four principal contributions to psychosomatics: (1) his 1926 reformulation of anxiety, which he conceptualized as a signal of internal danger (in contradistinction to fear, which was a reaction to an external threat); (2) his two models for the pathogenesis of bodily symptoms, those seen in conversion hysteria and the "actual" neuroses; (3) his adding a historical dimension for understanding the etiology of all disease; and (4) the concepts of transference and counter-transference—the mutual influence of therapist and patient on each other's perceptions and fantasies. Given Freud's roots in evolutionary biology as detailed by Sulloway (albeit of a Lamarckian cast), Weiner finds it puzzling that psychoanalysis remained "as uninstructed by Darwin as did the rest of medicine." See Wallace's two Freud chapters in the "Epilogue" for more on all this.

In the next section, on the psychophysiology of the emotions, we take a grand tour of the experimental history of the field, beginning with E. H. Weber's putting the study of sensation on a quantitative basis. Here and for long the work is all by Germans, with Fechner following up Weber's work and with Wundt (the founder of modern experimental psychology) and his students attempting to quantify emotion, sensation, and perception. The Italian Angelo Mosso in the late nineteenth century studied the effects of fear and fatigue and invented the plethysmograph as a measuring instrument. Meanwhile, in the (medically speaking) backward United States, the upstate New York physician William Beaumont published in 1833 the first description of the relationship of the emotions to the functions of an internal organ, observations made possible by the permanent gastric fistula in a patient he treated and decided to study. Beaumont's work led directly (if not very quickly) to Pavlov's discovery of conditional reflexes by means of gastric fistulae experimentally produced in dogs. With this work Pavlov placed psychophysiology on an experimental basis. Back in the United States, the physiologist W. B. Cannon intensively studied automatically mediated responses in pain, hunger, fear, and rage.

In the section on psychophysiological mechanisms we take a different route through experimental research, beginning with the description in the 1840s by E. H. and E. F. Weber of the inhibitory action of the vagus nerve on the heart rate. Around the turn of the nineteenth century and in the early years of the twentieth century the British neurologist Walter Gaskell laid the foundation for the modern study of the autonomic nervous system by describing the opposing functions of two branches of the "involuntary nervous system," while the English neuroanatomist John Langley renamed in 1898 the "involuntary" nervous system "autonomic" and called its two main divisions "sympathetic" and "parasympathetic." The European, British, and American experimental work had now laid the groundwork for understanding, at least in part, how emotions correlated with altered bodily function.

In the section on the role of the emotions in specific diseases Weiner discusses in illustrative detail the historical revelation of the role emotions play in dyspepsia and peptic ulcer, hyperthyroidism, heart disease (angina pectoris and essential hypertension), soldier's heart and neurocirculatory asthenia, amenorrhea, and anorexia nervosa.

With the section titled "The Beginnings of Psychosomatic Medicine (1920–1960)," we have reached the modern era. Weiner begins with the Freudians, such as Groddeck, Felix Deutsch, and Eduardo Weiss, who took as their model Freud's concept of the pathogenesis of hysterical conversion symptoms. The Chicago group, led by Franz Alexander, from the 1930s took their lead from Freud's model of the "actual" neuroses, in which the physical symptom had no symbolic meaning. Weiner describes in considerable detail Alexander's ideas; noting, however, that he held to a linear causal concept of how emotions "produce" bodily changes—despite Darwin and Cannon's having shown that they were integrated responses of the entire organism. Only with the mid-century psychobiological formulations of Thure von Uexküll is the idea of emotions as causal agents abandoned. Even before von Uexküll's work others had pointed in this direction: in the 1940s the medical biologist J. L. Halliday had identified seven separate but interacting features of the etiology of all diseases. In the United States Roy Grinker and John Spiegel

espoused field theories similar to Halliday's. In psychoanalysis Heinz Hartmann's extension in 1939 of ego psychology to include adaptation and Erik Erikson's important 1950 book *Childhood and Society* integrated Freud's ideas with biological and sociocultural concepts. Both greatly (albeit indirectly) influenced the direction of psychosomatic medicine. In 1948 Jurgen Ruesch published an important paper citing the maladaptive characteristics shared by many sick persons. The recognition that a person more capable of adapting might not fall ill even if predisposed to a disease was obscured for a number of years by Hans Selye's widely influential work on stress as a generalized body response.

Starting in the 1940s a more integrated behavioral medicine began to emerge as psychiatry moved into liaison work in general hospitals. Physicians began to recognize that health problems often resulted from people's behavior instead of from pathogens. Whereas Healy discussed this move into life style issues and problems in dour and pessimistic terms, Weiner sees it as a boon, with industrial and automobile accidents, tobacco and drug use, excessive food and salt intake, and lack of exercise all coming to be recognized as potentially "pathogenic." The quite different take Healy and Weiner have on this issue raises important questions about social control—about the extent to which individuals should be held responsible for their own fates (more or less a libertarian view) as opposed to the extent to which the state should coerce persons to do what is regarded as in their best interest, such as not smoking. In his conclusion Weiner points out how lower socioeconomic status has been associated with shorter life expectancy (by a great deal, we might add, especially among American black males), higher infant mortality, nutritional deprivation in infants and children, obesity, and heart disease. "Obesity and social class are almost as closely linked for ancestors as for their obese descendants," Weiner writes. At this level, though, we have—at least to some extent—left the domain of medicine and entered the realm of politics, for these are in the end political decisions; as Rudolph Virchow understood in the mid-nineteenth century.

Topics

Chapter 17: Neurology's Influence on American Psychiatry: 1865–1915. Brown discusses a late turn-of-the-twentieth century interaction that played a central role in expanding psychiatry's scope toward what it is today at the beginning of the twenty-first century. The "psychical" and "somatic" perspectives in American psychiatry were probably never as divisively demarcated as their counterparts in the German lands (see the chapters by Marx and Grob). We have already mentioned the theologically based dualism of both "psychically" and "somatically" oriented American alienists, quite a few of whom might more aptly be characterized as "eclectic," or rather "pluralistic." Nevertheless, there were important differences in etiological thinking and therapeutic interventions (or their absence) between the more "psychically" and the more "somatically" inclined. Grob speaks to the demographic, sociocultural, economic, and institutional changes leading many American alienists toward an increasingly somatic orientation, while Brown focuses more on internalist factors.

It was, as Brown recapitulates, the development of American neurology and German scientific medicine and neuropsychiatry that frightened, yet also encouraged, American psychiatrists to more-neurological views at the close of the nineteenth century. The growing comprehension of the pathogenesis and etiology of prevalent state hospital disorders such as pellagra, beriberi, and general paresis—along with the devising of specific nutritional or chemical therapies for them—vanquished the previous therapeutic nihilism of the "somatic" psychiatrists and furthered both their scientific and clinical aspirations. Gach discusses these topics, as well, in his chapter.

Even those European and American neurologists, such as Charcot and Beard, who worked mainly with outpatients or treated sufferings eventually considered psychopathological (hysteria, anxiety disorders, neurasthenia, and the like), used biomedical and neurobiological concepts to explain such conditions and the results of their therapeutic interventions. This accounts for the curious historical fact that twentieth century psychiatry, with its out—as well as inpatient treatments and inclusion (at least in America) of explicitly psychotherapeutic approaches, arose from a fusion between: outpatient neurologists who

practiced what was essentially psychotherapy; and hospital psychiatrists who espoused organicism but practiced what was essentially administrative custodianship.

As such neurologists became more psychologically and psychotherapeutically oriented. The Swiss-born former neuropathologist Adolf Meyer's "psychobiology" provided them with a new home, as did the *Journal of Nervous and Mental Disease* (leaving the *Archives of Psychiatry and Neurology* for more traditional neurologists and neurologically oriented psychiatrists). On the other hand, the joint history of these specialties helps explain the persistence of an integrated American Board of Psychiatry and Neurology, an apparently anachronistic union until U.S. psychiatry's recent neurobiological shift.

Brown's treatment of the role of medical error in psychiatry's advance is instructive. Though erroneous, Charcot's neurophysiological explanations of hysteria and of the effects of hypnosis on the disorder helped to remove the stigma of fakery from both hysteria and hypnosis, medically legitimating them for subsequent explicitly psychological and psychotherapeutic explanations. From the 1870s psychologically minded physicians had good reasons, both monetary and medical, for turning their attention to functional neuroses—"railway" spine and similar post-traumatic syndromes—insurance companies and the legal system both needed experts who could distinguish between malingering and real neurological maladies without obvious lesions. In short, neurologists developed functional, albeit ostensibly physiological, explanations for the class of disorders exemplified by hysteria and neurasthenia, a class now regarded as distinct from both neural disorders with a demonstrable organic pathology and malingering. *In short, the modern psychoneuroses were born and the ground prepared for explicitly psychological and psychotherapeutic theories such as Janet's and Freud's. Again, see Wallace's chapters on Freud in the "Epilogue."*

Finally, this chapter addresses other themes critical to understanding American psychiatry's political and nosological evolution to date. These include the impact of both socioeconomic and semiotic factors. Medical and popular "nervous" metaphors for states of mind and behavior go far back in a reciprocally reinforcing relationship, affecting the changing face of medicine and the eventual birth and development of the neurological and psychiatric specialties. The subsequent—sometimes autonomous and sometimes intertwining—courses of neurology and psychiatry probably contributed to general medicine's move toward progressively pathophysiological theories and hypotheses. And so, the one-sidedly "solidist" sixteenth through early nineteenth century reaction against Galen was reversed—an antipathy so strong that the great Viennese endocrine pathologist Rokitansky was initially suspected of being a "closet humoralist!"

Chapter 18: The Transformation of American Psychiatry: From Institution to Community, 1800–2000.

Whereas D. B. Weiner treats aspects of late eighteenth and early nineteenth century institutional psychiatry in France, and Marx does likewise for German academic and hospital psychiatry; Grob depicts the institutional transformations in American psychiatry in the nineteenth and twentieth centuries. Although Grob does not deny the role of theoretical and clinical factors, he emphasizes the sociocultural, demographic, and institutional determinants of the nineteenth through twentieth century alteration of American psychiatry from an asylum-based to a more ambulatory, community-oriented, and academic specialty. Many American psychiatrists have lived through various stages of its later developments: the clinical hegemony of psychoanalysis and psychodynamics from the 1940s through the 1970s in U.S. departments of psychiatry and hospitals; and the overlapping surge of social and community psychiatry in the 1960s and 1970s, with its progressively rapid deinstitutionalization and state hospital decentralization.

Grob's history is particularly pertinent to present psychiatric and mental health concerns. The tremendous growth of public mental hospitals in the mid to late nineteenth century was, Grob tells us, overwhelmingly motivated by a host of changes in the external scene, especially the mushrooming American population from mid-century forward; immigration and growing geographic mobility and its impact on the size, cohesion, and sociocultural homogeneity of communities; a waning sense of family and local responsibility for the care and maintenance of their mentally ill in the community; and changing social mores, including views on charity and the appropriate mechanisms for social welfare and economic relief. These factors affected not only the well-being of the chronically mentally ill, but also the form and orientation of American psychiatry. Grob sees psychiatry's character and theory as not only shaped significantly by institutional features, but as expressing broadly social and cultural values as well.

Still, in this and previous works, Grob hints at the reciprocally determining aspects of the relationship between externalist and internalist processes. For example, the aforementioned sociocultural and demographic changes, yielding larger and more custodially oriented psychiatric institutions, went hand in hand with the mounting impact on American alienists of middle and later nineteenth century German neuropathological psychiatry, leading to a somaticist orientation that was abetted as well by the growing number of organically disturbed inpatients and by the scientific and therapeutic discoveries enumerated in Gach's chapter. As the second half of the nineteenth century wore on, Grob sees American psychiatry becoming increasingly disease rather than patient oriented—something we have seen returning since the late 1970s.

Though state hospitals continued to grow around the turn of the twentieth century, the mental hygiene movement spurred the development of progressively acute (“psychopathic”) hospital psychiatry as well as a growing cadre of outpatient and community practitioners. While hardly intended by its leaders, the movement stimulated psychiatric interests far removed from the more severely disturbed patients who were the profession's earliest concern—and from the long-term facilities that birthed it and remained its long-time home. The mental hygiene movement initiated the progressive expansion of psychiatry's domain—an expansion deemed by some current critics as imperialist and scientifically, clinically, and morally unjustified.

The relatively recent deinstitutionalization movement has emptied the large state hospitals previously abandoned by most American psychiatrists. This similarly well-intentioned latter-day twist on aspects of the mental hygiene movement has left many formerly hospitalized mental patients no less therapeutically neglected—and exposed, to boot, to an uncaring or exploitative community. Had the lay and medical advocates of deinstitutionalization known their history—that local communities had begun relinquishing their responsibilities for the psychiatrically disordered by the mid-nineteenth century—then perhaps they would have paused before returning mental patients to ambiances that, if anything, welcome them even less now than then. This is yet another instance of history's potential utility for contemporary endeavors. Finally, Grob's chapter charts a number of American psychiatry's changing metaphysical, theoretical, nosological, and therapeutic issues and paradigms.

Chapter 19: The Transition to Secular Psychotherapy: Hypnosis and the Alternate-Consciousness Paradigm. Along with certain earlier practices—the Catholic confessional, Protestant cure of souls, and aspects of the general doctor–patient relationship—hypnosis is integral to the pre- and protohistory of secular lay and medical psychotherapy. Indeed, it is arguably the final, and transitional, step in that part of the story.

Crabtree's chapter traces the interrelated topics of hypnosis and altered consciousness from Puységur's “magnetic sleep” through the English hypnotists to Liébault, Charcot, Janet, and Freud, demonstrating the extent to which Puységur and the early magnetizers emphasized certain key phenomena and ideas. Crabtree accents the measure to which Puységur's template for what happens during the hypnotist–patient relationship shaped subsequent expectations about the nature of what was supposed to be seen. This significant epistemological point is repeated time and again by numerous historical investigators of prior and present-day psychiatric diagnosis, thus alerting us to an additional mode of patient-shaping “countertransference.”

In this context see: E. R. Wallace's “Psychiatry and Its Nosology: A Historico-Philosophical Overview,” in eds. J. Sadler, M. Schwartz, M. Spitzer, and O. Wiggins, *Philosophical Issues in Psychiatric Diagnostic Classification*, pp. 16–86 (Hopkins Press, 1994); and E. R. Wallace, J. Sadler, and J. Radden, “The Philosophy of Psychiatry: Who Needs It?” *J. Nerv. Ment. Dis.* 185 (1997):67–73.

Fascination with allegedly paranormal phenomena pervaded hypnotism for many of its formative decades, retarding, believes Crabtree, both the development of hypnosis and its medical acceptance. Expectably, both animal magnetism and its relationship with spiritualism were eagerly appropriated by German-speaking Romantics, who also, in line with *Naturphilosophie*, investigated the presumed “magnetic fluid.” Their preoccupation with the praeter- or supernatural notwithstanding, some of the German Romantics made important contributions to the eventual development of psychotherapy and dynamic psychology.

Phenomena relating to the “pathogenic secret” surfaced repeatedly, though it was decades before its therapeutic salience was sufficiently understood and coherently codified—hammering home, once more, how long it can take for the now seemingly obvious to establish itself. Hypnotism’s close connection to the paranormal and spiritualism began to wane under the influence of Braid in the mid-nineteenth century—it was Braid who, in addition to demystifying hypnosis, first coined the modern terms we use to refer to it.

Ellenberger argued that with the work of the later nineteenth century physicians Liébault, Charcot, and Bernheim the hypnotist–subject relationship lost an earlier, more collaborative and subject-centered character. Crabtree, however, sees matters differently, granting any such variation much less significance—yet another instance of interpretive divergences among competent scholars.

In the United States animal magnetism was significant in the emergence of a more distinctively American psychology and psychotherapy, though it, too, was for a time preoccupied with the spiritist and paranormal. American work with multiple personality and dissociation fed back to France, where the concept of animal magnetism originated. In the late nineteenth century French originality and momentum in the area resumed, especially with the work of Pierre Janet.

Previous explanations of unconscious processes had been primarily physiological, like those offered by the Englishman Carpenter, or philosophical, like the German von Hartmann’s; Janet, in contrast, educated in philosophy as well as medicine, took a predominantly psychological approach to psychopathology and hypnosis. This was, Crabtree argues, so original as to “become formative to all of modern dynamic psychology.” According to Janet, we exist and operate in two spheres simultaneously—“conscious” and “subconscious” (a term Freud disliked). As early as 1886, Janet conceived of unconsciousness as comprising multiple, distinct centers capable of proceeding independently of one another and of affecting conscious activity. Through work with dissociative disorders and hysteria, and experiments with distraction and automatic writing, Janet believed that he had demonstrated that a second consciousness is present continuously, denying that this results solely from posthypnotic suggestion. Janet argued (somewhat as Freud did later) that, though the hypnotist can deliberately suggest ideas to the subject that subsequently affect his or her activity in states of consciousness, traumatic experiences can do so as well.

Partly influenced by Charcot’s quasi-neurological theorizing on “isolated centers,” Janet christened his own psychological version “subconscious fixed ideas.” Janet’s “subconscious”—or, perhaps more aptly, “coconsciousness” (also his term)—influenced the thinking of investigators in many places, including Jung (perhaps accounting for some of his differences from Freud at the outset).

The many variations and vicissitudes of American usages of the “sub-” or “coconscious” are sketched here, as is Freud’s hypnotic work and its transformation to psychoanalysis. Crabtree incisively discusses the possible determinants of Freud’s strenuous opposition of “subconsciousness” and “coconsciousness” paradigms. In sum, this chapter contains an embarrassment of historical *and* epistemological riches. It diminishes the presentism that otherwise has compelled many automatically to “translate” the dynamic concepts of Janet and others into the more familiar ones of Freud and psychoanalysis.

Chapter 20: Psychoanalysis in Central Europe: The Interplay of Psychoanalysis and Culture. Drawing from a wealth of Central European historical sources, Decker paints a comprehensive picture of the cultural and intellectual development of psychoanalysis in its original heartland. She documents what she was among the first to demonstrate: Ernest Jones’s and Freud’s considerable underrepresentation of the extent to which Freud’s work was noticed and reviewed—often thoughtfully and at times positively—by contemporary European psychiatrists and their journals. Decker enumerates and discusses the complex reasons for the disapproval psychoanalysis did receive, ranging from its being viewed as a throwback to the unscientific *Naturphilosophie* of German Romanticism, through the identification of Freud’s work with “un-German” suspect French sources like Charcot, to concerns about its pansexualism, its reduction of human experience to explanations rooted in sex. She elegantly explains how the concern with psychoanalytic pansexualism was at least partly a cover for distress about the rapidly changing status quo, with the real problem being the promotion of the unconscious, with its suggestion of mental forces outside conscious control that again hearkened back to the hey-day of German Romanticism. The point is that

legitimate reasons for being suspicious of psychoanalysis existed along with the not-so-good ones such as anti-semitism, which Decker sees as a much less important motive for rejecting psychoanalysis.

The author surveys the history of psychoanalysis in Austria, Switzerland, and Germany, showing how for cultural and political reasons its course was quite different in each of the countries. The country in which psychoanalysis has had the least influence, right up through today, is Austria. The dominance of organicist ideas in Austrian medicine had led to a powerful tradition of therapeutic nihilism, which emphasized diagnosis and pretty much ignored attempts at therapy as more likely to harm than help. Freud's claims for non-physical disease with his proposals for a cure through psychoanalytic treatment met expectably strong opposition. In addition, his and his followers' shunning of medical and psychiatric meetings hardly endeared them to the powers-that-were in Central European medicine and psychiatry. This, by the way, was quite unlike the early years of psychoanalysis in America, where Ernest Jones rarely missed an opportunity to promote the psychoanalytic cause at a medical meeting. Whereas psychoanalysis revived quite strongly in Germany after World War II—abetted, in one of history's ironies, by the generous state insurance coverage of up to 300 hours of psychotherapy, a policy ironically rooted in the “harnessing of psychotherapy by various agencies of the Nazi government, particularly the military”: in Austria its post-World War II resuscitation was feeble. As Decker puts it, “it is improbable that Vienna will ever again be a center of psychoanalysis.” See Wallace's Chapter 24 for more on psychoanalysis in present-day Germany.

The Swiss experience with psychoanalysis was *sui generis*. Although the Swiss found psychoanalysis' preoccupation with sex even more troubling, they had no tradition of therapeutic nihilism. Furthermore, with no separation of custodial and therapeutic hospitals and an already decoupled neurology and psychiatry, the Swiss had at the turn of the century a meliorist psychiatric attitude toward treating patients (as very much evidenced by the Swiss-born Adolf Meyer's impact on therapeutically nihilist American psychiatry). So, in many ways Switzerland was fertile ground for psychoanalysis. Even after Jung's departure from the movement in 1914, there remained a cadre of psychoanalytic loyalists. Decker details the somewhat tortuous connection of Bleuler (Jung's mentor at the Burghölzli Hospital) with Freud, as well, of course, as Jung's. Bleuler's early interest in Freud's work was important in that it gave psychoanalysis an academic cachet in Switzerland that it lacked elsewhere. Indeed, the Swiss connection proved most fertile, as a large number of analysts trained in Zurich under Bleuler and Jung, including Karl Abraham and A. A. Brill, the prime mover for psychoanalysis in America. Unlike Austria, psychoanalysis thrived in Switzerland after World War II, with, if anything, increasing interest in Freudian analysis.

In her conclusion Decker points to the importance of two factors in the history of modern science: “the continuous, artificial distinction between materialist and nonmaterialist science, and national allegiances and rivalries,” calling to mind once again the epistemological themes mentioned by many of our authors. The editors see a rift between serious historians and psychiatric practitioners, with the former more suspicious of the naive realism with which the latter are too-often imbued. Historians know that how events are construed and understood is theory-laden, that one's point of view determines what it is possible for one to see; while practitioners too-frequently assume that invented syndromic categories somehow exist in the world. Wallace—in his Prolegomenon and Epilogue essays—consistently strives for a middle-ground, which acknowledges the importance of both rationalism and empiricism. J. Gach discusses these issues at greater length in Chapter 23.

Chapter 21: The Psychoanalytic Movement in the United States, 1906–1991. Gifford's chapter provides not only an American companion to Decker's European story, but also a fascinating account of certain culturally and politically inspired peculiarities of the history of psychoanalysis in the United States. Key themes in his chapter are (1) the importance of powerful personalities (such as White and Brill) and organizational political factors in local and national schisms and fragmentations, (2) the relative unimportance of major theoretical or therapeutic differences in the American dis- and reassociations, (3) an American preoccupation with therapeutics, leading the United States to produce few major home-grown theoreticians, and (4) an especially evident concern of the author—that American psychoanalysis has been until recently overwhelmingly physician-dominated and anti-lay analysis. The essay's many minor keys include (1) special theoretical and therapeutic twists and emphases in America, such as group and brief approaches, (2) the paucity of good histories of individual institutes and of the idiosyncratic vicissitudes of some of them

(e.g., New York and Baltimore–Washington, D.C.), (3) the somewhat different origins of American child analysis, (4) the role of post–World Wars I and II European émigrés, (5) the downplaying of America’s alleged desexualizing and optimistic recasting of Freudian theory, and (6) the much greater affiliation of psychoanalysis with psychiatry in the United States than elsewhere.

More controversial is Gifford’s rather low estimation of the importance of Sullivan’s theoretical contributions. Like many psychoanalysts, Gifford sees him primarily as an exceptionally intuitive therapist of schizophrenics, when he was also, arguably, the first American-reared psychodynamic and psychiatric thinker of any real originality and significance, many of whose ideas have become incorporated into psychoanalytic object-relations theory and self-psychology, with little or no acknowledgment of their source—not to mention the uncanny resemblance of his concepts of proto-, para-, and syntaxis to Lacan’s later formulation of the Imaginary, the Symbolic, and the Real. Finally, Gifford ironically projects that ostensible problems such as declining patient and financial resources for available analysts and the neurobiological/pharmacological hegemony in American academic psychiatry may ultimately redound to the benefit of the psychoanalytic profession by broadening its extramedical disciplinary base and attracting more intellectually interested and theoretically oriented trainees. On this the editors heartily concur.

Chapter 22. The Development of Clinical Psychology, Social Work, and Psychiatric Nursing: 1900–1980s.

Nancy Tomes has contributed this important chapter on the rise of the non-M.D. mental health professions. From psychiatry’s total domination of the mostly asylum-based field in 1900: by the late 1990s, of approximately a quarter-of-a-million mental health professionals; barely 16% were M.D.’s; though they still wield a power disproportionate to their numbers. Nevertheless, they have by now fully-endorsed the “mental health team” concept. Most American psychiatrists have become so-acclimated to it, that they will probably be surprised by the long and tortuous path by which this came to be. The origin of the new professions was intimately associated with the early twentieth century mental hygiene movement, and its associated public outpatient clinics and shorter term “psychopathic” hospitals. Forward-thinking M.D.’s such as Adolf Meyer, E. E. Southard, and W. A. White began including social workers and psychologists in their departments and facilities. Still, clinical psychologists more-often functioned as “mental testers,” with treatment reserved to M.D.’s. Social workers were given the task of obtaining family and environmental information and playing a role in discharge-disposition. Tomes notes that psychiatrists long felt more comfortable working with social workers than with psychologists. She conjectures that this was because of women’s overrepresentation in social work, as opposed to the more male-dominated and doctorate-holding clinical psychologists; implying that the (mostly-male) psychiatrists felt less-threatened by the former. Prestigious masters-level social work training programs, such as the one at Smith College; would gradually raise the status of the profession. World War I, with its many recruits rejected for intelligence-reasons; gave a leg-up to the mental testers. Between the World Wars clinical psychologists progressively moved toward therapeutic roles previously limited to physicians. However clinical psychologists had their own battles to fight with the experimentalists and academic psychologists who looked-down upon them. Indeed, many of the issues within their A.P.A. were not resolved until the 1960s and ‘70s. The many psychiatric casualties of World War II, coupled with a grossly-deficient number of psychiatrists; finally catapulted psychologists into the psychotherapeutic domain, hitherto reserved for psychiatrists. Post-War federal-funding of psychological graduate-training and clinical internships in V.A. Hospitals and V.A. Mental Hygiene Units, swelled the ranks of Ph.D. clinical psychologists and moved them toward near-parity with psychiatrists. Moreover, prestigious psychiatric training programs, such as the Menninger Institute, opened their doors to psychology faculty and trainees. In this period of psychoanalytic and psychotherapeutic emphasis in psychiatry; it became harder for M.D.’s to ignore psychological claims to therapeutic expertise. Too, M.S.W. social workers were making headway in areas such as family and group therapy as well. Community Mental Health Centers helped to clinch the “mental health team” concept; and M.S.W.’s and Ph.D.’s began assuming administrative positions. Meanwhile psychiatric nursing, which had many mental hospital training programs by the very-early 1900s, was the last to find a place in the sun. Indeed, many M.S.N. psychiatric nurse-practitioners joined private practice groups with psychiatrists and psychologists. On the other hand, some M.S.N.’s have been adopting a biomedical approach; which seems to run counter to their traditional commitment to the “mental” health team.

Epilogue: Psychiatry and the Mind-Body Relation

These chapters deal with psychiatry's—historically and presently—most central and contentious issue; the mind-brain/body relation. They are at once historical, philosophical, scientific, and clinical. They are too complex to “synopsise” well. The reader must simply chew and digest them. In important respects, they bring together many of the prior chapters' implicit or explicit considerations.

Chapter 23: Thoughts Toward a Critique of Biological Psychiatry. In this chapter John Gach discusses the metaphysical assumptions about the world that are implicit in biopsychiatry, attempting to render them as explicit claims for the monistic medical world view that arose largely from mid-nineteenth century German science and medicine. Many of the previous chapters, beginning with Wallace's historiographical essay, touch on the theme of how the reality of patients and physicians is co-determined by the ideas and expectations that each brings to the encounter. Here it is examined in detail from a philosophical point of view.

Chapter 24: Two “Mind”-“Body” Models for a Holistic Psychiatry. After a journey through its history one might well ask “what is psychiatry's subject matter?” As our authors have shown in their individual contributions, there is no and has never been a single answer to which all psychiatrists would assent in the roughly two hundred-year history of the discipline. From its beginning as an emerging medical specialty in the late Enlightenment, psychiatry has straddled medicine, psychology, the natural and social sciences, and the humanities. And it has intersected—whether explicitly or not—with a variety of sociocultural institutions. In these senses, it is an “amphibious” discipline. No issue brings this to the fore as much as the mind-body relation.

The history of psychiatry, like that of medicine, is mostly the history of error—serious and systematic mistakes by dedicated clinician-investigators trying to solve complex scientific and human problems with the best theoretical, therapeutic, and personal tools at hand. The nobility of this attempt to reach the mentally distressed and disabled justifies the specialty more than the probity and efficacy of its past and present theories and therapies. Individual treatments and explanations come and go, while the goal of trying to help people and understand the causes of their mental and emotional problems abides. If society ever reaches the point at which it no longer values or supports the gropings of this healing “amphibian,” it will be a sad commentary on medicine and humanity.

This essay proposes two alternative mind-body models for a holistic or biopsychosocial psychiatric medicine. Wallace presents a dual-aspect monist and a functionalist model of mind-body. He also discusses historical issues, and the work of Nobelist neuroscientist/psychiatrist Eric Kandel and others.

Chapter 25. Freud on “Mind”-“Body” I: The Psychoneurobiological and “Instinctualist” Stance; with Implications for Chapter 24. Wallace demonstrates the career-long importance of Freud's neurobiology and drive psychobiology; as well as discussing identity theory and evolutionary issues.

Chapter 26. Freud on “Mind”-“Body” II: Drive, Motivation, Meaning, History, and Freud's Psychological Heuristic; with Clinical and Everyday Examples. The first part of Wallace's chapter connects the issues in Chapter 25 with those in this Chapter; and he then discusses and exemplifies Freud's various psychological approaches, and some of their changes over time.

Chapter 27. Psychosomatic Medicine and the Mind-Body Relation: Historical, Philosophical, Scientific, and Clinical Perspectives. Herbert Weiner's multi-faceted vantage on the mind-body relation in psychiatry as it emerges from theory, practice, and primate/human research (including his own) in psychomatic processes amply demonstrates the historically-progressive realization of the incredible and multi-relational complexity of psychosomatics and the mind-body relation. He courageously points out that this is a metaphysical issue; and tentatively adopts an interactive dualism—as did the great Sir Karl Popper and Sir John Eccles.

Contributors

German Berrios is Professor of Neuropsychiatry and Professor of the Epistemology of Psychiatry at Cambridge University. He holds the B.A. and M.A. from Oxford, and the M.D. and D.Sc. degrees; as well as several honorary doctorates. He has been on the Editorial Board of *History of Psychiatry*, since its inception in 1990—now the principal journal for the publication of papers in the field. Since his first book, *150 Years of British Psychiatry, 1841–1991*, co-edited with Hugh Freeman and published by Gaskell in 1991, the multilingual Berrios has published numerous important papers and books in the history of psychiatry, among which are his *A History of Clinical Psychiatry: The Origin and History of Psychiatric Disorders* (with Roy Porter, 1995); *The History of Mental Symptoms: Descriptive Psychopathology Since the Nineteenth Century* (1996); *Delirio: historia. Clínica Metateoría* (1996); *Memory Disorders in Psychiatric Practice* (with John R. Hodges, 2000); *Two Millennia of Psychiatry in West and East* (co-edited with Toshihiko Hamanaka, 2003); and *Reinventing Depression: A History of the Treatment of Depression in Primary Care, 1940–2004* (with Christopher M. Callahan, 2005).

Edward M. Brown is Clinical Associate Professor of Psychiatry at Brown University and a psychiatrist in private practice in Providence, Rhode Island. Dr. Brown has been engaged in research into the history of psychiatry, especially the connection of psychiatry and neurology in America, for some thirty years. His research interests encompass the history of alcoholism, general paralysis of the insane, shell shock, and multiple personality disorder. Currently he is working on Philippe Pinel's clinical practice.

Adam Crabtree—originally christened “Gary”—was born and raised in Minnesota, taking the name “Adam” when he entered St. John's Abbey in Minnesota and became a Benedictine Monk. After ordination to the Catholic priesthood in 1964, he went to Toronto to do graduate work in philosophy. There he became part of the therapeutic community initiated by the Welsh psychotherapist Lea Hindley Smith, received psychoanalytically oriented training under her, and went into private practice in Toronto as a therapist. Crabtree became interested in unusual, anomalous, and paranormal phenomena, which resulted in colleagues referring patients to him who exhibited such symptoms. Crabtree undertook research into the historical literatures of psychical research, hypnotism, and dissociative phenomena. Out of his scholarly work and clinical experience came four books: *Multiple Man: Explorations in Possession and Multiple Personality* (1985); *Animal Magnetism, Early Hypnotism, and Psychical Research, from 1766 to 1925: An Annotated Bibliography* (1988); *From Mesmer to Freud: Magnetic Sleep and the Roots of Psychological Healing* (1993); and *Trance Zero: Breaking the Spell of Conformity* (1997). His bibliography immediately became the standard one on pre-1925 hypnotism and psychical research. *From Mesmer to Freud* traced the rise of what Crabtree calls the “alternate consciousness paradigm,” a framework of thought that became an essential ingredient in all modern psychotherapies of the unconscious mind. In 1985 Crabtree was one of the founders of the Centre for Training in Psychotherapy in Toronto, which trains psychodynamic psychotherapists.

Hannah S. Decker is Professor of History at the University of Houston. A cultural historian and historian of Germany, with research specialties in the histories of psychoanalysis and psychiatry, Dr. Decker is particularly interested in the interplay of science and culture. She has written books on the reception of psychoanalysis in Germany before the First World War (*Freud in Germany*) and on Freud's “Dora” case (*Freud, Dora, and Vienna 1900*) and published dozens of articles on German history and on the history of psychiatry and psychoanalysis. She has held a number of distinguished Lectureships and Visiting Professorships. She is currently engaged in projects on the history of German psychiatry and on the history of involuntional melancholia. Decker is undoubtedly the world's ranking historian of European psychoanalysis and is a household name among international historians of psychiatry.

John Gach is an antiquarian bookseller specializing in books in psychiatry, psychology, psychoanalysis, neuroscience, and related fields in the human and life sciences. He founded his book business in 1968 in Baltimore, Maryland, and began specializing in the behavioral sciences in 1973. In addition to being a leading dealer in behavioral and neuroscience books, he is probably the foremost living authority on the bibliography of psychiatry and psychoanalysis. In 2002 he edited the series *Foundations of Modern Psychiatry and Neuroscience*, with two subseries: the first, *The Lifetime Editions of Emil Kraepelin*, reprinted all of Kraepelin's books in English that appeared during his lifetime; and the second was a facsimile reprint in five volumes of the definitive eighth edition of Kraepelin's *Psychiatrie*. Both were published by Thoemmes Press in Bristol, England. In 2006 he edited *The Robert W. Rieber Library of the History of Psychology, Philosophy, Neuroscience, and Human Science*, the first published bibliography of a private collection emphasizing important books in psychology. His research interests are primarily bibliographic. He has for decades been developing software and a database for recording information about printed texts and significant names associated with their production in the disciplines devoted to mind and brain.

Sanford Gifford was born in 1918 in Omaha, Nebraska, and graduated from Harvard College and Northwestern Medical School. He served as a military psychiatrist in Australia, New Guinea, and the Philippines from 1942 to 1945. After the war he settled in Boston, where he completed his psychoanalytic training in 1954. From 1948 to 1953 he was on the staff of the Peter Bent Brigham Hospital (now Brigham & Women's), after which he continued in private practice. His clinical interests have encompassed psychosomatic medicine and psychophysiological studies of healthy young adults, especially twins. His historical research has focused on psychiatry and psychoanalysis in America in the early twentieth century. For many years Dr. Gifford organized annual or bi-annual oral history workshops at the meetings of the American Psychoanalytic Association. He published about 80 articles, reviews, and chapters in edited books and in 1996 the monograph *The Emmanuel Movement: The Origins of Group Treatment and the Assault on Lay Psychotherapy*.

Sander L. Gilman is Distinguished Professor of the Liberal Arts and Sciences at Emory University as of 2005. A cultural and literary historian, he is the author or editor of over seventy books. His Oxford lectures, *Multiculturalism and the Jews*, appeared in 2006; his most recent edited volume, *Race and Contemporary Medicine: Biological Facts and Fictions*, appeared in that same year. He is the author of the basic study of the visual stereotyping of the mentally ill, *Seeing the Insane*, published by John Wiley and Sons in 1982 (reprinted in 1996) as well as the standard study of *Jewish Self-Hatred*, the title of his Johns Hopkins University Press monograph of 1986. For 25 years he was a member of the humanities and medical faculties at Cornell University where he held the Goldwin Smith Professorship of Humane Studies. For six years he held the Henry R. Luce Distinguished Service Professorship of the Liberal Arts in Human Biology at the University of Chicago and for four years was a Distinguished Professor of the Liberal Arts and Medicine and creator of the Humanities Laboratory at the University of Illinois at Chicago. During 1990–1991 he served as the Visiting Historical Scholar at the National Library of Medicine, Bethesda, MD; in 1996–1997 he was a fellow of the Center for Advanced Study in the Behavioral Sciences, Stanford, CA; in 2000–2001 a Berlin prize fellow at the American Academy in Berlin; and in 2004–2005 the Weidenfeld Visiting Professor of European Comparative Literature at Oxford University. He has been a visiting professor at numerous universities in North America, South Africa, the United Kingdom, Germany, and New Zealand. He was president of the Modern Language Association in 1995. He was awarded a Doctor of Laws (*honoris causa*) at the University of Toronto in 1997 and elected an honorary professor of the Free University in Berlin.

Gerald N. Grob is the Henry E. Sigerist Professor of the History of Medicine (Emeritus) at Rutgers University. A notable and influential historian of mental health policy, his books have objectively charted the history of mental health policy in the United States. His first book on the subject, the classic *The State and the Mentally Ill* (1966), was awarded the annual prize of the American Association of State and Local History. His three-volume history of mental health policy has likewise achieved classic status, the volumes in sequence being *Mental Institutions in America* (1973), *Mental Illness and American Society*,

1875–1940, and *From Asylum to Community: Mental Health Policy in Modern America* (1991). In 1994 he published *The Mad Among Us: A History of the Care of the Mentally Ill*. The American Association of the History of Medicine awarded Dr. Grob the William H. Welch medal in 1986; he was president of the Association from 1995 to 1996. Dr. Grob is an elected member of the Institute of Medicine of the National Academy of Sciences. His most recent book, *The Deadly Truth: A History of Disease in America*, was published in 2002. He is currently working on a series of essays on a variety of diseases and a book dealing with the evolution of mental health policy from 1945 to the present.

David Healy studied at University College, Dublin, Ireland; and the University of Cambridge. He is Professor of Psychological Medicine at Cardiff University, Wales, a former Secretary of the British Association for Psychopharmacology, and author of over 130 peer reviewed articles, 200 other pieces and 15 books, including *The Antidepressant Era*, *The Creation of Psychopharmacology*, *The Psychopharmacologists* Volumes 1–3, *Let Them Eat Prozac*. His main areas of research are clinical trials in psychopharmacology and the history of psychopharmacology. He has been involved as an expert witness in homicide and suicide trials involving SSRI drugs, and in bringing these problems to the attention of American and British regulators. He is a vociferous critic of what he deems a too-close Anglo-American alliance between academic psychiatry and pharmaceutical companies.

Stanley W. Jackson (1921–2000) was born and raised in Montreal and secured his Bachelor's degree from McGill University in 1941. During World War II he served in the Royal Canadian Air Force and the Royal Air Force. After the war he took his M.D. from McGill in 1950. He trained as a psychoanalyst from 1955 to 1962, graduating from the Seattle Psychoanalytic Training Center and the San Francisco Psychoanalytic Institute. In 1964 he moved to Yale University to undertake graduate studies in the history of science and medicine, later joining the Yale faculty with appointments in psychiatry and in the history of science and medicine. After years as professor of psychiatry and of the history of medicine, he became professor emeritus. His scholarly work was primarily in the history of psychiatry, including numerous articles and his important 1986 book *Melancholia and Depression: From Hippocratic Times to Modern Times*. He served as Editor of the *Journal of the History of Medicine and Allied Sciences*; was on the editorial boards of a number of other journals, and served as president of the American Association of the History of Medicine. His last book, *Care of the Psyche: A History of Psychological Healing* (1999), was hailed by the *New England Journal of Medicine* as “a brilliant book.”

Otto M. Marx received his M.D. from the University of California Medical School. He was in training analysis for three years with Medard Boss in Zurich. From 1964 to 1966 he held a National Institute of Mental Health Special Research Fellowship in History of Psychiatry at the Institute for Medical History under Erwin Ackerknecht. Another Special Research Fellowship under Prof. Owsei Temkin allowed Dr. Marx to spend a year at the Institute for the History of Medicine at Johns Hopkins University Medical School in Baltimore, Maryland. Appointed in 1967 Associate Professor of Psychiatry at Boston University, Dr. Marx also held appointments and taught in the Department of Psychology at the University of Massachusetts in Boston and at the University of New Hampshire in Durham. From January to June 1969 he was Visiting Professor for the History of Medicine at Harvard University Medical School. In 1971 Dr. Marx advanced to full professorship in psychiatry at Boston University, and in the following year was appointed professor in socio-medical science. In 1985 Dr. Marx assumed a position at the Brattleboro Retreat in Vermont, where in 1988 he gave a full-day workshop on the history of psychiatry. Subsequently, Dr. Marx was for several years a professor of medical history at the University of Heidelberg. He has published numerous papers on the history of psychiatry, especially on nineteenth century German psychiatry, in which area he is a leading authority.

George Mora (1923–2006) received his medical degree from the University of Genoa, Italy, in 1947; with subsequent training there and at the University of Zurich in pediatrics, neurology, child psychiatry, and medical history. He came to the United States in the early 1950s, working first at the Thom Clinic for Children in Boston, which was followed by residencies in psychiatry at Butler Hospital in Providence and at the University of North Carolina. From 1961 to 1988 he served as Medical Director of the Astor Home for Children in Rhinebeck, New York, and maintained afterward a part-time private

practice in Narragansett, Rhode Island. From 1957 he was Research Associate at the Yale School of Medicine, Section on the History of Medicine; and Clinical Associate Professor of Psychiatry at Albany Medical College from 1967 to 1986 and Clinical Professor there from 1986 to 1988. From its founding in 1964 he was a member of the Editorial Board of the *Journal for the History of the Behavioral Sciences* and, from its inception in 1990, of *History of Psychiatry*. Dr. Mora has authored numerous publications in psychiatry, child psychiatry, and the history of psychiatry. With J. Brand he edited in 1970 the influential book *Psychiatry and Its History*. He edited and oversaw the translation into English of a number of historically important texts, notably Kahlbaum's *Catatonia*, Heinroth's *Textbook of Disturbances of Mental Life*, Cabanis's *On the Relations Between the Physical and Moral Aspects of Man*, Chiarugi's *On Insanity and Its Classification*, and Weyer's *De praestigiis daemonum*, each with a long and erudite introduction by Dr. Mora.

Bennett Simon is Professor of Psychiatry at Harvard University and a supervising analyst at the Boston Psychoanalytic Society and Institute. He received his M.D. from Columbia University's College of Physicians and Surgeons in 1959 and his training analysis at the New York Psychoanalytic Institute. His first book, *Mind and Madness in Ancient Greece: The Classical Roots of Modern Psychiatry*, was an important and widely cited contribution. Subsequent books he has published are *Tragic Drama and the Family: Psychoanalytic Studies from Aeschylus to Beckett* (1988); *Minefields in Their Hearts: The Mental Health of Children in War and Communal Violence* (edited with Roberta J. Apfel); and *Family Romance, Family Secrets: Case Notes from an American Psychoanalysis, 1912* (2002; with Elizabeth Lunbeck). In addition, Dr. Simon has published numerous papers and chapters in edited books.

Nancy Tomes is Professor of History at the State University of New York (Stony Brook). She is a social and intellectual historian, who has specialized in the history of psychiatry and the mental health disciplines. In addition to the history of clinical psychology, social work, and psychiatric nursing, she has written on hospital psychiatry, psychiatry and feminism, and medical and popular images of the mentally ill. In 1995 she published, with L. Gamwell, the iconographic and literary study, *Madness in America: Cultural and Medical Perceptions of Mental Illness Before 1914*.

Edwin R. Wallace, IV holds the M.D. from the Medical University of South Carolina (Charleston); and degrees in European history and in the history of science and medicine from the University of South Carolina and the Johns Hopkins University Institute for the History of Medicine, respectively. He completed his neuropsychiatric and psychoanalytic psychiatric training at the Yale University School of Medicine, where he served on the faculty as well. He retired as Professor and Chairman of Psychiatry and Health Behavior, and Senior Neuropsychiatric Consultant in Neurosurgery, at the Health Sciences University of Georgia School of Medicine (Augusta). From 1982 to 1996 he was also Professor of Social Work, Graduate School, University of Georgia (Athens); and from 1986 to 1994 Consultant to the U.S. Army Health Services Command. He moved to the History Faculty at the University of South Carolina (Columbia) in 1996, where he is now Research Professor of Bioethics and Medical Humanities. He was a Visiting Scholar at the University of Chicago's Committee on the Conceptual Foundations of Science during Fall, 1990; and a NEH Fellow in the Philosophy of History in 1991. He is a Member of the American College of Psychiatrists and the Group for the Advancement of Psychiatry (G.A.P.). He was a 1990 Hannah Lecturer in the History of Science at the University of Toronto; and a Visiting Fellow and Lecturer at Linacre College, Oxford. He has been a Visiting Professor in many American university psychiatry departments. Dr. Wallace has served on the American Psychiatric Association's Committee on History and Library, and was for many years on the Senior Editorial Board of the *Bulletin of the History of Medicine* (the organ for the American Association of the History of Medicine and the Johns Hopkins University Institute for the History of Medicine). He also served on the Senior Editorial Board of *Second Opinion: Journal of Health, Faith, and Ethics*; and delivered the Plenary Address at the 25th Anniversary Meeting of the American Association of Pastoral Counselors. He is a Founding Member of the International Association for the Advancement of Philosophy and Psychiatry; and is on its Executive Council and the Senior Editorial Board of its journal, *Philosophy, Psychiatry, and Psychology* (published since 1994 by the Johns Hopkins University Press). He has authored *Freud and Anthropology: A History*

and *Reappraisal; Dynamic Psychiatry in Theory and Practice* (Revised Editions in Japanese, Spanish, and Turkish); and *Historiography and Causation in Psychoanalysis: An Essay in Psychoanalytic and Historical Epistemology* (also in an Italian translation by Edizioni Borla [Rome], Volume III in *The Classics in Psychoanalysis Series*). He edited, with Lucius C. Pressley, *Essays in the History of Psychiatry* (in which several of our book's chapter authors have essays). He has published over a hundred articles and book or encyclopedia chapters on the history and philosophy of neuropsychiatry, psychiatry, psychoanalysis; and on the philosophy of history and the philosophy of mind; as well as dozens of book reviews. He also pursues an avid interest in art history (and collecting); and is completing a book, *Giotto at Assisi? Yes*, with the Renaissance art historian at the University of South Carolina, Professor Carleton Hughes.

Dora B. Weiner is Professor of the Medical Humanities and History at the University of California, Los Angeles. She received the *baccalaureat* from the University of Paris, the B.A. *magna cum laude* from Smith College, and the M.A. and Ph.D. in modern European history from Columbia University, where she studied with the great Professor Jacques Barzun. Her books include *Raspail: Scientist and Reformer; The Clinical Training of Doctors: An Essay of 1793; The Citizen/Patient in Revolutionary and Imperial Paris; and Comprendre et soigner: Philippe Pinel et la médecine de l'esprit* (Paris, 1999), also in a Spanish translation. She has also edited *Jacques Tenon's Memoirs on Paris Hospitals*; and coedited *From Parnassus: Essays in Honor of Jacques Barzun, The World of Dr. Francisco Hernandez* (2 vols.), and the second edition of *Philippe Pinel, Traite medico-philosophique sur L'alienation mentale* (Paris, 2005). She is now translating her 1999 book on Pinel into English (Ashgate series: "History of Medicine in Context"), and is pursuing research on "The Doctor in Early Nineteenth-Century Ibero-America: European Roots and National Claims." She was elected a Corresponding Member of the Academy of Sciences and Letters of Toulouse; and her book on Pinel received the prize for the best book published in 1999 from the French Society for the History of Medicine. She teaches at UCLA: in the History Department, the Honors Collegium and the Medical School.

Herbert Weiner (1921–2002) was born in Vienna, Austria, received his early education in England, and subsequently graduated with an A.B. from Harvard and M.D. from the College of Physicians and Surgeons of Columbia University. Professor of Psychiatry and Biobehavioral Sciences at UCLA from 1982, he was a leading researcher in, and proponent for—as well as historian of—psychosomatic medicine. Weiner was awarded the Alexander von Humboldt Research Prize and an honorary doctorate from the Faculty of Medicine of the Technical University of Munich. He served as Editor-in-Chief of the journal *Psychosomatic Medicine* and Associate Editor of the *Journal of Psychosomatic Research*. He served as President of the American Psychosomatic Association. He published over 160 research articles, 85 book chapters, and the important books *Psychobiology and Human Disease* (1977) and *Perturbing the Organism* (1992). He also co-edited a number of books.

Section One

Prolegomenon

Chapter 1

Historiography

Philosophy and Methodology of History, with Special Emphasis on Medicine and Psychiatry; and an Appendix on “Historiography” as the History of History

Edwin R. Wallace, IV

Introduction

Science is a house built on piles above a swamp. The piles are driven down from above into the swamp, but not down to any natural or “given” base; and if we stop driving the piles deeper, it is not because we have reached firm ground. We simply stop when we are satisfied that the piles are firm enough to carry the structure, at least for the time being. (Karl Popper, *Conjectures and Refutations: The Growth of Scientific Knowledge* (New York: Harper, 1965), 106.)

“Historiography” has two currently accepted meanings: (1) “the history of academic history” and (2) “its philosophy, theory, and methodology.” While I shall to some extent deal with the first, my overwhelming emphasis is on the second. Nevertheless, a closing bibliographic addendum will point the reader toward some very useful histories of history-writing (i.e., the “Appendix”). It also includes “essayettes.”

This essay acquaints the reader with key issues in the philosophy and methodology of history. This is particularly apt for readers who are primarily clinicians: (1) to convey what is involved in the historical enterprise; (2) to facilitate a more rigorous and critical reading of the historical literature; and (3) to assist appreciation of the limitations and possibilities of applying historical insights to current clinical, investigative, and philosophical and ethical issues. Insofar as psychiatry—especially dynamic psychiatry—is in many respects a clinical-historical discipline, there are numerous parallels between academic historiography’s philosophical and methodological issues and those in clinical psychiatry.¹ The term “dynamic psychiatry,” often used in my chapters herein, needs clarification; for it often carries different connotations in the U.K. and the U.S./Canada. In the former it tends to refer to Adolf Meyer’s “psychobiology” (which Meyer occasionally termed “dynamic psychiatry”). In North America, however, it has become interchangeable with “psychoanalytic psychiatry.” It is the latter, which I shall mean by “dynamic psychiatry.”

This chapter is divided into two sections, The Philosophy of History and The Methodology of History, with the distinction between the two being somewhat arbitrary. The former results from reflection upon methodology, as well as from the requirements of *a priori* epistemological commitments. The latter is shaped by previous epistemological decisions, as well by the demands of the subject matter. Throughout their ongoing course of development philosophy and methodology interact.

The first part, The Philosophy of History, has sections on (1) Subject Matter, (2) Theory and Data, (3) History as Relationship, (4) Historicism Versus Positivism and Covering Laws, (5) Causation, and (6) The Nature of the Discipline. The second part, The Methodology of History, contains sections on (1) Critical Method and Steps of Research, (2) Presentism, (3) “Externalism” Versus “Internalism,” (4) Applications of Psychiatry to History, (5) Historical Psychology, and (6) Utility. In the Conclusion, I assess the condition of the history of

psychiatry along several parameters. *All reference and content end-notes to this essay appear after the "Appendix."*

The Philosophy of History

Briefly to review one of the most active areas of modern philosophy is an impossible task. Hence I must limit myself to a few central issues, occasionally presented *for expository purposes* as dichotomies. I am concerned with the analytical, rather than the speculative, philosophy of history. The former elucidates the modes of historical reasoning and explanation, including especially the relationship historical hypotheses and interpretations have to the evidence used to motivate, substantiate, or refute them.

The speculative philosophy of history, by contrast, is seldom encountered today, though it was once virtually synonymous with "philosophy of history." It has a long history beginning at least in biblical days, when all history was interpreted as manifesting God's relationship with his chosen people. The classic statement of the speculative philosophy of history, St. Augustine's fifth century *City of God*, remained dominant for over a thousand years. Recent instances of theistic historiography include Reinhold Niebuhr's interpretation of history from the vantage of the allegorical "Fall" in the book of Genesis, which he restates as human "pridefulness." In the Renaissance/Baroque, and especially Enlightenment and Romantic periods, a variety of secular speculative philosophies appeared, culminating in the works of Vico in the mid eighteenth century; Herder and Kant in the late eighteenth century; Hegel and Marx in the nineteenth century; and Spengler and Toynbee in the twentieth century. Typically more concerned with global than period or local histories, such philosophies usually present the historical process as a series of progressive evolutionary stages, or as cycles of flowering, decline, and recrudescence.²

Subject Matter

Historians take as their subject matter something with which psychiatric clinicians are intimately familiar: the symbolically mediated behavior of human beings, that is, those aspects of human action that must be understood in terms of ideas, images, affects, purposes, desires, memories, perception, interpretations, and attempts at adaptation, as opposed to the aspects that are adequately explained as biophysical happenings. These latter (as well as the manifold events of the physical environment) interest historians only insofar as they enter into individual and social constructions of, and actions upon, reality.

Historians are occupied with occurrences that are communicative, whether the communication be actual or potential, explicit or implicit, intentional or not, verbal or nonverbal. Chronicles, documents, diaries, letters, official archives and monuments, artifacts, and the like all signify meaningful human activities and events; but they are intelligible only to one prepared by education, technique, and attitude to ask the right questions and listen for the answers.

Such considerations move me to agree with Collingwood that the data of the historian and the physical scientist primarily differ in that the former have, as it were, an "inside," that is, meanings and motives that precede and accompany the observed and reported events.³ Only the most plodding chronicler is satisfied merely to record dates and occurrences. To know that a "Julius Caesar" crossed the Rubicon in 49 B.C.E. is to possess a mere piece of "external" data. To understand Caesar's history and intentions (and how these fitted into and were determined by the political, economic, and sociocultural ambience of ancient Rome) is to begin to appreciate the datum's proper significance, to get "inside" it—all of which will be taken up in the subsection on History as Relationship. That much of history deals with broad social structural, cultural, and economic contexts and trends does not vitiate Collingwood's insight, for these "forces" are produced by the symbolically mediated activities of individuals and collectivities. If such factors operate at all, it is through the motivations and interpretations of these individuals and the collectivities they constitute.

A second peculiarity of the field of inquiry in history, as opposed to that in the experimental sciences, is its mediate—as opposed to immediate—relationship to the "observer." The historian does not work with the

real event and does not have direct acquaintance with it. The past event in history is irrecoverable, but its meaning in the present is not. Langlois and Seignebos correctly point out that the historian's observational data are not the "facts of the past" themselves *but their "traces" in the present*. Much of their late nineteenth century treatise on methodology is an account of the process by which the historian infers facts from the traces. In the case of written documents these two historians were aware that the "traces" are of "psychological operations" that must themselves be constructed before one can make inferences about the events they report.⁴

Collingwood also averred that "it is the past as it is residually preserved in the present that is alone knowable." Elsewhere, he elaborated that the

business [of history] is to study events not accessible to our observation and to study these events inferentially, arguing to them from something else which is accessible to our observation, and which the historian calls 'evidence' for the events in which he is interested.⁵

Such distinctions between the historian's and the natural scientist's evidence can of course be overdrawn. Much of what atomic physicists and cosmologists study are unobservables inferred from tracks in cloud chambers, or instrumentally mediated data from events long dead or even unobservable by definition (e.g., "black matter" and "quarks").

As the historian Carl Becker aptly stated, "the historical fact is in someone's mind or it is nowhere. ... The *actual occurrence* and the *historical fact* are two different things [my italics]."⁶ Even the records with which the historian works, he pointed out, are not the events themselves but only a pattern of ink on paper, left by someone with images or ideas of the events. Florovsky concurred that "the knowledge of the past is necessarily indirect and inferential. It is always an interpretation. The past can only be reconstructed."⁷

M. G. Murphey made a similar point but with a different twist, arguing that "historical facts" are suppositions, which make sense of the observable data:

If I believe that George Washington existed and did the things he is generally reputed to have done, it cannot be because I observe Washington doing these things. It is, rather, because I have now a great many objects of which I can make sense only on the supposition that such a person did exist and did do these things.

Nevertheless, that the historian's data, "residues" or "traces," are *observable* is crucial to the testability of historical hypotheses, which I discuss further in this part, section Theory and Data, and the next part, section Presentism. The chronicler's assertion that the Battle of Bosworth occurred in 1485 "has among its consequences statements about what will be found in records written after that event."⁸

A third peculiarity of the historian's data is that they are mostly themselves *interpretations*—especially the actors', eyewitnesses', or chroniclers' retrospective interpretations of events. Such interpretations are of course in part a function of the recorder's personal history, perspective, and sociocultural and temporal context. Five levels of interpretation are entailed: (1) the original interpretation of the event by the actor or eyewitnesses; (2) his or their subsequent conscious and unconscious elaboration on the original interpretation; (3) such interpretive elaboration, including retrospective distortion and opinion, as occurs at the time the actor or eyewitness records it; (4) the subsequent chronicler's or archivist's interpretation of the record; and (5) the academic historian's own interpretive and evidential elaboration of the chronicler's retelling. On the often incredible powers of memory see my exposition of F. A. Yates and U. Neisser on pages 110–111 (in the "Appendix").

Insofar as the historian has access to the reports of other eyewitnesses and actors, some of the idiosyncrasies in these levels can be bypassed. This permits a kind of cross-examination and provides academic historians a means of sorting "actual" from "psychical" reality in a way that clinical researchers rarely possess. Still, in selecting, ordering, and interpreting interpretations that have themselves been selected, ordered, and interpreted, historians are, strictly speaking, not historians but "historiographers" (in the sense in which the term refers to historians of histories).

A fourth distinguishing characteristic of historical data is that they often intentionally conceal as much as they reveal. Actors, eyewitnesses, and chroniclers (like historians themselves) disguise, embellish, and distort. With successive recopying of documents, the original text or record can change considerably. This

confronts historians with the need for “diplomats” (the study of the authenticity and nature of documents) in order to evaluate evidence in their attempts to reconstruct an accurate approximation to the events and activities of the past. Historians need to consult as many contemporary eyewitnesses, chroniclers, and archives as possible (and in the pertinent languages)—and on all sides of an issue or set of events.

Finally, the historian of any particular area must exercise some judgment in determining what constitutes the subject matter. Most evident in disciplines like art history, where matters of personal or time-bound cultural taste partly delineate the domain, it is perhaps least obvious in areas such as political, military, and diplomatic history, with social, intellectual, and cultural history occupying a middle ground. Among historians of science and medicine, too often personal bias (whether theoretical, investigative, or clinical) has ruled out attention to whole enterprises that were once serious medical and scientific endeavors (about which more in the section Presentism)—astrology, alchemy, and phrenology, for example.

Of all medical specialties, psychiatry is currently far and away the one most broadly based and involved in disciplinary interfaces—with biology, social science, the humanities, law, ethics, philosophy, religion, and theology. It is, moreover, the one most sensitive to, as well as formative of, popular culture and wider socio-cultural currents. When one considers the population of the mentally ill and the various ways for describing, understanding, and treating them in different times and places—and even in defining “mental illness” or “mental health”—one encounters additional problems.⁹

Furthermore, the study and therapy of what we now consider “psychiatric disorders” has hardly been limited to the physician. Throughout history religious and other nonmedical healers have had far more traffic with the mentally ill than have doctors (as may well be the case today). Elsewhere in this book, Dora Weiner points out the conspicuous absence of the physician from the asylum itself until the nineteenth century. And finally, there is the problem of which M.D.’s we deem “psychiatrists.” Although physicians from time immemorial have paid some attention to psychiatric concerns, “psychiatry,” as a distinct medical specialty, is barely two centuries old. And throughout this short history there have been—and continue to be—many different ways to be a psychiatrist.^{9a}

All this requires the historian of psychiatry to have a broader base in social, cultural, political, religious, and intellectual history than any other medical or science historian. Indeed, it is the central thesis of this essay that *the history of psychiatry is best pursued as a subspecialty of the history of civilization*. In this way one can at least partly avoid arbitrarily delineating the subject and fill in certain of the inevitable gaps and discontinuities.

Theory and Data

In history, as in natural science, the relationship between theory and data is central. What are historical facts? Are they discovered or invented, organized or organizable? Should our approach be Kantian or Lockian, *a priori* or *a posteriori*, rationalistic or empirical? Here we touch on the idealism/realism, subjectivism/objectivism debate, raised again in the next section, History as Relationship, and in the next part of this chapter, The Methodology of History.

There are those who view historians as gathering data, unburdened by theoretical preconceptions and only later theorizing about them. Others act as if they imaginatively spin out what they study. Even the great Leopold von Ranke (the founder of modern historical methodology in the early nineteenth century) could at times lapse into language suggesting that data are rock-like entities that, once collected, animate and assemble themselves into coherent and accurate theories. For Ranke, the two cardinal characteristics of historians are “a feeling for and joy in the particular in and by itself” and the absence of preconceptions. His task is to portray the past “as it actually was” [*wie es eigentlich gewesen ist*].¹⁰ Fortunately, however, in his own research methodology and in his teaching in his famous “seminars” (where students—or at times Ranke himself—would present their ongoing research), Ranke was hardly so naïve. We shall return to him later. Still, his injunction is an important regulative methodological ideal.

Nor did Langlois and Seignebos, whose 1898 handbook educated several generations of historians, ignore the role of interpretation. They did draw, though, too sharp a line between gathering and criticizing

the data on one hand, and theorizing about them on the other.¹¹ At the opposite pole are those like Beard, Becker, and at times even Collingwood, who opined that history is an exercise in faith and speculative ingenuity—a *construction* rather than a *reconstruction*.¹²

An erroneous and one-sided conception of the scientific method, based on a caricatured and outdated picture of the natural sciences, has kept many historians from appreciating the interactive and mutually conditioning role of theorizing and data-gathering in both history and natural science. Anxiety over whether they are “scientific,” in a sense that would satisfy their most captious critics, has led some historians to cling to a simplistic “observation before theorization” model long after natural scientists and philosophers of science have abandoned it as illusory. Fortunately, many scholars have come to appreciate the fluidity of the line between data collecting and theorizing. It is solely by refraction through the selecting and ordering lens of theory that *data* are reconstituted as *facts*.

I believe that the boundary between “narrative” or “descriptive” histories on one hand, and “explanatory” or “interpretive” histories on the other, as proposed by M. White¹³ and others, is overdrawn. The historical investigator forms a narrative from data that have been selected and organized, not merely by his apprehending their inherent structure or “inner logic” but in accord with his theoretical presuppositions. There may be a valid distinction between histories that explain more and those that explain less, and between those better evidenced and those less so; but a history without interpretation or explanation would not be history. As Meyerhoff explained, “The facts of history invariably appear in a context of interpretation. There is no narration without interpretation, and there is no interpretation without theory.”¹⁴ And some histories are time-slice cross-sectional analyses.

One’s theory of the nature of the historical process leads one to ask some questions but not others, to attend more to certain kinds of data than to others. Consider, for example, the role of Marxian theory in bringing scholars to ask economic and social-structural questions they had hitherto ignored. Every historian, like it or not, has an explicit or (more likely) implicit philosophy of history, which ineluctably bears on the data.

Traps for the unwary abound on every side of this issue. Recognition of history’s theoretical and interpretative aspects has led some scholars—Teggart and Beard in the 1920s and 1930s, and at times Becker and Collingwood—to radically subjectivist, idealist, and even nihilistic positions on the issue of historical truth. Accenting the historian’s inability directly to observe historical events, the fragmentation of the existent data, the selectivity involved, the impossibility of a complete and total reading of historical actuality, the necessity for interpretation, and the presence of personal bias, Beard concluded (and Teggart too in 1925) that history is an “act of faith” and the historian “a guesser in the vail of tears.” In many respects, Beard was (of course unconsciously) projecting his own belief in Marxist theory into his economically reductionist history of the U.S. Constitution, which has been *empirically falsified several times over*.¹⁵

Detachment and the Writing of History includes a number of Becker’s subjectivist critiques of history writing from the mid-1920’s on. As Becker wrote,

We are accustomed to say that “the present is the product of all the past”; and this is what is ordinarily meant by the historian’s doctrine of “historical continuity”. But ... it is equally true ... to say that the past (our imagined picture of it) is the product of all the present. ... The past is a kind of screen upon which we project our vision of the future; and it is indeed a moving picture, borrowing much of its form, and color from our fears and aspirations.¹⁶

It is perhaps presuppositions such as these that resulted in the major empirical deficiencies in Becker’s best-known book, *The Heavenly City of the Eighteenth Century Philosophers* (1932). This idiosyncratic treatise reinterpreted the French and Scottish Enlightenment thinkers as essentially post-medieval men piggybacking on Augustine’s *City of God*!¹⁷ The Beardian facets of his philosophy of history seemed to have spared him the task of a rigorous, time-consuming immersion in their writings, correspondence, and memoirs. Insofar as I can tell, the proto-Romantic Rousseau, who never considered himself a “*philosophe*,” was the only major eighteenth century thinker to fit remotely into Becker’s embarrassingly Procrustean bed. And Rousseau, despite his nature mysticism, was a secularist (at most a Deist, or latter-day Spinozist pantheist). See, by contrast, Peter Gay’s much better documented intellectual and cultural history of the Enlightenment, which gives the lie, again and again, to Becker’s thesis.¹⁸

Beginning with an image of history as a “web of imaginative construction stretched between certain fixed points provided by authorities,” Collingwood attenuated it still further: “there are for historical thought no fixed points thus given.” In other words, in history, “just as there are properly speaking no authorities, so *there are properly speaking no data*” (my italics). The historian, he told us, is just as responsible for the fixed points as for the web of imaginative construction. “Hence there is in the last analysis no distinction between his sources and his conclusions; his conclusions, as soon as he has reached them, become his sources, and all his sources are conclusions which he has reached.” Collingwood pessimistically concluded that “The more the historian knows, the more acutely he becomes aware that he will never really know anything, and that all his so-called knowledge is to an unverifiable extent erroneous.”¹⁹ How, one wonders, does Collingwood’s historian know even this? Collingwood’s thesis, like Beard’s and Becker’s, presupposed a perfectionist historical epistemology: “either the historian knows everything, or he knows nothing.” The parallels with recent psychoanalytic “hermeneuticians” and “constructivists,” Schafer and Spence, for example, are obvious²⁰—and with postmodernists too.

Nevertheless, in many places in *The Idea of History*, Collingwood veered toward a more empirically based and testable concept of historiography. After all, he pursued two careers at Oxford: Professor of Metaphysics, and Professor of Romano-British Archaeology and History. As a competent ancient historian/archaeologist, which is much more linguistically and technically demanding than modern history, he could never totally allow Collingwood the metaphysician and skeptic to overcome Collingwood the rigorous excavator and scholar. Despite his subjectivism and skepticism, Becker too had a more complex and even-handedly empirical dimension to his notion of “the historical fact.”

Not so, however, for the relentlessly relativistic Beard and Teggart. Postmodernist historians have assimilated, albeit not entirely correctly, the more moderate legacy of Collingwood and Becker into the tradition of Beard and Teggart. From his sources in Beard and Teggart, and from one-sided readings of Collingwood and Becker, Hayden White moved in 1973 toward the French postmodernists (Foucault, Derrida, Barthes, *et al.*).

White’s purely poetic, or metaphorical, view of history sees it as relying on one of four rhetorical tropes: providential, deterministic, tragic, or ironic. He has held each of these strategies of “emplotment” to be equally legitimate. Bias, politics, and philosophy determine which trope is used. That they allegedly lead to incompatible histories on any given topic matters not at all to White. Since his “metahistorian” no longer “privileges” old-fashioned truth-criteria, each trope makes its own claim on the reader’s literary proclivities. History’s *raison d’être* is to produce the “law-abiding” citizen—a return to the pre-Rankian mode of history as moral teacher. Nietzsche and Foucault also engaged in this—in their propagandist quasi-histories, or “genealogies” (and also the latter’s “archaeologies”). Both had little-use for rigorous Rankian historicism; see, e.g., Nietzsche’s distribe *On the Advantages and Disadvantages of History for Life*. White contends that history is *always ideological*, in that its legal and political contexts differ:

Irony is in one sense metatropological, for it is deployed in the self-conscious awareness of the possible misuse[!] of figurative language ... Irony thus represents a stage of consciousness in which the problematical nature of language has been recognized. *It points to the potential foolishness of all linguistic characterizations of reality as much as to the absurdity of the beliefs it parodies[!]* [My italics]²¹

Definite shades of Barthes’s/Derrida’s denial of the existence of any intersubjectively consensual text; and of the dissolution of any authorial intentionality in its production! Logically, their contentions (and White’s) lead to an incredible non-communicational solipsism: with human beings as monads continually talking-past one another. *Finally, this leads to the self-reflexive destruction of their own texts as well.* And yet, hypocritically, they continued to turn out a never-ending stream of oral presentations and publications—to which they *zealously affixed their names.*

In any event, such analyses suffer from a number of deficits, only four of which are touched on here. To begin with, White—and often even Becker—totally ignore the difference between *perception and interpretation*. While it is correct, as I have argued, that there is an element of conception, memory, emotional set, and cognitive schema in every perception (read “apperception”); it is nevertheless *a matter of degree* in levels

of abstraction. Common sense dictates some distinction between “perception” and “interpretation.” It is the latter, within the context of a theory, that transforms “data” into “facts”. But not just any old theory and perspective will do. There are widely agreed-upon evidentiary criteria that must be met. And some perspectives are broader than others.

It is essential to distinguish the historian’s sense datum—a chronicle or official document, say—and the overarching theoretical structure in which it takes on new meaning. It is the historian’s placing a datum into a previously unappreciated context and into a novel theoretical matrix that constitutes his act of “interpretation,” that transforms an old datum into a new fact. Ponder, again, the role of Marxist and other socioeconomic theories in alerting us to hitherto-overlooked but pertinent *data*. Such interpretative programs did not “create” the economic and sociocultural data we now consider so important to a holistic appreciation of the historical process. Such data were observed, or at least potentially observable, long before; what Marxians did was alert us to their causal significance—that is, transform them into historical facts.

Second, that historical events are dead and gone need not lead us into subjectivism and nihilism, as it does “idealist” philosophers of history. Much skepticism about the scholar’s access to historical truth is based on a naïve “direct-observation” theory of knowledge: “because we cannot *see* the historical occurrences; we cannot know them.” Such a criterion is not satisfied, as Atkinson pointed out, by much knowledge of present-day reality—for instance, the acceptance as veridical of a radio broadcast stating that it is raining at the beach, or that a certain state of affairs is occurring overseas.

Consider how much of our everyday knowledge is historical—reference to previous arrangements, recent conversations, bank statements and stock reports, a newspaper article about events in the Middle East the day before, and so forth. Imagine that one accepts as veridical knowledge only what is now literally observable and one will understand the force of Atkinson’s assertion that “most of what we know about the present is indirect and a consistent skepticism about the past would lead on to a virtually total, incredible skepticism.”²²

Nor does the bygoneness of historical events totally deny us an element of correspondence and realism in our epistemology. The bygone occurrences have left traces that we directly observe and that allow us to make indirect contact with the events. Hence by “correspondence” truth criteria—as opposed to those requiring only that our historical narratives be “coherent”—I do not mean a naïve “copy theory,” according to which our explanations must be photographic reproductions or mirrors of vanished realities. The “inner logic” of past events once existed, but now no longer; and huge areas of it were never represented or, if recorded, have since been lost for subsequent inspection. We cannot “copy” it.

What we can do is attempt to *reconstruct it through its present-day traces*, which constitute a form of *indirect contact* with prior events and their organization—that is, substitute “*contact*” for “*copy*” (à la William James). We are concerned with historical documents not merely as current phenomena, but as signs pointing to past realities that created them and that they continue to represent. It is as indicators of the past, not the present, that they assume their historical significance; though they may—and often do—contribute to a richer or altered understanding of the present. The present is of course always an outgrowth of the past. The great Hegel (who did more than anyone to make historical studies academically/professionally respectable) emphasized this; and bemoaned the fact that peoples and governments so-seldom learn from their history. He rightly stressed that we can know a historical age or period only with its passing: “The Owl of Minerva only spreads her wings at dusk.” Thus we could not adequately grasp the Victorian era until it was smashed by the Great War; just as future historians will in some ways appreciate the present Western world better than we: “Hindsight is 20/20.”

In some cases, such as chronicles penned long after the events, the relationship between tracks and historical events is more tenuous than in others. In other cases the relationship is more direct. Monuments, artifacts, and eyewitness accounts approximate what Renier termed “the still perceptible termination or culmination of a sequence of events or of several sequences of events.”²³

Often the historian is in a position to compare the accounts of a number of witnesses to or chroniclers of an event, to assess the opinions and observations of a variety of contemporaries regarding a figure or movement; and to be privy to archival, iconographic, numismatic, monumental, artifactual, and statistical data bearing

upon his reconstruction. In doing so he examines the narratives and other evidence for internal consistency versus contradiction. “Coherence” and “correspondence” (“contact”) theories of truth are mutually entailed.

Granted, historians are still often confronted with fragmentary evidence, distortions in chroniclers’ interpretations, and errors produced by the copying of documents. Even so, we need not hold that scholars must have the whole and unvarnished truth to possess any truth whatsoever. What natural scientist is ever in the position to uncover *all* the necessary and sufficient conditions for a state of affairs? What experimentalist can discern, much less control for, *all* pertinent variables? The historian’s propositions are subject to the requirement for *certainty* no more than those of the physicist, chemist, or biologist. The reconstruction of an “objective past” (i.e., “intersubjective” consensuality) is but an ideal, albeit one that makes a considerable difference in the reality of scholarly practice.

Third, that every historian must exercise selectivity and must work from a given perspective on a particular set of problems—taken by Beard, Teggart, and the postmodernists as impugning the search for veridical knowledge—does not commit one to a skeptical philosophy of history. No more than his natural science counterpart can the historian proceed in a theoretical, cultural, historical, and psychological vacuum. While some stances may indeed contradict others, in many cases they are complementary. See, for example, Stamp’s account of the multiple factors converging to make the American Civil War nearly a necessary occurrence. Where there is controversy over a plausible multicausal explanation, it is usually a matter of which factors were most important. See also G. S. Boritt’s *The Historian’s Lincoln*.²⁴

Histories of the concept of evolution focusing on the social ambience of burgeoning capitalism and industrialism do not, for example, rule out the determinative role of other, disciplinarily internal factors. Even most Marxists have come to believe that such ideological “superstructures” can exert co-determinative force as well-as, from the history of Communism, indeed they should! We can readily conceive, say, of histories of the U.S. Constitution from legal, political, sociocultural, and economic positions. As William James said, “All ways of conceiving a concrete fact, if they are true ways at all, are equally true ways.”²⁵

Queries regarding historical facts may be answered in many correct ways, depending upon the perspective and concerns of the investigator. Even a nettlesome subject like the decline of the Roman Empire, with its multitude of divergent interpretations, has considerable convergence and overlap among its interpretations, and decided consensus about certain basic facts and relationships.

Where judgments reflecting moral or metaphysical commitments matter—such as, for example, the stance that what really matters in history is the fate of the common people—there can still be, as Walsh asserted, “true and false answers to the question how the common man fared at particular times.” “The point of view colours the account the historian gives, or if you like slants it, but it does not (or should not) decide its details.”²⁶

Fourth, in actual practice historians approach their subjects in a manner that allows free play between observation and interpretation, between a relatively passive receptivity to the data (akin to Freud’s “evenly suspended attention”) and an active restructuring.²⁷ Historians go over and back over their documents in exquisite detail, saturating themselves in their sources. They begin by casting their nets widely and with a broad knowledge of the contexts of the areas they propose to investigate. Primary and secondary sources are systematically surveyed. They encounter the same datum repeatedly—often in slightly different contexts or connected in different ways with data already uncovered. Patterns and themes begin to appear, analogies are drawn, hitherto-meaningless mounds of data are ordered; some of this is the fruit of the practitioner’s preconscious and unconscious connections between, and elaborations upon, the material.

From these arrangements historians construct and test causal hypotheses. The whole process—absorbing and reconstituting, observing and interpreting, induction and deduction—is so inextricably interactive and mutually determinative that unilinear cause—effect models do it no justice. The interpreter imposes himself on the data no more than the data impose themselves on the interpreter. The choice is not between Kant (presuppositions) and Locke (empiricism), but rather a recognition that each requires the other. As Carr said, “The historian is neither the humble slave, nor the tyrannical master, of his facts. The relation between the historian and his facts is one of equality, of give-and-take.”²⁸ This is not wholly-dissimilar to the activity of adept diagnosticians in internal medicine and psychiatry.

Ordinarily there is a balance between “interpretation” and “observation” (heuristically necessary distinctions, even with my epistemological caveats about the distinction). Problems arise when one’s theory (interpretative framework) compels inattention to broad arcs of relevant data: (1) as Freud’s psychological and biogenetic theories of monotheism led him to ignore the historical and cultural contexts of Judaism²⁹; (2) as Sulloway’s insistence on the *à priori* biological strains in Freud drove him to overlook Freud’s psychological, cultural anthropological, and empirical sides³⁰; (3) as the commitment of some historians to economic explanation blinds them to cultural, psychological, and ideological factors; (4) as Zilboorg’s presupposition that all witches were psychotic or hysterical caused him to ignore much evidence to the contrary³¹; and (5) as the commitment so many psychiatric historians have to purely internalist and intellectual causative factors makes them neglect the political, sociocultural, and economic contexts of the development of psychiatry. No point of view, and one drowns in the data; too strident a point of view, and one sees only what one wants to see.

Moreover, as elaborated in the second part of this chapter, section Critical Method and Steps of Research, historians’ factual assertions and causal propositions can be *tested* against the data in a variety of ways. Inspecting their bibliographies can answer the following questions: Have they ignored crucial primary or secondary sources? Have they consulted the appropriate editions? Have they read key works in the original languages? Have contemporary testimonies been cross-validated? Have they relied on problematic chroniclers and historians? Scrutinizing historians’ data and sources in such a manner (including important sources that were overlooked) allows one to determine whether the alleged patterns, themes, contexts, sequences, and relationships are reasonable and coherent interpretations of the data.

Where does all this leave us? What does the historian assert with his formulation? In my opinion, something like the following:

“This is what I believe occurred, based both on the limited and in some respects distorted data at my disposal; and on the rules of evidence and inference of my discipline. Although I cannot claim that my reconstruction totally recaptures events as they transpired or that my interpretation sufficiently elucidates the whole causal nexus, I believe that my argument is reasonable and adequately supported by evidence. In any event it is so fashioned that subsequent scholars can support, undermine, supplement, or revise it.”

Can for instance, the paleontologist, who also engages in retrospective reconstruction, do more—or even as much, given the fragmentation of the fossil record at any given locale? Paleontologists—and natural scientists in general—lack the sort of knowledge-by-direct-acquaintance that historians possess of the objects of their investigation, for historians themselves are persons interacting with other persons. This does not presuppose an exaggerated, cultural evolutionist concept of “psychic unity,” but only a recognition that humans universally share a number of traits and dispositions. See Vico, below and in Chapter 2.

Is there no midpoint between denying any role to interpretation, inference, and informed imagination and denying any place to empiricism? A multitude of historians and philosophers of history aver that one can acknowledge the importance of interpretation and perspective while still holding a concept of intersubjectively based objectivity and historical truth, as evidenced by the writings of Frankel, Nagel, Gardiner, Mandelbaum, Putnam, and many others.³²

The more recent of these writers are as concerned with the negative ethical consequences of postmodern relativism as they are with its negative epistemic conclusions. Did the Armenian and Jewish Holocausts really occur? Aren’t Stalin’s alleged atrocities merely fictions cooked up by neo-Trotskyites? Consider how Nietzsche, the *Ur*-hero for postmodernists and deconstructionists, turned social altruism and historical truth simultaneously on their heads in “genealogies” that were really pseudohistorical propaganda for the few “supermen” that nullified the worth of the bovine masses below them. Such beliefs justified Foucault’s sexual sadomasochism, along with his anarchic political stance and his reduction of knowledge to power.

History as Relationship

In earlier work comparing history and psychoanalysis, I suggested that in both disciplines the practitioner is best characterized as in relationship or dialogue with the “object” of understanding. This is, of course, obvious in dynamic psychiatry, with its concepts of participant observation, transference, countertransference,

empathy, and the mutuality of influence between patient and therapist. There is keen awareness that the clinician's *private* (my preference to "inner") responses may give him useful clues to the experience and motivations of his patient, as well as to his own.³³

If the parallels are not carried too far, I suggest that the analyst's relationship with the analysand sheds light on the historian's encounter with texts, monuments, periods, cultures, nations, and personalities: "historical cognition is a kind of conversation, a dialogue with the past," said Florovsky.³⁴ The historian's interaction with his subject is, like the psychoanalyst's, carried out not merely with his cognitive apparatus, but with his total personality (including his affects). For example, Croce told us that

When the development of the culture of my historical moment presents to me ... the problem of Greek civilization or of Platonic philosophy or of a particular mode of Attic manners, that problem is related to my being in the same way as the history of a bit of business in which I am engaged, or of a love affair in which I am indulging, or of a danger that threatens me. I examine it with the same sense of unhappiness until I have succeeded in solving it.³⁵

Similarly, the historian Page Smith asserted that good histories are "animated by the devotion of the author to the subject" and are the fruit of "the deepest commitment to the people, the period, and the events about which [the historian] is writing."³⁶ The parallels with the cultural anthropologist are plain.

From the concept of history-writing as relationship, it follows that the historian brings to his field of study a historically determined perspective and set of conflicts, preconceptions, and preoccupations. All this, known to him or not, influences his selection, organization, evaluation, and explanation of the data. It may even affect his choice of topic and, if he is a biographer, cause a countertransference to his subject. "Before you study the history, study the historian," advised Carr. This was an extension of his British colleague, Namier's, "prosopography," the detailed biographical study of individual parliamentarians during the reign of George III, the better to understand their voting records and political positions on broader issues. In this and other works he included a psychoanalytic approach along with quantitative methods.³⁷ As for the mutually influential nature of the historical dialogue, what scholar—having immersed himself in a culture, age, or individual—has not felt the impact of his subject upon him? *Parri passu* with the ethnographer—and psychoanalyst—again.

Of course, *if the historian* is aware of his historically conditioned mental-emotional set and is true to the canons of evidence, criticism, and interpretation of his craft; *then his personality can work for, and not against, him*. He will be able, like the psychoanalyst, to use his psyche, not as a well from which to project preconscious and unconscious idiosyncrasies; but as an empathic instrument useful for understanding the object of his research (Dilthey's *Verstehen*). Dilthey, Collingwood, Croce, Ortega y Gasset, and others have expounded upon the necessity for empathy in the historian's work.³⁸

In reading an edict of Theodosius, Collingwood told us that the historian

must envisage the situation with which the emperor was trying to deal, and he must envisage it as that emperor envisaged it. ... [H]e must see the possible alternatives, and the reasons for choosing one rather than another; and thus he must go through the process, which the emperor went through in deciding on his particular course.³⁹

In intellectual history, the brand of history that along with biography most closely resembles the psychoanalytic enterprise, the historian makes every effort to see his author's project through the author's eyes, with his author's background, and with his author's aims and procedures. He must discern what his author was actually trying to say before criticizing the form and content of his subject's work, whether from a contemporary or present-day vantage point.

If the topic is, for instance, Freud's anthropological thinking, one must *first* think and feel one's way into Freud's scientific temperament, personal characteristics, cultural ambience, intellectual prehistory, theoretical biases (and their rationale), professional experience, and early exposure to anthropological writings. With this background, one *then* approaches Freud's task—the study of nonliterate ("primitive") beliefs and institutions—as closely as possible to the manner in which Freud did. One must read Freud's sources; and one needs to imagine how he would have read them, and how his theoretical presuppositions, clinical experience, and creativity would have interacted with the ideas of his authors. Pertinent correspondence is

also essential. While it is impossible to *become* Freud as he wrote *Totem and Taboo*, it is possible, with sufficient immersion in Freud's biography and in the sources that he read, to arrive at a reasonable reconstruction of his state of mind. I am saying that one must first try to understand Freud "from the inside" before one can reasonably critique his sociocultural work from the outside.⁴⁰ Moreover, the book should be written in such a manner that a critical reader can sort-out the relevant data and primary sources, from the theories and interpretations purporting to historically explain them—*contra* postmodernist "historians" who entangle them in Gordian knots.

It is likely, for example, that Macaulay's time in Parliament enhanced his sensitivity to the political processes and figures about which he wrote; and that Gibbon's military service deepened his understanding of generals and maneuvers. Although the medical or science historian need not be a practitioner of the field about which he writes, there are instances in which it can definitely be helpful, such as in the history of physics, surgery, or psychotherapy. The minority black historian who has himself experienced the effects of civil and social discrimination may well better appreciate the problem of slavery than others can.

Nevertheless, empathy based upon such backgrounds is reliable only if one is sufficiently aware of the potential for bias and distortion inherent in them. Macaulay's Whig political partisanship often colored his view of things. Zilboorg's psychoanalytic adherence led him to a Hegelian vision of the history of psychiatry as the progressive unfolding of psychoanalysis. The black historian's experience might, if he is not careful, cause him to write, not a history, but a polemic about the antebellum South. Of course at times, a bait of bias snares a carp of truth—as when seventeenth century English antiroyalist sentiments led historians to reassess Arthurian legends they had hitherto accepted uncritically; or when anti-psychiatric sentiment in the 1960s and 1970s resulted in critiques of optimistic "Enlightenment-style" histories of psychiatry. Still, the most common errors in history result from inadequate empathy with one's figures or period: from failure to suspend disbelief sufficiently to enter into their or its world before engaging in criticism. The poet John Keats aptly called this a "negative capability."

Despite the existence of psychic universals, aspects and traits shared by all normally functioning humans, one can only approximately grasp the modes of thought and being of our ancestors. There remains an unbridgeable gulf between a Theodosius and a Collingwood, a Tacitus and a Gibbon. The fruits of empathy must be subjected to and pass the scrutiny of critical reason and empirical test.

The concept of historical labor as a relationship further illuminates the discussion of idealism versus realism, subjectivity and objectivity. In common parlance "subjectivity" is often construed as a synonym for "bias," as meaning that one's percepts and concepts are determined more by one's wishes, fears, and presuppositions than they are by the structure of external reality itself. Such "subjectivity" is a danger in history, just as it is in psychoanalysis and in the social sciences generally—and in biology too (especially ethology).

A good example of the subjectivism into which even the best historians can fall is the impact of the great Belgian scholar Henri Pirenne's Francophile sentiments on his interpretation of Belgium's history. His aim to "Gallicize" Flanders led Pirenne, a Walloon teaching history to Flemish students in French, to overemphasize the historical interdependence of Wallonia and Flanders, the Flemish separation from the kindred Dutch language to the north, and the role of French as a natural language of Flanders.⁴¹

I use "subjectivity" differently. As I view it, historical knowledge emerges from one's *relationship* with the subject matter. To know someone or something is to have a relationship with him or it. Note that many languages have two distinct categories of "knowing": one based on objective, impersonal knowledge (e.g., *wissen* in German) and one based on some form of psychological intimacy or familiarity (*kennen* in German). In many languages the etymology of the verb for "knowing" has carnal, affectional, or relational roots. Since Kant, we appreciate that all knowledge of external reality entails an active contribution by the observer: in modern terms, certain neuropsychologically "hardwired" categories through which we perceive and interpret phenomena—derived, presumably, through evolutionary natural selection.

Within this framework "subjectivity" refers to the impact of one's perceptual-affective-cognitive apparatus on one's picture of reality. The investigator's task is not to eliminate such "subjectivity," without which there can be no knowledge, but to determine through critical self-assessment and consensual validation (*intersubjectivity*) when his responses reveal more about his idiosyncratic mental set than about his subject

matter. Without a corollary concept of objectivity, “subjectivity” alone violates the fundamental logical principle of nonvacuous contrast and becomes meaningless. Yet another riposte to deconstructionism. Apropos all this, see my subsequent discussions of “*intersectional causation*.”

Historicism Versus Positivism and Covering Laws

The positivist versus historicist debate has raged for decades in history, as it has in psychoanalysis and the social sciences. It has even entered into philosophical considerations of the natural sciences. Broadly speaking, the positivist looks for regularities, universalities, and laws (the “nomothetic” approach), the historicist for concrete events and idiosyncratic lines of development (the “idiographic” approach). In history positivism takes the form of large-scale, linear or cyclical speculative schemes such as Marx’s, Spengler’s, Toynbee’s, and the nineteenth century cultural evolutionists’—and also of less grandiose attempts, such as Hempel’s and Nagel’s, to shunt particularist explanations through “covering laws.”⁴²

Leopold von Ranke, the founder of scientific history, emphasized (1) detailed archival work, (2) mastery of the requisite languages, (3) thorough grasp of primary sources and context, from multiple vantages, (4) understanding periods and peoples in their own right, rather than judging them by local and current categories of morality and perfection (his dictum that each period and society is “equidistant to God”), and (5) tracing concrete lines or networks of development. This is the *historicist* (or “idiographic”) approach. And he conducted it with a fair amount of individual and social psychological sophistication.

Although Ranke’s philosophy at times led him to espouse a radical empiricism with a lack of appreciation for the role of theory in historiography, his attack on the Hegelian (and, derivatively, the Marxian too) subsumption of idiosyncratic historical events and situations under overarching metaphysical schemata and laws was beneficial for the historical enterprise.⁴³ It is still a good antidote to the lawlike and quantitative pretensions of the social sciences—with the notable exception of cultural anthropology (minus, of course, the nineteenth century cultural evolutionists and their twentieth-century epigones).⁴⁴

Walsh’s concept of “colligation” is a current methodological manifestation of the historicist program:

the procedure of explaining an event by tracing its intrinsic relations to other events and locating it in its historical context ... to see it as part of such a process, to locate it in its context by mentioning other events with which it is bound up.⁴⁵

In history, outside Marxist circles and a recent (toned-down) resurgence of Hegelianism, there is little attention to allegedly lawful schemes of universal historical development, though there is an active controversy over covering laws. Hempel and his followers have maintained that scientifically respectable explanations, in history or elsewhere, must invoke *both particular antecedent conditions and covering laws*. The explanation should be framed in such a way that the *explanandum* (i.e., phenomenon to be explained) is deducible from the *explanans* (i.e., the specific antecedent conditions *operating in accordance with an explicitly stated universal law*). Such a law asserts that “whenever and wherever circumstances of the kind in question occur, an event of the kind to be explained comes about.” Previously, I demonstrated that, to some extent, psychoanalysis (implicitly and explicitly) invokes covering laws in its explanatory enterprise.^{45a} See also my Chapter 26 herein.

Dray and other opponents of this model have pointed out that, since in practice most historical explanations do not meet these criteria, the scholar has no use for a philosophy that inadequately reflects his procedure.⁴⁶ Hempelians maintain that if historical explanations do not generally invoke covering laws, then so much the worse for historians. Idiographic, or historicist, writers counter that the historian is concerned with concrete and nonreplicable events, not with abstract and repetitive universals. To which the Hempelians reply that the historian is interested in the concrete occurrence only insofar as it is a member of a class of events, otherwise it would be incomprehensible and irrelevant to him.

Finally, there are those who point out that the notion of lawfulness, even in physics, has been relaxed considerably to accord with the constructs of relativity and indeterminacy.⁴⁷ If “laws” in physics are at best probabilistic, then must not they be even more so in history? *If this is granted, however, then covering law*

explanations lose their deductive inevitability (i.e., logical necessity) and are no longer laws in the manner in which Hempel originally conceived them.

In practice, most historians seem to toe a middle line. They often make working assumptions—in evaluating actions, events, and the accuracy of documents and chronicles—about how human beings, individually and in groups, typically behave in certain periods, cultures, and situations. For instance, in *The Mind of the South* W. J. Cash attacked the “cavalier theory” of Southern history, not merely by using data concerning patterns of immigration from England (grossly insufficient and unreferenced data, I must add); but by invoking generalizations like this:

Men of position and power, men who were adjusted to their environment, men who find life bearable in their accustomed place—such men do not embark on frail ships for a dismal frontier where savages prowl and slay, and living is a grim and laborious ordeal. The laborer, faced with starvation; the debtor, anxious to get out of jail; the apprentice, reckless, eager for a fling at adventure, and even more eager to escape his master; the peasant ... [and so forth]. But your fat and moneyed squire, your gentlemen of rank and connection, and your cavalier who is welcome in the drawing-rooms of London—almost never. Not even, as a rule, if there is a price on his head, for across the channel is France, and the odds are that Cromwell can't last.⁴⁸

That his concrete emigrational data were inadequate, and some of his generalizations as well (e.g., many of the regicides did flee to America), is beside the point. What is important is that, in principle, this exemplifies—almost certainly unbeknownst to Cash—a Hempelian-type historical explanation.

In no sense, however, do most historians and philosophers believe scholars are searching for “binding” regularities or laws. The positions of Mandelbaum, Scriven, and Gardiner exemplify this middle ground. Mandelbaum projected that historical research

will continue to be concerned with the analysis of the concrete nature of particular events, though it will surely continue to utilize, in ever growing measure, not only the commonsense generalizations of everyday life, but the best available generalizations which social scientists have been able to formulate on the basis of a knowledge of history.⁴⁹

Scriven asserted that historians utilize generalizations about what history has taught them about human nature and historical events, but emphatically denied that these amount to laws. For example, when a historian says that Francophile sentiments in the London Corresponding Society in 1792 caused alarm in that city, he does not claim that such sympathy is always cause for alarm in London. Nor, Scriven maintained, does he deduce this explanation from a covering law to the effect that “Whenever sympathy is expressed, in certain circumstances, with a foreign power meeting certain conditions, by a group of a certain kind, alarm follows.”⁵⁰

The historian is not claiming deductive inevitability for the events he is explaining. What he seeks is merely evidence that his candidate was present, that it has on other occasions clearly demonstrated its capacity to produce an effect of the sort here under study (or that there might be grounds for thinking it a possible cause rather than previous direct experience of its actual efficacy), and the absence of evidence (despite a thorough search) (a) that its *modus operandi* was inoperative here, and/or (b) that any of the other possible causes were present.

In practice, Scriven believed, the historian's use of such generalizations is a largely intuitive one: “a diagnostic skill ... at identifying causes even though he does not know, let alone know how to describe, the perceptual cues he employs.”⁵¹ This is very similar to the diagnostic practice of general and psychiatric M.D.'s, involving, among other things, un- or pre-conscious *pattern recognition*.

Gardiner felt the historian uses “vague and open” generalizations and terms, “able to cover a vast number of events falling within an indefinitely circumscribed range,” such concepts functioning as “guides to understanding.” Generalizations such as “economic changes in society are accompanied by religious changes” and “rulers who pursue policies detrimental to the countries over which they rule become unpopular” may provide rough-and-ready indications of the sorts of factors a historian will look for in his investigation of a specific set of religious changes or a particular ruler's unpopularity. But they leave open to historical investigation and analysis the “task of eliciting the specific nature of those factors on a particular occasion, and the precise manner in which the factors are causally connected to one another.”⁵²

Widely used in experimental science, the hypothetico-deductive method specifies that one deduces one or more specific events as necessary consequences, if one's hypothesis is true. The hypothesis is supported

if experiment finds the deduced events and undermined if not. For the historian such deduction from hypotheses is only the beginning of his explanation, not its end and substance. British economic historians have demonstrated instances in which ostensible covering laws (e.g., “industrialization depends upon hitherto-idle liquid capital and modes of moving it”) have led to erroneous history. Political and cultural historians were so overawed by such “iron laws” of economics that they bent the facts to fit them. For more on covering laws, see my subsequent considerations of the comparative method.

It was some time before a more-skeptical cadre, outside the hegemonic mainstream, brought forth refuting evidence for reams of *à priori* history. Once a few highly placed “authorities” adopt a position, the most convenient (and often academically safest) tack is simply to swallow and regurgitate it in one’s own arguments. Kuhn⁵³ and others—for example, Gould⁵⁴ on Lamarckism, on the so-called biogenetic law (“ontogeny recapitulates phylogeny”), and on “gradualist” theories of evolution—have shown it operates in the natural sciences as well.⁵⁵ Cash’s animus against “Cavalier” interpretations of tidewater Southern history drove him to see only what supported his dictum. It influenced a segment of writers on Southern history, until a mass of inconvenient information spawned more balanced and geographically differentiated points of view. Of course, to jettison all of Cash’s arguments as merely “red-neck” or “hillbilly” historiography would be to run from one extreme to another.

Before parting from this section, we must glance at an issue tangentially-related to covering laws—i.e., *historical periodization*. Historians from Hebrew, classical Greco-Roman, and earlier Christian times onward; operated with periodizations of a sort—as did Vico and other philosophical historians. Of course “medieval” persons did not think of themselves as occupying the “Middle” Ages—“middle” on the way to what? Many probably conceived themselves as living in the later Roman Ages (apropos Charlemagne’s coronation as Holy Roman Emperor in 800)—the Byzantines, with Constantinople as the “New Rome,” certainly did so; with their much-fuller possession of the Greco–Roman literary, philosophical, natural philosophical, historical, mythological, mathematical, and medical texts. As this Empire crumbled, from internal and external (the Latin Crusaders’ and Turks’ onslaughts) causes; with its final collapse in 1453; her scholars fled to Italy, with their priceless Greek texts and knowledge of both Attic and Koiné Greek. Hence many intellectual historians would begin the Italian “Renaissance” ca. 1450 and end it ca. 1600. Art historians, on the other hand; would start it around 1400; with Massaccio’s innovations in painting, Donatello’s in sculpture, and Brunelleschi’s in architecture. They would end it about 1600; with the “High Renaissance” flourishing ca. 1485–1530/35; with the latter Renaissance dubbed “Mannerism”—an artistic/architectural transition toward seventeenth century “Baroque” art. The fifteenth/sixteenth century Italian educated public plainly viewed themselves as living in a “New Age,” importantly characterized by the “Rebirth” (reappropriation really) of Greco–Roman antiquity. The elsewhere-cited *ur-art* historian, Vasari, seems to have coined the term, “Rebirth” or “Renaissance”; though it was Burckhardt’s 1860 cultural history of it that popularized the epithet.

It is important to grasp that this “Renaissance,” *especially in the fine arts*, began later in northern Italy (e.g., Milan and Venice, the latter long-under the influence of Byzantine styles and the former hitherto determined decisively by French Gothic); than in Tuscany and Rome. Moreover, the “Northern Renaissance” was a bird of a different color. Too, it embraced regions with significantly different artistic/cultural styles: the Netherlands, Flanders (both long-dominated by Spain), northern France, and Germany. As with northern Italy; the Northern Renaissance began somewhat later than the Tuscan/Roman one. Artistically, it was heralded in the “Low Countries” in the 1430s/50s by the brothers van Eyck; one of whom (Jan) is credited with the invention of oil paint, much-superior to the older egg-tempura. Thus, Jan van Eyck and other Flemish/Dutch painters soon had an impact on the center of the Italian Renaissance. The Germans, for their part, inaugurated (with the ca. 1450 invention of the Gutenberg press) printmaking: wood-blocks and, later, engravings. For the first time in history, the common folk could afford representational images—to which they formerly had access only in chapels, churches, and Cathedrals. The Italian public lapped-up these German prints, such that Italian Renaissance printmaking did not begin until much later. One of these German printmakers, Albrecht Durer (flourished latter-fifteenth century/earlier-sixteenth), was also a great painter and watercolorist. During two sojourns in Venice; his painting

both influenced, and was influenced by, Venetian Renaissance art (especially that by its true-founder, the then-aging Bellini). Parenthetically, we children of the mass-media—including audiovisuals—generally-cannot adequately-imagine the importance of prints/paintings/miniature sculptures to the pre-photographic and pre-cinematic worlds.

While the Northern and Italian artistic/cultural/intellectual innovations (and “recoveries” of the Classical past) are lumped together under the same term (*i.e.*, *Renaissance*); there were key differences between them—indeed, such that they threaten to bend that periodization to its breaking-point. Northern art during this time was much-less likely, than Italian, to depict mythological or pagan themes. Both arts were heavily Christian, however, and included landscapes and cityscapes. The Low countries were particularly taken by peasant genre scenes (often illustrating many proverbs) and bourgeois domestic interiors. Their art tended to be “busier” than that of their southern counterparts; and three-dimensional illusory perspective was perfected later in the North. Moreover, the Reformation and Renaissance would come together in the North; such that more of its literature was religious/theological in nature—though of course not wholly-so (e.g., Montaigne and some of Erasmus). In many Protestant regions, Calvinist iconoclasm/anti-idolatry led to the burning of much religious and “vain” high-art (and books too); as occurred in Florence during the “reign” of the evangelical puritanical monk, Savonarola (1492–1496). Still, secular historiography, philosophy, and proto-political science flowered earlier in the South, than in the North.

The “Baroque”, or seventeenth century period, was not cut from whole-cloth either. Its philosophy/natural philosophy was rational and mathematical/geometrical—even mechanical: Hobbes, Descartes, Spinoza, Newton, Leibniz, and so forth. But its art (in both North and South) was emotionally-expressive, dramatized by alternating light and dark (the chiaroscuro/tenebrism developed by the impulsive Caravaggio, and adopted by Rembrandt and other Northern painters). Architectural styles were more complex (with alternating recesses and abutments, broken pediments, and florid design inside and out): as opposed to the severe, obsessively geometric-symmetric, classical architectural interiors/exterior of the “high” Italian Renaissance. Thus, key aspects of the Italian Renaissance (including its paintings and murals) were *much-more rational and classical, than was the case with Foucault’s ensuing seventeenth century or “Classical Age”!* On the other hand, in the very midst of Baroque fine art; a powerful French neoclassical school grew up around Pussin. And Bach’s concerti had a rationalistic/“geometric” element: for example, the interlocking, moving wheels-within-wheels of the Brandenburgs. Many current intellectual historians have severely truncated the Baroque; placing its latter half in a novel periodization: the “Long Enlightenment” (ca. 1640–1800). A similar battenning of the “Victorian” age has occurred: 1830s to the Great War’s outbreak in 1914.

Hence we see that periodization in history—like taxonomizing in biology, and diagnosing in medicine and, especially, in psychiatry—is hardly a naively-empiricist carving of nature/human natures at the joints. Theory, and the criteria emphasized by the historian, come to bear at every point. I am not contending that there are no intersubjectively-consensual facets to, say, the latter Middle Ages compared to the earlier; or to the Renaissance, contrasted with the latter-Medieval before, and the Baroque afterward (“Baroque” originally being a purely art historical term, as was its succeeding “Rococo”). Nevertheless, as we have seen from our scandalously-succinct/sweeping overview; the historian’s subspecialty significantly conditions where he draws the chronological lines in periodizing. Thus art historians do not find the “Long Enlightenment” and “Long Victorian” periods at all useful to the continuities and transformations in their subject matter; whereas general intellectual historians do. The historical sociologist, Max Weber’s, “ideal types,” perhaps best captures the nature of historical periods—and of biological and medical/psychiatric taxons. It avoids the age-old quicksand of “nominalism (or idealism)” *versus* “realism (or empiricism)”; by acknowledging the presence of both in any viable periodization. Too, Weber argues that history (like biology/medicine-psychiatry) is an impossible discipline without them. A premium is placed on the scholar’s awareness of such issues; so that periods do not become petrified into a rigidity that interferes with the novel data and ideas of ongoing and future historians.

In sum, as with biological taxons and psychiatric diagnostic categories; historical periodization should be open, flexible, and revisable—as well as recognizing that different historical subspecialties (e.g., political/diplomatic, military, social, economic, general cultural, art/architectural, general intellectual,

science/medical/psychiatric, etc.) may need to slice the “joints” differently. It is only through such self-cognizance that any optimal integration of each period can be achieved; *and the transitions and overlaps between them—more often than Foucault’s razor-sharp disjunctions—be appreciated and, eventually, cogently explicated.* See O. Halecki’s *The Limits and Divisions of European History*, and J. A. Hall’s edited *States in History* (from ancient Sumer and China to recent and current ones); for discussions of periodization and the geographic extent of the regions involved.^{55a}

Causation

The length of this section reflects the importance of the topic in the philosophical historical literature. The cogency of causal models in history is denied by a minority party of historians and philosophers of history led by Oakeshott, Dray, Demos, and Berlin.⁵⁶ In many respects their arguments are similar to the “hermeneutic” reinterpreters of psychoanalysis.⁵⁷ Explanations involving motive, intention, meaning, purpose, and function—so common in history and the social sciences—are declared incompatible with causality, which is deemed mechanistic and appropriate only to the natural science sphere. Heisenberg is frequently invoked to support the claim that it does not operate universally even there (an issue addressed below). Postmodernists, such as Foucault, stress disjunction, not continuity, in history; and have little use for causality.

Oakeshott opposed cause and effect explanations in history on the grounds that they create an “arbitrary arrest or disjunction in the flow of events ... [and an] arbitrary distinction in the character of events.” To it he countered his concept of the “unity of history.” For him, historical explanation is not causal analysis but “redescription” (a popular ploy in certain present-day postmodernist cultural anthropological circles as well). The historian’s task is to give “a complete account of change” in which all events are appreciated as contributory: “*Pour savoir les choses il faut savoir le détail*”... [history is] the narration of the course of events which, in so far as it is without serious interruptions, explains itself.”⁵⁸ Beard and Marrou were other historians chary of causal explanations.⁵⁹ The historian Zinn⁶⁰ derided causation as “one of those metaphysical conundrums created by our own disposition to set verbal obstacles between ourselves and reality”—a causal proposition, I believe!

Dray and Demos differentiated sharply between “reasons” and “causes,” declaring the former to be the appropriate category for explaining human behavior. For Dray, the historian seeks

information about what the agent believed to be the facts of his situation, including the likely results of taking various courses of action open to him, and what he wanted to accomplish. ... Understanding is achieved when the historian can see the reasonableness of a man’s doing what the agent did, given the beliefs and motives referred to.⁶¹

For Demos, “motives, aims and decisions” are the “sources of human action.” Distinguishing between causes and reasons, the latter are said to incline, but not necessitate.

Brutus assassinated Caesar because he feared that Caesar might make himself a tyrant. Here we have an action issuing from a decision, in turn issuing from a reason. To give a reason is to explain why he did it *without implying he had to do it* [my italics].⁶²

Isaiah Berlin’s equation of determinism and inevitability was the ground on which he rejected the former. From this equation he concluded that determinism entails the elimination of personal responsibility:

If I extend this category without limit, then whatever is, is necessary and inevitable. ... [Consequently] To blame and praise, consider possible alternative courses of action, damn or congratulate historical figures for acting as they do or did, becomes an absurd activity. Admiration or contempt for this or that individual may indeed continue but it becomes akin to aesthetic judgment.⁶³

This is a regression to the age-old requirement that history function primarily as moral teacher (replete with heroes and villains), which permeates the work of even the best Enlightenment historians, such as Voltaire, Gibbon, and Hume (*despite this last’s hard determinism*).

Let me criticize these points in reverse, beginning with Berlin. Nagel, in contrast to Berlin, did not believe that the doctrine of historical determinism is wedded to any notion of inevitability (“predeterminism”). That there are “ascertainable limits to human power” does not, he asserted, negate the fact of individual choice and effort. For Nagel, deterministic propositions in history always proceed backward, attempting only to account

for that which has already occurred. They entail no retroactive predictions of inevitability: historical determinism is the proposition that

*if a deterministic system is in a definite state at a given time, the occurrence of that state at that time is determined in the sense that the necessary and sufficient conditions for the occurrence of that state at that time is that the system was in a certain state at a previous time [my italics].*⁶⁴

Bunge concurred that “*causality does not entail inevitability [Bunge’s italics].*”⁶⁵ The day-to-day causal explanations of historians must be distinguished sharply from the lawfully *predetermined* stages of global speculative philosophers of history like Hegel, Marx, and Toynbee. Lest the tail soon wag the dog, I shall here avoid discussing the relationship of “inevitability” to “necessity” and the “free will” issue, which I have written about elsewhere (see also Chapter 26).⁶⁶ Fortunately a good deal of history can be done without resolving this problem!

In most English-language dictionaries and discourse “reason” and “cause” are used interchangeably. These lexicons consider “reasons” a subspecies of “motivation,” itself deemed a causal concept. *If* something is: (1) explanatorily relevant to what follows upon it; (2) *if* it is (as Demos termed it) a “source” of human action; (3) *if* in its absence what occurred would not have occurred; (4) *if* it is understood to have begun temporally prior to the observable action; (5) *if* it arises in a person with a certain cognitive-conative-affective set and perceptual/interpretive style, which are relevant to the courses of action he generally entertains in certain classes of situation; and (6) *if* that mental-motivational set is itself a function of his constitution and personal/interpersonal history; *then it is difficult to see why a reason, if it be efficacious at all, is not also a cause—as well as itself the effect of prior conditions.* And, *with appropriate modification*, this should also pertain to the behaviors of sufficiently circumscribed collectivities.

With his “complete account of change” that explains itself, Oakeshott proclaimed that he had obviated the need to invoke hypothetical causes. This seems a regression to naïve notions that facts, if unhindered by theory, assemble and explain themselves. It is similar to the conceit of certain phenomenologists that a person’s experience simply explicates itself, without intervention by the investigator’s organizing principles. Are Oakeshott’s “redescriptions” conditioned by presuppositions about the data and historical process any less than explicitly causal historical propositions?

In any event, what historian (or physician or psychoanalyst or *natural scientist*) is ever in the position to give a “complete account of change?” Is not one’s very selection of which aspects of a course of events to “redescribe” determined by implicit or explicit assumptions about the causal connections, temporal priorities, and relative potencies among them? Oakeshott himself said, “No course of historical events exists until it has been constructed by historical thought and it cannot be constructed by historical thought without some presupposition about the character of the relation between events.”⁶⁷ Oakeshott’s charge that causal language fragments events is well countered by Mandelbaum’s argument, to be considered shortly.

Finally, the status of causality in subatomic physics likely has little relevance to the macro-level of events with which history is concerned. Be that as it may, it is insufficiently appreciated that many physicists do not reason from our inability to “determine” simultaneously both the position and momentum of particles to the acausality of their behavior. Rather, they draw conclusions about observational conditions that preclude our discerning one of these aspects, without the instrumental act of measuring it inadvertently affecting the value of the other—such that we cannot know its value very precisely. Note that this is essentially an epistemological claim about the limitations of knowledge and measurement, the ontological implications of which are quite unclear (and hotly debated). In fact the indeterminacy principle itself articulates a fundamental instrumental law: the measurements of position and momentum in subatomic particles are inversely related. The more exactly you know one, the less exactly you know the other. This does not necessarily preclude retaining a principle of universal causation, though it does in certain models of the Copenhagen interpretation.

Nonetheless, Schrödinger’s equations accurately described subatomic processes; and are wholly-compatible with both determinism and scientific realism. Einstein, too, was convinced that his general and special theories of relativity, and his studies of photon emission; fit in with universal causation and scientific realism. Moreover, I believe that the behavior of electrons and other subatomic “waveicles” is causally necessitated in two other important respects: (1) acausal interpreters cannot correctly claim that their

“containers” are so “air-tight” that they preclude all influences whatsoever by externally-ambient activities. And (2), it is the *total assemblage* (within the “container”) of molecules, atoms, particles/“waveicles,” rays and a variety of forces/force fields; which determines both the position and momentum of any given electron or whatever; including their nonrandom emissions. Thus any randomness and indeterminacy are *methodological, not ontological*. They have to do with the impact of our instrumentation on the behavior of the system—and its always-interrelated “components”; and, in the case of assessable patterns of photon-emissions (*supposedly* clinching the acausal ontic position), our incredible ignorance of the pertinent (*multi-multi-causal*) initial conditions—and probably also of some of the associated covering laws. *Whence our inability to engage in more than probabilistic, pattern-oriented prediction*. Acausalists have further-slid from this (possibly insoluble) *methodological* dilemma, and its consequent statistical requirements; to grand pronouncements about the *alleged ontologically-stochastic* nature of atomic/subatomic laws. Like gods, they have somehow seen the fundamental realities behind the veil of Maya (read “phenomenology”). Although much of the “language” involved in these debates is in the empyrean (“Platonic,” if one will) medium of highest mathematics; this has not precluded some—both causal and acausal—subatomic/quantum physicists from vigorously engaging in linguistic translations of it for the educated public. Of course some of the mathematical rigor is inevitably lost; and there remains a residue of non-verbally accessible mathematics. However, when acausalists debate deterministic physicists or philosophers of science; it is too-easy to invoke verbal inadequacy—or to flippantly-assert, as some acausalists actually do: “*If you really understand quantum mechanics, you realize you don’t!*” If there be any truth in this “yahoostic” dodge; it is the metaphysically/epistemologically commonplace one, that no subject matter (from the subatomic to the historical) is *without ambiguities and important unknowns (and, probably, “unknowabilities”)*.

The overwhelming majority of historians and philosophers of history have stressed the key place of causation in historical explanation. Leopold von Ranke enunciated the task of history as “penetration of the causal nexus.” Historians Langlois and Seignebos asserted that “the notion of cause ... is indispensable for the purpose of formulating events in constructing periods.”⁶⁸ The Committee on Historiography of the Social Science Research Council asserted that “The concept of causality has entered into narrative to such an extent that the writing of history might become mere cataloguing or chronology without it.”⁶⁹

On the other hand, historians Renier and Gallie⁷⁰ accepted causality but viewed the historical narrative or “story” as an end in itself, which only makes use of causal explanation where needed to move the story along. I think that they are reversing the order of priority—that narrative is merely one form in which historical causal explanations are presented, analysis and time-slice cross-sectional descriptions and interpretations being others.

The historians Elton, Barzun and Graff, and Fischer and the philosophers of history Frankel, Stover, and Murphey have remarked on the euphemisms for “cause” in ostensibly acausal formulations: “factors,” “influences,” “roots,” “foundations,” “bases,” “undercurrents,” and so forth.⁷¹ Fischer averred, “I have never read an extended historical interpretation which does not include causal statements, or cryptocausal statements, at least in a peripheral way.”⁷² The philosopher of history Michael Scriven concurred that “In merely describing the course of a war or reign the historian is constantly choosing language which implicitly identifies some phenomenon or aspect of phenomena as a cause and some other as effect.” In an analysis of a single page of an *Encyclopedia Britannica* article on English history, he counted thirty causal claims, although the word “cause” was used but twice!⁷³

Edward Carr, in his popular manual, defined history as “a study of causes.” Though he acknowledged that there must be some differences between mechanical, biological, psychological, and historical causation, as a working historian he did not see much importance in pursuing them. For Carr, historical determinism is “*the belief that everything that happens has a cause or causes, and could not have happened differently unless something in the cause or causes had also been different* [my italics].” At the same time, he approvingly quoted Huizinga that “Historical thinking is always teleological.” (Human teleology, I shall later demonstrate [in Chapter 26] is not contracausal; for human purposes are themselves the effect of prior conscious and, especially, unconscious causes; and such purposes themselves come to be causes.) Carr viewed causal explanations as products of the interaction between theory and data: “The causes

determine [the historian's] interpretation of the historical process, and his interpretation determines his selection and marshalling of the causes."⁷⁴

In his primer on methodology, the historian Gottschalk, like Carr, accepted the viability of causal explanation in history. Distinguishing between the "immediate cause or occasion" and "remote or underlying causes" of historical events, he places primacy with the latter: "the immediate cause is not really a cause; it is merely the point in a chain of events, trends, influences, and forces at which the effect become visible." Even more than Carr, Gottschalk emphasized the influence of the scholar's theoretical presuppositions on his causal analyses: "the causal explanations of events rest upon philosophies of history; and of philosophies of history there is no end."⁷⁵

Mandelbaum concurred that "causal analysis" is the historian's task. In more recent work, effectively neutralizing Oakeshott's charges, he undertook a crucial revision of atomistic, Humean concepts of cause and effect. A

state of affairs is viewed not as an isolated event, but as the end point of a process; what we take to be the cause of that state of affairs is the process leading to it, out of which it eventuated. ... The connection between cause and effect lies in the fact that both are seen as aspects of a single ongoing process, of which the effect is viewed as its end point or result; the cause of this result is the process itself [my italics].⁷⁶

Unless we engage in an imaginary stop-gap cinematographic analysis of an otherwise continuous process, Mandelbaum's model of causation corresponds more closely to our experience than Hume's atomistic pairings and sharp demarcations between cause-events and effect-events. This saddled Hume, moreover, with an utterly skeptical notion of cause and effect as nothing more than an inductive inference based on the habitual pairing of events and the psychological expectations this pairing leads to.

In asserting that we only know causes inferentially, from repetitive correlations between events; Hume was correct (more-so than he could then imagine), regarding the experimental scientific method—with its "controls" or independent and dependent variables; and the subsequent statistical processing which yields correlations from which the experimenter infers cause-and-effect relationships. Nevertheless, not all science is done this way; some, such as ethology and significant aspects of psychology and clinical psychiatry; are more directly observational. The brilliant Hume was blinded to the obvious—the manifold quotidian, and scientific, instances in which we directly perceive causation or cause-and-effect relationships. His blinkers derived from a version of empiricist philosophical psychology, that condemned each person to life-imprisonment inside his or her own "head" (*i.e., representational world*); and led to breathtakingly-total skepticism: indeed solipsism, which Hume himself admitted nobody could live. If humans—or animals, for that matter—did not have an evolutionarily-ingrained capacity to apprehend environmental actualities, including (at least initially) important singularities in causal relations; then more-complex forms of life would have died-off eons ago, *if indeed they could have arisen in the first place!* For example, a grammar-school boy need be punched in the "gut" by a bully *only once, to know and feel, that he has experienced a direct causal relationship*; which leads to attempts to avoid, or otherwise obviate, such situations henceforth. No matter that he knows nothing about the solar plexus, with which the fist intersected to cause the pain. And a dog need be pelted with a stick or stone *only-once*; to avoid rock- or staff-toting humans thereafter. Too, the great cats have an almost-instinctive appreciation of the anatomy of their prey; which leads them to strike at the hindquarters or jugular on their *very-first* hunt. This is a type of implicit and active causal knowledge *which, it is even silly to point out; is not a psychological expectation deriving from multiple correlations between events, or classes of events.* Finally how, one wonders, could Hume have convinced himself—to take his classical instance—that when a moving billiard ball hits a stationary one, which then moves also; that he had not directly witnessed a causal nexus?! And, given his causal-skepticism, how could he coherently contend *that the will is totally determined? Contra* Hume's "causal-nihilism," and *pro* instances of direct human perceptions of causality in action; see Michotte, Piaget, Brand, and Tooley.^{76a}

I argue *that motives or intentions need not be separated decisively* (à la Hume's skeptical/"empiricist" epistemology and psychology) *from the observable behaviors we take them to "determine."* Rather, there is a sense in which the motive operates and expresses itself *throughout* the behavior. *There is a continuum, in*

which the motive does not first cease and then the behavior arise, but in which it is difficult to say when the one becomes the other. This continuum we call “motivation.” It does not violate causality: because the *earlier* part of the series or nexus is a *necessary* condition for the *later* part. Hence neither the necessary condition nor the temporal criterion for causality is violated.⁷⁷

Nagel defined the historian’s task as “the explication of various features of particular happenings by exhibiting these factors as causally related to other particular occurrences.” Like Hempel, he believed that, in performing this task, the historian invokes covering laws.⁷⁸

We shall see that many historians have adopted a usage of causality that is strikingly similar to the psychoanalyst’s. Indeed, it can be contended that, apart from theistic determinism, a primitive notion of psychological causality was invoked by the first great historians, Herodotus and especially Thucydides. This was a notion of “character.” Breathtakingly monolithic and nondevelopmental, it had little or no eye for the private or “inner” life. Rather, the positions of the major political, diplomatic, or military leaders and protagonists were expressed in public speeches—real or, as often, imagined by Thucydides, when he had not been present or when memory failed him. Nor did the Greeks appreciate the complexity and contradiction manifested even by those with the most ostensibly polarized and fixed characters. The classical Greek character typology was a physiological “psychology.” Following the Hippocratics, who, in turn, based their taxonomy on far-older sources, it was believed that there were four bodily “humors”: blood, phlegm, and yellow and black bile. Each person’s “psychology” was characterized and explained by a preponderance of one of these: hence the “sanguine,” “phlegmatic,” “choleric,” and “melancholic” characters. The conceptual tools for a sophisticated psychology of motivation and personality complexity simply did not yet exist.

Until Rousseau’s developmental and motivational introspective psychology (with its robust appreciation of psychical conflict), Enlightenment historians were still satisfied with surprisingly superficial and simplistic explanations for the behavior of historical actors. The literature of the Romantic period carried Rousseau’s psychological revolution still further, as did German philosophers and psychiatrists in the first half of the nineteenth century. Consequently, Ranke and his pupils had access to much more sophisticated psychological models for describing and explaining both historical figures and collectivities. Ranke himself maintained that the “psychological forces of multiple, intermeshing human abilities, emotions, inclinations, and passions ... concern the historian as the most direct mainspring of action and the most immediate causes of the events resulting from the action.”⁷⁹

Marc Bloch, in his masterful *The Historian’s Craft*, asserted that “Historical facts are, in essence, psychological facts. Normally, therefore, they would find their antecedents in other psychological facts.”⁸⁰ Collingwood, following his teacher Croce, looked for the *idea* behind the action. It is on this ground that he distinguished between causation in history and in natural science:

When a scientist asks “why did that piece of litmus paper turn pink?” he means “on what kind of occasions do pieces of litmus paper turn pink?”. When a historian asks “why did Brutus stab Caesar?” he means “what did Brutus think that *made him* decide to stab Caesar?” [my italics].⁸¹

This is certainly a deterministic formulation, if there ever was one! Collingwood made it plain that it is the actor’s thought that is the causal principle. Collingwood’s concept of motivation is, however, all too rational, conscious, and without affect.

The philosopher of history Walsh and the historian Hughes explicitly acknowledged the likeness between the causality of history and that of psychoanalysis.⁸² The former said,

it can be contended with fair plausibility that the historian, in studying impulsive acts and seeking to uncover the thoughts behind them, has a task which compares at some point with that of the psychoanalyst, whose success in revealing carefully worked out plans behind apparently irrational actions is surely relevant to the subject we are considering.

Because of the peculiar nature of the subject matter of historians and psychoanalysts, Walsh believed, like Meyerhoff, that their concept of causation includes teleological facets:

The series of actions in question forms a whole of which it is true to say not only that the later members are determined by the earlier, but also that the determination is reciprocal, the earlier members themselves being affected by the fact that the later ones were envisaged.⁸³

Though Walsh's point is worth taking seriously, his characterization of it as "reciprocal determination" is confusing. The "reciprocity" is not at all temporal, nor is the "cause" in any way determined by the "effect." It is simply that the effect was envisioned in the cause, that is, by antecedent individual or collective human desires or aspirations. These desires themselves are a function of prior causes, of which the agents might have no consciousness whatsoever—whether they be *heuristically conceptualized* as "social structural," "political-economic," or "psychological." Freud's concept of causation, or motivation, also included a telic dimension. I have elsewhere argued that, despite the epistemological similarities between psychoanalysis and history/biography, the former tends to invoke explicit quasi-covering laws much more frequently than do the latter. Despite its idiographic dimensions, psychoanalysis has various nomothetic aspirations as well.⁸⁴

In a study of three great modern artists (one an architect) the cultural/intellectual historian and lay analyst Peter Gay has shown the importance of causation in historical answers to the question "Why?" He proposed an "hourglass" model of "overdetermination," or multifactorial causation, of the works of artists (or other biographical subjects). The ("porous," I should add) genres of causality are "cultural," "craft" or professional, and "private" or psychological. More temporally remote causes (or "predispositions") are in the upper-upper part of the hourglass; more intermediate ones in the upper-middle; and more recent ones in the lower-upper. At the very bottom of the upper glass are the "releasing factors" or "triggers," and in the neck is the event to be explained. The lower part of the glass represents the immediate, intermediate, and long-term (cultural, craft, and psychological) consequences, which of course then become causes in themselves. In studying biography or history, Gay has correctly stressed the crucial importance of the subject's (often defensively or wishfully skewed) perception and interpretation of events as much as the "external" (intersubjective) actuality of the events themselves.⁸⁵

The current psychoanalytic concept of causation subsumes the dimensions of "intentionality" in both the phenomenologist's sense of "representationally object-directed" and in the earlier sense of "drive," "motive," or "desire." "Object relations" psychoanalysis, into which the earlier "id" (or "instinctual drive") "psychology" evolved, appreciates that psychical or private ("intrapsychic") desires—at whatever level of consciousness—are invariably linked to the images of persons (especially historically prototypical ones). The patterns of important interpersonal relations in childhood form a largely unconscious matrix of expectations and fears through which an individual experiences the actual persons encountered in adulthood. The primordial object-directed desires become displaced onto later persons, depending upon their actual or perceived roles, for example, onto authority figures, peers, rivals, nurturers, sexual partners, and so on. The nature of this "matrix" significantly determines the degree to which one can seek to gratify, rather than ward off and defend against, one's most basic human-related strivings. Of course, actual adult interpersonal relationships (including, it may be, clinician-patient ones) may themselves beneficently alter earlier "internalized" object-related ones. In short, object-relations psychoanalysis is at once psychical *and* interpersonal. This makes it much more historian/biographer user-friendly, though many academicians are unaware of these advances. Historians and biographers are, however, increasingly making use of object relations theory.⁸⁶ See also Chapter 26.

As for the dimension of "*function*"—so commonly invoked in social historical and anthropological/sociological explanations—it clearly does not violate the causal principle in the case of individual behavior. *In other words, the "function" of a behavior is understood as codetermined by its demonstrated prior capacity to fulfill strivings and goals and by the immediate feedback of environmental consequences upon the individual.* Psychoanalytic theory clearly includes this dimension of functionalism. Group or social behavior, however, is more complex, since one must get *from* presumed *societal* ends (themselves often treated as if they arise in some sort of hypostasized "group mind") *to* the *individual* motivations that they allegedly determine (see Nagel's classic critique of functionalism).⁸⁷

Here it seems that behavioral psychology, neo-Darwinian evolution, and psychoanalysis may provide a way out. However societal aims arise and become organized, once they are present the group must have some means of reinforcing individual behavior that serves the aims (e.g., ends such as social control and social cohesion). This is accomplished by rewarding or punishing behavior so that individuals are motivated

to perform or avoid actions, *whether or not they are conscious of the ultimate societal ends entailed by the behavior*. Patterns of behavior supporting group survival (altruism, for example) spread, while maladaptive patterns die out in the competition with those possessing more-adaptive consequences.⁸⁸

Models of causality, such as Collingwood's and Walsh's, are heavily individualistic. Exclusive allegiance to such paradigms has accounted for the "king and battle" or excessively internalist quality of history, especially the history of science and medicine, in which the achievements of one or a few geniuses become the foundation and the problematic for the next generation's luminaries. This is even more apparent in the history of philosophy, the most old-fashioned branch of intellectual history: Father Copleston's gargantuan multivolume history, published in nine volumes from 1946 to 1975, goes from one splendidly internalist "problematic" to its successors' grappling with it, which then becomes the "problematic" of the next school or successor. An extraordinarily comprehensive chronologically ordered textbook of philosophy, it is, seen from an externalist point of view, where medical and psychiatric history were a half century ago. And yet it is among the best "histories" of philosophy written.⁸⁹

Examples of radically polarized internalist and externalist approaches to the history of civilization are those of Sidney Hook in the twentieth century, who stressed the "hero in history," and in the late-nineteenth century Friedrich Engels, who emphasized economic and social currents:

That Napoleon—this particular Corsican—should have been the military dictator made necessary by the exhausting wars of the French Republic—that was a matter of chance. But in default of Napoleon another would have filled his place; that is established by the fact that whenever a man was necessary he has always been found: Caesar, Augustus, Cromwell.

Gardiner pointed out that such Marx/Engels dicta are irrefutable; for if a "great man" does not arise, they can always riposte that "in that particular situation he was not necessary!"⁹⁰

Opposing perspectives in the history of medicine are Osler's⁹¹ "great doctors" approach versus Neuburger's emphasis on the connection between general civilization and medicine and his attempt to find the "common philosophical denominator for the medicine of a period and other manifestations of its cultural life."⁹² In the history of psychiatry and psychology we encounter the "great man" orientation of Zilboorg's *History of Medical Psychology* versus the "Zeitgeist" perspective of Boring's *History of Experimental Psychology*.⁹³ While some of Freud's biographers have, like Ernest Jones, promoted his originality,⁹⁴ others, like Henri Ellenberger, have stressed the degree to which his work was a consequence of a long history of mesmeric and Romantic philosophical trends.⁹⁵ Ellenberger's genealogy, and other nineteenth century philosophers we have touched on, were but the chronological tip of the iceberg of philosophical influences that Freud *never cited*.⁹⁶ Erikson's "great man in history" model, in which the genius is seen as struggling with personal issues that also preoccupy society, to some degree synthesizes the "hero" and "Zeitgeist" approaches.⁹⁷ Each grasps a facet of the truth but requires the other for completeness.

Social historians have recently pointed historians of science, medicine, and psychiatry to the fact that intellectual and professional disciplines do not develop in socioeconomic and political vacuums. In crucial respects such specialties are both determined by, and unwittingly serve, these wider sociocultural currents. The next part of this chapter, *The Methodology of History*, examines this issue in detail. In general academic history the tools for social history were being forged in France by the "Annales" school, centered around Marc Bloch and Lucien Lefebvre, so-called for its important journal, *Annales d'histoire Economique et Sociale* (founded 1929). They drew on insights and methods from psychology, psychoanalysis, sociology, and economics. Lefebvre's 1939 *The Coming of the French Revolution* is a good example of their approach (which at times included quantitative analysis). Their work culminated in the 1960s with Fernand Braudel's broad-scale histories of the Mediterranean littoral, work that has been criticized for being remiss in factual details. Nonetheless, in an academic history so characterized by monographs on micro-topics, it is refreshing to see historians dare to attempt a synthetic history of civilizations reminiscent of Spengler and Toynbee.⁹⁸

In Britain, E. P. Thompson's 1963 *The Making of the English Working Class* furnished a prototype for Anglo-American social and economic history writing.⁹⁹ Long before Thompson's book appeared, though, a number of influential British periodicals devoted to social and economic history had come into existence by

the late 1920s, to some degree independently of the *Annales: Economic History*, *The Economic History Review*, and the *Journal of Economic and Business History*. As with so-called “psychohistory,” one can hope that the social and economic approaches will be integrated into more multifactorial and inclusive histories.

Before closing this section, I shall examine (1) the concept of “chance,” (2) the elliptical character of many causal explanations in history, (3) the reciprocal interactions of multiple determinative influences (“overdetermination”), and (4) the “intersectional” nature of causation.

The notion of “chance” or “accident” in history neither negates nor is negated by the concept of determinism. “Chance” events such as the sudden eruption of a hero upon the scene, a plague that decimates a defending army, or a drought may indeed play a role in turning the course of history. Such “accidents” do not escape the causal nexus. The effects of prior causes (albeit perhaps unforeseen and unforeseeable), they enter history by becoming causes themselves.¹⁰⁰

As Carr said, by “accident” in history we mean “a sequence of cause and effect interrupting—and, so to speak, clashing with—the sequence which the historian is primarily concerned to investigate.” He approvingly quoted Bury’s definition of accidents as the “collision of two independent causal chains.” In line with this, Carr cogently pointed out that chance or accident usually exerts its effect as a necessary but not sufficient condition.¹⁰¹ In short, I suggest if for the want of a nail the battle was lost and the nation destroyed, the question becomes, “what were the antecedent conditions such that the battle was fought, crucial materiel was missing, and that the state collapsed from but a single event?”¹⁰²

Let us now turn to a special feature of deterministic explanations in history—their often elliptical character. What does it mean to say that “a change in the mode of production ‘causes’ a change in political structure and ideology”? Does not this seemingly simple, ostensibly unilinear cause and effect statement subsume an indefinite number of interlocking determinants (people, ideas, technology, physical environment, social structure, economics, and so forth) feeding back upon one another in a bewildering manner? It should not be forgotten that it is people who determine the changes in mode of production, to which they then respond by recognizing the inadequacy of former political structures and ideologies for their new situations.¹⁰³

Unilinear cause and effect chains do not do justice to the interactive determination of historical phenomena (or of *any* naturalistic phenomena, for that matter). As they investigate the role of theoretical, educational, empirical, psychological, sociocultural, and creative factors in their figures and movements, intellectual historians should appreciate this better than anyone.

A good example of the subtle interaction of ideas and influences is Freud’s discovery and formulation of the Oedipus complex. Previously thought largely to have resulted from his self-analysis, Freud scholars now appreciate that it had more complex origins. Freud had certainly read the Oedipus story in his youth. Contemporary plays and novels, a burgeoning nineteenth century sexological literature, and Fliess’s ideas had sensitized him to the role of infantile sexuality and the possibility of incestuous longings. Inhibitions against sexuality and the treatment of sexual themes were already beginning to break down in Freud’s Vienna. Then Breuer’s work, the writings of Nietzsche and others, and his own clinical work led him to the conviction that important constellations of ideas and affects can remain unconscious. Patients were recounting incestuous stories to him, which Freud first treated as accounts of real seductions.

In the midst of all this, Freud became aware of his own oedipal strivings, which further sensitized him to such longings in his patients and contributed to his abandonment of the seduction hypothesis. In generalizing from data uncovered in himself and a few patients to the entire human race, Freud was invoking the principle of “psychic unity,” with which he was thoroughly familiar from reading the cultural evolutionists.

By turning to the Oedipus legend to “confirm” (Freud’s own word) the universality of the complex he had discovered in Vienna, Freud was borrowing yet another principle from nineteenth century anthropologists—the comparative method. Freud’s thinking on the unconscious, anthropology, and causality itself similarly exemplify complicated interactions of ideas.¹⁰⁴

Finally, I turn to what I call the “intersectional causation” of human affairs. Although this is a common-sense notion, its exposition may prove useful. Here I shall begin with clinical and psychological examples, whose relevance to historical and biographical work will become apparent.¹⁰⁵

Mr. D's father died on Monday. Two days later Mr. D attempted suicide. What do we mean when we say that the former event "precipitated" the latter? Do we mean that it caused it in approximately the way a gamma ray transforms a molecule? Yes, if we understand the cause as lying at the *intersection* of the properties of the ray and the particular molecule. This causal statement is a short-hand notation that omits reference to a complex array of interacting determinants. A more complete causal explanation would read as follows:

Mr. D had been ignored and intimidated by his well-known and highly successful father throughout childhood. He reacted to this by developing powerful fantasies of murdering and surpassing the father. At times he acted so obnoxiously that he actually aggravated the father's withdrawal and abusiveness. Eventually, because he feared his father's retaliation and the condemnation of his own conscience, he repressed these hostile fantasies. However, he continued to entertain them unconsciously, and substitutively expressed them by entering into and rising in his father's profession. When the combination of his own success and his father's death fulfilled his unconscious wishes, Mr. D reacted with an inordinate (unconscious) sense of guilt. In other words, *his* unconscious conflicts over patricidal aggression (themselves the effect of his early relationship with his father) *caused* him unconsciously to misinterpret his father's death as a murder, and himself as a murderer. He then punished himself as if he had actually committed this crime.

This was only one of many motives for his self-destructiveness. My point is that the cause of the self-punitive fantasy, which itself determined his suicidal behavior, *lay neither in just the external event (the father's death) nor just in the personality structure of the patient. Rather, the cause lay at the intersection of Mr. D's historically determined unconscious desires, fears, and interpretations with the external event of his father's death.* To belabor the obvious, the causal explanation of Mr. D's behavior asserts that, "but for the death of the father, and but for Mr. D's personality structure, the behavior to be explained would not have occurred."

I can conceive of no manner in which one could intelligibly explain the connection between the father's death and Mr. D's suicide attempt noncausally. Nor can I conceive of any way to relate noncausally the history of Mr. D's interaction with his father to Mr. D's father-conflict. The suicide attempt was in every sense *caused* by the intersection between an event in external (i.e., intersubjective) reality and the actor's historically-determined unconscious conflicts. In other cases, such as in "fate neurotics," we have to deal not merely with a neurotically determined misinterpretation of "precipitating" events, but with an active (albeit again largely unconscious) engineering of them as well.

In this context hermeneuticians are correct to remind us of the crucial role of the *agent's interpretation of the situation*, for this interpretation is indeed the proximal cause of his behavior. Nevertheless, this interpretation does not arise *de novo*. It is itself determined by the current situation, the complex of unconscious fantasies, and the history of prior interactions with significant others. Again, I argue that a unilinear notion of causation is inadequate. What is required is an interactional and intersectional concept of multi-causation, with points of mutual feedback along the way. In short, causation is a *nexus*, not a *linear chain*.

An intersectional model of causation holds not merely for situations of psychopathological interaction with one's fellows, but also for *perception, interpersonal relations, and human communication in general*. This is true whether one is engaged in the most refined Socratic dialogue or is reacting to the crassest insult. If, in the former case, we are led to adopt a novel position because of the superior logic of our conversational partner, then he will be said to have given us good "reason" to do so. The cause lies at the *intersection* of his argument and our understanding. In the second case we can predict that the insult will cause (conscious or unconscious) anger in the recipient. However, the final reaction—for example, fearful withdrawal, guilt feelings, anxiety, and so on—will depend on the historically determined dynamics of the target.

One man's erection, another's anxiety, and a third's guilt feelings in response to the lingering glance of a beautiful woman are all instances of *intersectional causation*, as are those subliminal, nonverbal communications that play so important a role in our reaction to other persons. Though a strain from a Mozart sonata may well elicit certain effects common to a musically sophisticated audience, the specific constellation of images, affects, and associations evoked will differ from person to person according to each person's unique history and constitution.

The same applies to dynamic psychiatry's concept of historical determinism. The causation here is *interactive* and *mediate*. It is interactive in that the infant is impinged upon by the behavior of his parents, who

“shape” his nascent affective-conative-perceptual set; but they shape it in intersection with his idiosyncratic constitutional endowment (“temperament”). The shaping also works in the reverse direction, for the infant’s “temperament” (including innate activity level, emotional expressiveness, extraversion/introversion, and so forth) impinges upon the parents and partly shapes their behavior toward and expectations of the infant.

After the first few months of life, the infant is developing his own “inner world” (“private life” in Wallace-speak) and interpretive style, from the interaction between his neurobiological maturation and the parents’ behavioral patterns. Henceforth, the parents impinge upon him *through* this psychological private world. The infant’s personality structure is then determined not by the parent’s behavior per se, but by the impact of that behavior on his own mental set with its affective, conative, perceptual, and interpretive aspects. This is what I mean by “mediate” *determinism*. The infant is not passively and mechanically buffeted about by his “determinants” but “reaches out and grasps them” with his own mental set.¹⁰⁶

Returning now to intellectual history, such a model of psychical causation and historical determinism lets one appreciate that it is never a matter of the thinker’s being passively influenced by his sources. Rather, his predetermined mind-set and his theoretical problems and presuppositions lead him to read them in a certain way. Certainly this was the case with Freud, whose lifelong Darwinian infatuation and biogenetic-Lamarckian commitments, very much affected how he read the anthropological literature for *Totem and Taboo*.¹⁰⁷

In conclusion, it seems well to cite Mazlish’s tolerant and incisive comments on the variety of causal explanations invoked by the historian:

straight narrative, limited generalizations, and Hempelian universal laws where he can find them—anything which will serve his purpose—for the very understandable reason that he is trying to explain an individual action or a social event which lends itself only to that particular level of explanation.¹⁰⁸

The Nature of the Discipline

“Is their profession art or science?” is a question that has long bedeviled historians. To some extent, as Carr pointed out, this is a problem peculiar to the English language, with its sharp differentiation between the “sciences” and “humanities.” The philosopher, historian, and critic Wilhelm Dilthey was especially influenced by Ranke’s historicism, when Dilthey joined him as a philosophy professor at the University of Berlin. Dilthey contended strenuously against the positivists, who would enshrine natural science explanation as *the only legitimate kind*. Dilthey’s division of intellectual disciplines into the *Naturwissenschaften* (natural sciences) and the *Geisteswissenschaften* (human sciences), foundational to his program, became widely adopted. Knowledge in the natural sciences does no more than explain (*erklären*) observed events by relating them to other observed events in accord with natural laws—laws that tell us nothing about the “inner nature” of physical phenomena such as “gravitation”—or “quanta,” for that matter (if, in fact, the latter are “real”!)^{108a} By contrast, the *Geisteswissenschaften* (the sciences dealing directly with human mind and action) take us *behind* observable behaviors to an “internal” sphere of thoughts, feelings, and desires.

Humanist knowledge, in contradistinction, is not merely phenomenal and “external.” We all have *direct insight* into the experiences, thoughts, value judgments, and purposes that eventuate in human action in ourselves or others. Dilthey philosophically analyzed how one mind becomes aware of the processes of another (and here he had historiography particularly in mind). The sequence was *Erlebnis*, *Ausdruck*, and *Verstehen*—“experience,” “expression,” and “understanding.” We understand another’s “expression” by re-experiencing (*nacherleben*) in our own consciousness the “experience” from which the other’s “expression” arose. The key to understanding the “structure” of the individual personality is the transition whereby perceptions lead to thoughts, thoughts to feelings, and feelings to desire and acts of will. Since human beings communicate with each other, one person’s experiences can stimulate thoughts and feelings that can lead to similar actions on the part of others. Thus, an *individual “structural” pattern* can ramify into a “*life pattern*” of *whole social groups*. (Recall Erikson’s “great man in history” model.) Dilthey’s influence on Collingwood is apparent.

Moreover, Dilthey’s is a powerful argument against the acommunicational solipsism; to which the post-modernist denial of any intersubjective text, must lead.

Dilthey wrote a lot, and his large body of work is not without internal contradictions. For example, he blurs his earlier differentiation of the *Geisteswissenschaften* from the *Naturwissenschaften* by suggesting that, *if* all the various “human sciences” are brought to bear on human life and experience, *then psychical and group general laws may eventually be discovered*. In any event, he can certainly be interpreted in such a way that causal explanations in history are not ruled out of court. In short, *Verstehen* (“understanding,” or *empathy*) can be conceptualized as one of the *necessary preliminary steps* that lead to causal explanations (*erklären*) of human behavior. This would seem to be presupposed in his suggestion that it might be possible to formulate general psychical and collective laws.¹⁰⁹

The crux is how one defines “science.” For instance, the sciences of physics and ethology differ in subject matter and method from one another as much as history differs from either of them. If under the rubric of “science” one admits only disciplines that use predominantly experimental and mathematical methods and models, then history need not apply (though statistical models have been usefully applied in many fields of history—demographic, epidemiologic, social, political, and of course economic). By the very nature of what they study historians cannot engage in prospective, controlled experimentation; nor, often, can they provide more than an approximate kind of quantification; nor can they channel their explanations through quasi-absolute laws. Their method is essentially idiographic, interpretative, and reconstructive. Their explanations and theorems do not carry the same degree of predictive power as do those in the more mathematizable branches of natural science. The historian cannot attain (indeed he would not want to) the same degree of observational detachment as the natural scientist. Finally, historical perspectives are to some degree time and culture bound.

Still, none of these objections closes the case. To begin with, not all natural sciences are experimental. Some, such as paleontology, operate with a methodology that is broadly historical and reconstructive, while others, such as ethology, employ naturalistic observation and—at least in primate ethology—a degree of empathy and appreciation of often surprisingly humanlike social structure, and of what has aptly been termed “infraculture.” Second, not all sciences make equal use of mathematics. If, as I believe, much of what history studies is nonquantifiable anyway, then to quantify is to lose, not gain, precision. (The same is preeminently true of aspects of psychology-behaviorism as much as psychoanalysis.) Third, since Heisenberg and Einstein, we appreciate the probabilistic nature of all statements about the nature of reality, that is, of all natural laws.

Nevertheless, the comparative method, used extensively by ethologists and cultural anthropologists (and by paleontology and much of evolutionary biology and evolutionary psychology), may yield primitive generalizations, if not positivistic covering laws. For example, fine-grained cross-historical analyses of what all would agree were “revolutions”—the English Civil War, the American Revolution, the French Revolution, the Mexican Revolution of 1910–1921, the Russian Communist Revolution, the Maoist Revolution, the Cuban Revolution—might yield factors present in them all or, equally important, present in some but not others.

These analyses could be coupled with close study of situations in which revolutions seemed to be imminent but did not occur. For example, more than a few English historians have argued that Wesleyan Methodism may have averted a revolution “from below” in mid eighteenth century England, a time of great social unrest. In other words, it may have diverted the common people’s socioeconomic and political concerns into spiritual channels and nonsecular forms of “salvation.” Moreover, some believe a Depression era American socialist or Communist Revolution was averted not only by the “New Deal,” but also by the tremendous upsurge of Pentecostal and evangelical Christianity in the South and Midwest. The comparative method is the one closest to the experimental method, to which disciplines like history, cultural anthropology, and psychoanalysis (at least in the clinical setting) lack access.

Fourth, historians often engage in successful retrodiction. Hypotheses derived from data at their disposal may be confirmed by data that emerge only later, such as newly discovered letters or diaries—a prime example being the discovery of Boswell’s *Memoirs* in an attic in the 1940s. Recall our discussion of testability in the section Theory and Data (and the next part of this chapter, section Critical Method and Steps of Research).

Fifth, as the physicist Percy Bridgman¹¹⁰ noted, all science is to some degree interpretative. No scientist should now ignore the impact of his mental framework and methodology on his subject matter. Thomas Kuhn argued relentlessly that the scientific endeavor itself inescapably has historically and culturally relative aspects.¹¹¹

Larry Laudan, James Harris, and Imre Lakatos have separately formulated a less relativistic and un-Kuhnian history and philosophy of science.¹¹² For example, as Laudan demonstrated, the history of eighteenth and nineteenth century geology was characterized by several, long-term competing visions—including uniformitarianism and catastrophism (or “vulcanism”) as well as “Neptunism.” It was not a matter of one paradigm displacing another, but rather an eventual higher-level synthesis of several (along with no longer useful paradigms being discarded). Moreover, this synthesis resulted from accumulating evidence with which both uniformitarian and catastrophic schools could agree—contra Kuhn’s convictions that (1) a theoretical paradigm cannot be separated from the evidence supposedly integrally ensconced in it and (2) competing paradigms are utterly incommensurable. Furthermore, while Newtonian physics did supplant the Cartesian one, it was not so much falsified by Einstein’s general and special theories of relativity as replaced by a more complete theory that resolved its anomalies. Einsteinian relativity and quantum mechanics now clearly oppose one another in important respects. The theory of general relativity is compatible with determinism; while the Bohr/Heisenberg theory of quantum mechanism is not.

Rather, each of these physics speaks to different levels or orders of phenomena. For example, most civil and mechanical engineering continues to apply Newtonian concepts; astronomy and cosmology utilize Einsteinian models; and nuclear and subnuclear physics draw on quantum mechanics, as well as on still emerging approaches like string theory. Another postmodernist science historian, Paul Feyerabend, has carried Kuhn’s arguments to their logical conclusion: there is not “a shred of an argument” “[that] modern science is superior to magic or Aristotelian science.” Basic “scientific wisdom” is no better than the “basic wisdom” of “witches and warlocks.”¹¹³

Finally, that historians labor under far greater epistemic liabilities than natural scientists is by now such a “truism” that, again, it ignores a crucial fact: the historian’s self-conscious sentience (i.e., “phenomenology”) and first-hand knowledge of agency and the cultural-historical process gives him knowledge by direct acquaintance of part of his class of investigation (i.e., sentient and symbolizing human beings) that no natural scientist can ever enjoy. This, it seems, was Vico’s point in asserting that “we can clearly know only that which we have made.” Recall that Dilthey emphasized this as well.

The notion that science deals with the general and recurrent while history deals with the unique and particular is incorrect in principle, correct in practice. It is incorrect in principle because historians, like scientists, cannot dispense with generalizations and classes. It is correct in practice in that the historian, insofar as he is a practitioner and not an analytical or speculative philosopher of history, is mainly concerned with explaining the development and configuration of the specific concrete phenomena being studied (this individual or culture). His use of general theorems and universal schemata are subordinated to this task.

If by “science” one means a discipline that rigorously and systematically investigates its phenomena, that is radically self-conscious of its methodology and its relationship to its subject matter, that weighs and sifts the data according to coherent and internally consistent theories and canons of evidence, and that attempts to arrive at rational explanations of reality, then history is a science. But it is not physics or chemistry or biology. Historians adopt methods and models—including empathy and “colligation”—appropriate to the peculiar nature of what they study rather than slavishly aping those of natural scientists. Alone among the intellectual endeavors, history reports its conclusions in ordinary language. In both these respects history carries a message for the scientific pretensions and jargon-laden locutions of much so-called “social science.” This also holds true for the historian’s concepts of causation, which we have already examined.

In short, while there are similarities between the heuristic and testing methods of history and the natural sciences, there are significant differences as well. History must assert its methodological and epistemological autonomy in the face of so-called “logical” positivists telling practitioners of the human sciences how they should proceed—or even that they are talking nonsense—without troubling themselves to learn what it is that they actually do. Ludwig Wittgenstein, perhaps the most brilliant twentieth century

philosopher, sized them up remarkably quickly—refusing their idolatrous homage to him, and their cultic inflation of a tiny arc of human thought and experience.

Nor can it be denied that, despite its scientific aspect, history has strong affinities with the arts. The historian concerns himself with form, feeling, and imagination; to some extent he works intuitively. He should not be devoid of the more artistic aspects of creativity. His subject matter generally permits more latitude for alternative interpretations—whether complementary or contradictory—than does that in the experimental natural sciences. Ranke himself asserted that, in its tasks of “recreation” and “portrayal,” “history must be science and art at the same time.”¹¹⁴ Clio, goddess of history is, after all, one of the classical Greco-Roman Muses—albeit the ninth and last one admitted.

The Methodology of History

The nineteenth century historical revolution, as Collingwood noted, has profoundly affected the way we think about self and world. It even affected thinking in the natural sciences, which were themselves becoming more historical: for example, Lyell’s geology and Darwin’s biology. Historical thinking is practiced by all of us—in attempting, for example, to appreciate the thoughts in a friend’s letter, to reconstruct one’s state of mind from a diary entry of years before, or even in reflecting upon the events of the last hour. “In this sense all knowledge of mind is historical,” as Atkinson wrote.¹¹⁵ Of all psychologies, psychoanalysis is supremely aware of this.

Nevertheless, modern historiography is distinguished by an explicit body of rules and canons of evidence much more sophisticated than, and in some respects even opposed to, workaday common sense. It is the purpose of this part to highlight these.

This part is divided into six sections: The first, Critical Method and Steps of Research, treats various general issues; the second treats Presentism; the third is an essential return to “Externalism” and “Internalism;” the fourth is The Application of Psychiatry to Historiography; the fifth is Historical Psychology; and the sixth is Utility.

If there is one thing that characterizes good writers of modern history, it is the critical method. It is difficult for the present-day reader to appreciate just how slavishly earlier historians treated their sources. Temkin¹¹⁶ called this the “doxographic” method—arguments from citing the opinions and observations of prior authorities (“secondary sources”) rather than from one’s own archival research (“primary sources”). This is one of many instances of how something taken for granted took some millennia to develop. Prescientific historians were often more concerned with the potential their works had for morally improving the reader than with the accuracy of their own narratives. The foundations for the critical-historical approach were laid in seventeenth century biblical philology, especially in France. The late seventeenth century author Mabillon began systematically to describe “diplomats”—the critical assessment of the historical authenticity of documents. Still, most eighteenth century history—such as Voltaire’s and that of the *philosophes*—was not historiographically sound by current standards. The eighteenth century Gibbon’s great *Decline and Fall of the Roman Empire* came closest to meeting later Rankian requirements. Meanwhile, in earlier eighteenth century Naples, far from the Enlightenment center, the Roman legal scholar Giambattista Vico was doing history and theory of history that would eventually influence the Göttingen school.¹¹⁷ At the University of Göttingen, beginning in the late eighteenth and early nineteenth centuries, critical secular historiography was born from critical philology (the history of languages and criticism of texts—especially biblical or classical Greco-Roman).

Leopold von Ranke (1824) became the exemplar of this approach.¹¹⁸ “Hermeneutics,” a necessary part of this enterprise, initially meant interpretation of biblical texts. In the Enlightenment this hermeneutics moved from its originally allegorical mode to an increasingly critical and historicist one. It was an important historical determinant of early nineteenth century methodologically rigorous and critical secular historiography. Nonetheless, despite the progressively critical stance of hermeneutics, it should not be confused with the totalizing epistemic nihilism of Beard and his “postmodern” “hermeneutic” successors. They dismiss all

prior historiography as politically motivated ideology masking as truth, as no more than time- and place-conditioned apologetics for the socioeconomic status quo.

Their claim that all prior histories are politically tendentious lies and that all supposed “truths” are nothing more than exercises in power subjects them to philosophically self-reflexive suicide on several ironic grounds: (1) they write history and social science that they wish to be taken seriously; (2) their proclamation of the “death of truth” would seem to apply equally to their own allegations; and (3) their tracts are patently motivated by the political ideologies and power maneuvers (usually some version of Marxism or Anarchism that they seem for all the world to hold as True) that they accuse modern historiography of perpetrating.

For yet another irony consider their erroneous assertion that history is nothing more than the study of historians’ texts (though these allegedly have no evidential base), while at the same time (cf. Jacques Derrida and Stanley Fish) they deny the objective existence of texts (and hence actually existing authorial intentionality) other than whatever any given reader makes of it! Hence history is the totally subjective study of texts that aren’t really there! For examples of postmodernist excesses, including those of Derrida and Fish, see the collections by Smith and Kerrigan, Gane, and Silverman and Ilde, and also works by Gadamer, Jameson, Guess, and Feyerabend.¹¹⁹

From the 1820s Ranke actively researched, and he taught the modernist historical vanguard for the next six decades—his middle and later career being at the University of Berlin. His European students, such as Jakob Burckhardt (who founded cultural history) and Theodore Mommsen (who brought studies of Roman antiquity to a level far beyond Gibbon), read like a hall of fame. Those Americans who established the New World’s first methodologically rigorous university history departments (at Columbia University and Johns Hopkins in the latter nineteenth century) had been students and disciples of Ranke or his pupils. It is no accident that critical primary-source medical history began around that time in Germany as well, at the University of Leipzig. The first New World Institute of the History of Medicine (again at Johns Hopkins) was modeled on that at Leipzig and staffed by two of its greatest scholars, Henry Sigerist and Oswei Temkin in 1929. Langlois and Seignebos,¹²⁰ in that frequently mentioned 1898 classic (which still repays careful reading), emphasized the fundamentally critical nature of historical work—especially toward previous historical authorities. They advocated a measure of methodical doubt from the outset toward long-accepted interpretations and allegations of fact. Indeed, they implied that the scholar assumes a measure of moral, as well as epistemic, responsibility when he reproduces a statement or opinion.

Criticism is divided into “external” and “internal.” The former assesses whether a document is in fact from the era in which it purports to be, and the latter evaluates whether its statements are veridical or (tendentiously, unwittingly, or mythologically) erroneous. The first step in internal criticism, Langlois and Seignebos emphasized (independent of, but like Dilthey), is phenomenological—an honest attempt to understand what the author is saying—before moving on to weigh his evidential and personal motivation. Of course it is no accident that they are almost never read by postmodern “hermeneuticians,” “genealogists” (à la Nietzsche and Foucault), or “archaeologists” (again, à la Foucault and epigones).¹²¹

Henri Ellenberger, preeminent historian of dynamic psychiatry, advocated, like his French predecessors, that we never take anything for granted. By way of example, he cited Ernest Jones’s account of Karl Abraham’s 1908 delivery of a psychoanalytical paper before the Berlin Society of Psychiatry. Jones depicted an almost riotous reception, whereas the society’s official report—and even Abraham’s letter to Freud the next day—are less stormy accounts.¹²² Similarly, Decker and Wallace have reported serious deficiencies in Jones’s narrative of the response to Freud’s ideas by German psychiatrists and Anglo-American anthropologists, respectively.¹²³

For years Freud’s birth date was debated—some contending that “May 6” was a misreading of what was actually “March 6” on his birth certificate—until René Gicklhorn actually went and looked at the document. It was indeed “May 6,” spelled in the old-style. Entire polemical histories concerning the alleged role of deception and self-deception in Freud and his family had been developed around the persistence of this erroneous belief in his March 6 birth date. One ugly little fact undermined mountains of elegant conjecture.¹²⁴ *In short, historical assertions, hypotheses, and interpretations are potentially falsifiable—a cardinal criterion of science.*¹²⁵ Other instances follow.

Ellenberger listed several rules of thumb in assessing the reliability of data: closeness in time to the alleged actual occurrences; and the generally greater reliability of official documents than eyewitness accounts, particularly given the fallibility of memory, if the latter occur long after the events. Similarly, letters and diaries, while quite useful, can present events in distorted ways.¹²⁶

A number of examples bear on Ellenberger's contentions generally, though not without exception. Recall that public officials, such as George Washington, often quite self-consciously and selectively directed the preservation of their correspondence—with posterity very much in mind. In addition, we know, commonsensically, that diaries are as often used to ventilate and work through feelings and protect self-esteem as they are to accurately depict events. In short, the aims of diarists are usually quite different from those of academic historians—if we need any reminding! However (contra Ellenberger), the records of meetings, governments, and diplomats could also be quite tendentious, as well as likely to ignore the more emotional and personal aspects of the relationships, decisions, and actions involved. This is why Ranke taught his students to scrutinize the sources on the various sides of a diplomatic or political issue, including more private documents such as letters and diaries. This also presupposed a measure of linguistic mastery, almost certainly less common among historians today.

Testing a figure's assertions or perceptions against eyewitness contemporaries is no simple matter of totaling opinions and going with the majority. Witnesses here, as in a courtroom, must be cross-examined for credibility. Whole groups of contemporaries can have misconceptions about a figure, either because of political or religious bias or because they lack access to crucial information about him that only comes to light decades later.

This was the case with the French Revolutionary politician, Bertrand Barère; whom contemporaries decried as a hypocritical sail-trimmer and opportunist. Much later, the mid-twentieth century historian Leo Gershoy scrutinized the records of the successive regimes in which Barère served; as well as his private papers, notes, and letters. All this gave Gershoy a much-broader and more accurate appreciation of him than that enjoyed by his peers. Barère was no mere power-monger or survivalist. Rather, he *consistently* strove for some semblance of governmental moderation and efficiency. His initial support of Robespierre was dashed by the Terror; and Barère secretly worked for his downfall.¹²⁷

Though we cannot know precisely what it was like to be a Junker in, say, one of the three hundred political entities in eighteenth century pre-unification Germany, there are historical and biographical methods—given sufficient pertinent data—by means of which we can form approximate notions. Indeed, these are often more reliable than that particular aristocrat's appreciation of the phenomenology and perspectives of the peasants who worked his land, or of a Bavarian's apprehension of the psychology and world-view of his landed Prussian counterpart, or of a capitalist entrepreneur in Danzig.

In some instances we can have much broader and more reliable knowledge of a state of affairs and of its multiple causes than did even the participants themselves. For example, the Continental Congress or early post-Constitutional Federal government are probably more thoroughly comprehensible now than then after the publication of Jared Sparks's mid-nineteenth century fifty volumes of public and private Franklin documents and comparable nineteenth and twentieth century comprehensive collections for Washington, Jefferson, Jay, Hamilton, Burr, Adams, Madison, and so on.

Of course archives and testimonies are hardly the only data assessment devices the scholar possesses. Philology and a number of auxiliary sciences, such as numismatics and archaeology, assist in determining authenticity and probity. In addition, there are crucial checks involving logic, internal coherence, and semi-covering laws. Does the report hang together, or is it filled with non sequiturs, self-contradictions, and inconsistencies? Is it plausible, given what we know of the most common modes and styles of perception, interpretation, motivation, and behavior consistent with the time and place? Is it believable (contra postmodernists) in light of what we know about seemingly more longstanding aspects of human nature and in light of the laws of nature?

While I have criticized Collingwood's subjectivist-idealist streak, there were also sober and insightful sides to this philosopher and archaeologist/historian of British Roman antiquity. Like Langlois and Seignebos and Ellenberger, he stressed the critical stance. In this sense—by scrutinizing and cross-examining his

sources—the historian’s data are indeed “achieved” rather than “received” ready-made: “In proportion as [the historian] is more of a novice, either in this particular subject or in history as a whole, his forerunners are, relatively to his incompetence, authoritative; and in the limiting case where his incompetence and ignorance are absolute, they could be called authorities without qualification. As he becomes more and more master of his craft and his subject, they become less and less his authorities, more and more his fellow students, to be treated with respect or contempt according to their deserts.”¹²⁸

Much of the history of psychiatry has leaned on such “authorities without qualification”—the reliance, for example, by the still widely read and taught Alexander and Selesnick on secondary sources like Zilboorg and Jones.¹²⁹ In mastering a topic one soon discovers that standard lore from the most respectable writers may become suspect: see Dora Weiner’s dashing in this book of the cherished “Pinel as chainbreaker” myth. The French historian Gladys Swain, died tragically young, also contributed to falsifying this “fact.”

While it is always hazardous to present a complex enterprise like history-writing as a series of steps or stages, it is nonetheless useful to do so. All good historical work is directed, as Collingwood and Fischer averred, to the clarification and resolution of specific problems.¹³⁰ However, much must occur before any would-be scholar is in the position to identify problems, much less solve them.

It is necessary that the historian have a broad grounding in the history of civilization, as well as in topics relating to his specialty area. Here we can profitably follow the lead of William H. Prescott, America’s first great historian and a master prose stylist as well.¹³¹ Prescott, already possessing the necessary mastery of languages and a good knowledge of Spanish creative literature, began his study of Spain’s history under Ferdinand and Isabella by reading all around his subject: histories of European civilization and of the nations figuring in important relations with Spain. Then he sought to grasp the whole course of Spanish history, in the process doing a few important “finger exercises,” such as a lengthy unpublished essay on the Arabs in Spain.

All this provided him with key context and background before he ever turned to most of the primary sources for his problem. Copyists would furnish this wealthy scholar with thousands of pages from never-published Spanish archives. For three and one-half years he took critical notes on these. In short, independent of Ranke, he appreciated the necessity for undertaking rigorous archival research rather than just drawing on the published historical “authorities.” All told, the whole project (*The History of Spain Under Ferdinand and Isabella*) took a decade. Thus Prescott demonstrated the patient and dogged thoroughness, or *Sitzfleisch*, that Langlois and Seignebos deemed the historian’s cardinal virtue.

Similar critical thoroughness characterized Prescott’s two subsequent multivolume masterpieces: *The Conquest of Mexico* and *The Conquest of Peru*. Here again, copyists provided him with reams of archives from the Spanish bureau for the Indies and other depositories. Prescott was of course doing much more than simply gathering data. He was developing the empathy—both resonant and active—with his period and people. Dilthey termed this *Verstehen*, the necessary prelude to description and causal explanation. Although he never visited Mexico, in *The Conquest* Prescott drew on first-hand knowledge of similar terrain and climate in the Azores to inform his appreciation of Cortez’s March. Those who knew Mexico swore he had been there!

Any historian worthy of the name gathers his data not merely as an end in itself but as an important means to penetrate the ways of being and thinking of the period and place being investigated. This involves knowing at least something of its art, architecture, literature, politics, religion, popular culture, intellectual traditions, social and economic structure, and physical environment.

If it is a foreign culture, it may entail moving for awhile through the actual geographic ambience where the events occurred. For example, the American historian of German Romantic psychiatry could profit from time in the better-preserved towns, villages, and institutions where his subjects lived and worked. The Freud scholar could visit Vienna; read his (published and still-unpublished) letters; pore over published volumes of photographs of Freud, his family, and domiciles; sit in his London study and consulting room; and examine his library and antiquities. All is fair game in the facilitation of empathy and informed historical imagination. In such work, the clinician-historian’s training and practice in clinical assessment and psychotherapy should prove invaluable.

With a good knowledge of the general history of civilization and the background of the period, the historical apprentice is ready to begin work. With the consultation of mentors, he reads the best secondary literature on

the topic; builds a working bibliography of primary and secondary sources; engages in the relevant archival work—letters, diaries, newspapers, journals, official reports, asylum casebooks, laboratory notebooks, and so on. Langlois and Seignebos dubbed this data-gathering phase “heuristic” (i.e., “discovery”), and sharply demarcated it from external criticism, internal criticism, and the hypothesizing and synthesis that follow.¹³² Elton, as well, deemed “Knowledge of all the sources, and competent criticism of them” as the prerequisites to reliable history-writing. The safeguard against procrusteanism lies in the “total survey of the material” and in data selection guided by the perception of its patterns rather than “by the historian’s purpose.”¹³³

To be sure, this is sound advice, though it immediately demands qualification. To begin with, no historian—except perhaps of certain narrowly delimited ancient and medieval problems, and usually not even then—can master all the extant data. Some of them will be in languages inaccessible to him; some simply buried in libraries without adequate cataloguing; and others overlooked out of sheer human fallibility. As Langlois and Seignebos admitted, “the documents are too numerous for him to read them all; but he does not say so, to avoid scandal!”¹³⁴

If precipitous and shoddy scholarship are grave errors, so is perfectionism. Lord Acton (one of Britain’s first university professors of modern history and founder of the extraordinary Cambridge Modern History series), at the time of his death, is said to have possessed thousands of notes and slips of paper. Yet he could seldom bring himself to write. “The progress of historical science,” as Fischer said in *Historians’ Fallacies* (which every scholar should read before penning a line), “rests squarely upon a sense of the possible.”¹³⁵

Sooner or later the historian must write. At times it is advisable to do preliminary sketches and drafts before gleaning “all the data”—lest one be choked by them, and so that some provisional organization of the material can occur. When the scholar does so, he will be surprised at the extent to which the unconscious mind has been selecting, connecting, organizing, and interpreting—in fallow moments between his immersion in sources, and in preparation and re-retracing of notes. Moreover, no historian totally suspends conjecture and hypothesizing until obtaining and criticizing “all” his sources. His knowledge of general history and personal predilections have already played a role in choice of topic. He ineluctably brings certain conscious and unconscious motivations and presuppositions to the task.

In fine, as emphasized in the first part of this chapter, theorizing and data gathering are in constant interaction, subtly conditioning one another. The historian rapidly oscillates between a relatively passive apprehension of the data and their patterns and an interpretative organization of them. This could be characterized as alternative applications of inductive and deductive reasoning or perhaps, per Fischer, “adductive” in the “simple sense of addressing answers to specific questions, so that a satisfactory explanatory ‘fit’ is obtained ... questions and answers [being] fitted to each other by a complex process of mutual adjustment.”¹³⁶

Ellenberger¹³⁷ gave further useful guidelines to historians of psychiatry—and, for that matter, intellectual historians generally. He should bracket his identification with a particular “school” or orientation and try to identify himself with his subject—something that guards against presentism. Authors should be read in the original language—especially important advice to the Freud scholar, in light of recent criticisms of the Strachey-orchestrated English-language translations.¹³⁸ Finally, they should be read chronologically and in, at least initially, the first editions of their works. With Freud, for example, one should begin with the neuroanatomical and neurological writings—surprisingly key to understanding his early psychological works.¹³⁹ In reading any figure’s sources, one should read them as the subject himself encountered them (insofar as this is known, or inferred, with reasonable probability), and in the languages and particular editions in which he read them.

Ellenberger proposed a taxonomy of the determinants in intellectual history: (1) the actual or most important sources are not always those the figure cites (Darwin, for example, skewed historical explanations for years by accenting the role of Malthus in his work); (2) sources only casually mentioned by the subject (for example Tylor, who shaped Freud’s anthropological and psychological thinking to an extent disproportionate to Freud’s meager references to him); (3) sources never cited but traced with certainty (as is now the case with Herbart’s influence on Freud); (4) authors not mentioned, but where the influences are probable (such as the impact of Spinoza on Freud); and (5) sources expressly denied but who are “in the air” (as was the case with Nietzsche for Freud). These last are especially recognizable when, as Ellenberger

suggested, one puts one's author(s) in context, new works almost always being part of a trend. Consider, for example, the impact of Schopenhauer on Nietzsche, and of Nietzsche on Freud.¹⁴⁰

This last point moves us from originating historical hypotheses to testing them. Whatever positivists would have us believe, experimentation and statistics are not the only means of falsifying and supporting hypotheses (in areas of research like economic, military, or demographic history quantification is applicable).

As Gardiner opined, in what is also an excellent manifesto of historicism:

A postulated historical explanation is not, as a rule, justified (or challenged) by demonstrating that a given law implied by it does (or does not) hold; far less by showing such a law to follow (or not to follow) from an accepted theory or hypothesis, or to be confirmed (or falsified) by experiment; nor, again, by pointing out that the case under consideration does (or does not) satisfy in the required respects the conditions exactly specified in the formulation of the law ... The historian is likely to insist that, fully to comprehend the explanations he provides, the events that concern him must be considered in all their detail and complexity.¹⁴¹

Murphey developed a similar line of reasoning, though he carries us into the role of prediction, where we shall follow him in a moment;

One must evaluate the oft-repeated claim that historical theories and explanations are usually of an *ex post facto* character. There is some truth to this claim, for the simple reason that in many cases the theory is elaborated to explain a given data base. But this is not a fact, which should concern us. The ability of a theory to explain data that are already before us does as much to confirm the theory as does its ability to predict; logically, any complete explanation is equivalent to a prediction. Moreover, new data are continually turning up against which the theory can be tested.¹⁴²

Sometimes these new data can be predicted from the theory, but, for reasons already discussed, this is not the general case. Usually we discover the relation of the data to the theory only after the data are in hand. Nevertheless, the fact that a theory turns out to explain data, which it was not known to explain at the time the theory was developed, is surely as strong evidence for the theory as its ability to predict the character of the actual data found. The so-called *ex post facto* character of historical explanations does not, therefore, tell against their truth (*ibid.*).

For example, Ellenberger's hypothesis—inferred from apprehending parallel themes in Freud, Nietzsche, and Romantic philosophy—that Freud was influenced by Nietzsche has subsequently received additional substantiation from the discovery of a letter Freud wrote when 17, stating that he had read everything Nietzsche had written up to that point! Some of these works contain clear parallels to Freud's thinking about psychology and anthropology.¹⁴³ In 1932 Maria Dorer—much earlier than Ellenberger—conjectured from similar passages and textual patterns in their writings that Freud was influenced by Herbart.¹⁴⁴ Her hypothesis was supported by Bernfeld's¹⁴⁵ eventual discovery: Lindner's *Lehrbuch der empirischen Psychologie*, a detailed exposition of Herbartian psychology, was studied by Freud for two hours per week in the last year of his Gymnasium, as well as in philosophy courses at the University of Vienna (where he had further exposure to Nietzsche).

Apropos Nietzsche and Freud, Lou Andreas-Salome was a long-time participant in the meetings of Freud's Vienna circle. She had been a rejecting girlfriend of Nietzsche himself; it was partly the resemblance of Freud's ideas to Nietzsche's that first attracted her to Freud. Undoubtedly Nietzsche would have entered her conversations with Freud and her remarks at meetings of the Vienna Psychoanalytical Society. In *Totem and Taboo* (1913) whole passages are virtually identical to those in Nietzsche's *Human, All Too Human*, though Freud barely cited him there.¹⁴⁶

Such fascinating proofs of historical conjectures obscure somewhat the extent to which historians, in their quotidian work, actually do use *prediction* to test tentative hypotheses. This is done largely automatically, implicitly, even subliminally. We assess a provisional, half-formed conjecture less by predicting the individual datum that would confirm or refute it than by hypothesizing classes of data that would constitute preliminary support or disconfirmation. For instance: subsequently discovering that one's figure was familiar with a whole trend or movement rather than merely with some specific worker within it; or encountering a number of converging eyewitness reports about an individual's interactional style or typical behavior—such evidence supports or weakens one's conjectures about his personality or intellectual approach (e.g., the authoritarian side of Freud).¹⁴⁷

On the other hand, falsification in history is clearly possible. This applies both to factual assertions and to historical hypotheses. Regarding assertions of fact, recall Jones's incorrect accounts of (1) the German medical reception of Freud's psychological publications and (2) the response of anthropologists to *Totem and Taboo* and to Freud's other cultural and psychological writings. Anent hypotheses or interpretations, recall Jones's originating Freud's psychological and psychopathological theories in Freud's clinical experience, including his own self-analysis. In fact, dozens of pre-Freudian philosophers—from Hobbes and Spinoza on—and cultural anthropologists had theories of a dynamic unconscious; psychical causality, and an associative model of mind; of repression, projection, and other defensive maneuvers; and of childhood sexuality. Jones had worshipful and quasi-religious attitudes toward Freud and psychoanalysis—glaringly apparent in his three-volume Freud biography. This led him to maximize Freud's originality and to downplay or ignore outside intellectual influences (some of which Jones must have known).¹⁴⁸

Likewise, Zilboorg's¹⁴⁹ theories that most—if not all—witches were mad, or at least hysterical, have been falsified by (1) closer clinical studies of works such as the infamous *Malleus Maleficarum* (*The Witches' Hammer*), (2) recognition that inquisitors often used torture and what we would now term "brainwashing" techniques, (3) comparison of outbreaks of "witchcraft" elsewhere in Europe and America, and (4) cultural anthropological studies of the phenomena in tribal societies.¹⁵⁰ Indeed, studies of the late seventeenth century New England outbreak of "witch" persecutions suggest that it was more often the accusers who were psychopathological (hysterics)—or at least using psychopathological mechanisms such as projection—than the alleged witches themselves. The latter were mostly economically marginalized, often elderly, women without a family or marital matrix. Studies of the phenomenon in Europe have found similar psychological and social factors at work.¹⁵¹ This economic marginality was as important as the misogyny which is too-often one-noted. See Mora's chapters.

Finally, Zilboorg's contention that the sixteenth century Johann Weyer was a heroic medical pioneer in diagnosing, rather than defaming, the supposed witches and that he influenced the inception of the first "dynamic psychiatry" is erroneous on both counts. (In 1966 Alexander and Selesnick simply parroted Zilboorg on these and related matters.) In fact, Weyer's diagnoses were *medico-theological*: claiming that Satan was inducing delusions in alleged witches, who then confessed to imaginary misdeeds. Moreover, Weyer had *little or no impact* on subsequent proto-psychiatric thinking. Rather, he was retrospectively resurrected by the newly formed nineteenth century French psychiatric profession to lend a hoary respectability to their fledgling subspecialty (see Mora in this book).

Alternatively, when it is a case of *the absence of the datum or class of data* projected by one's hypothesis, then one may consider one's conjecture falsified (although, strictly speaking, this would be incorrect, for the *absence of data may weaken, but not refute*, a hypothesis), or one may retain it and simply go on looking. Conversely, the absence of evidence for the presence or operation of a given factor may support, but not confirm, a hypothesis about its alleged nonexistence or inactivity; it is always logically and empirically possible that evidence for its existence and importance may emerge in the future.

Before leaving this section, let us consider a peculiar and important fact of historical thinking and writing—*its reliance on everyday terms and language*. Langlois and Seignebos declared this a virtue and advocated that the historian be wary of personifying abstractions or being carried away by social science metaphors, sticking as closely as possible to concrete descriptive words.¹⁵² Atkinson praised history writing for achieving "the highest level of sophistication and professionalism without falling into the jargon and the ostensibly lawful classifications and theories of the social sciences."¹⁵³

In an age of often obfuscating psychological and social science jargon this is refreshing. It reflects history's acceptance of the inherent ambiguity and infinite shading in the realm of human behavior—something analytical philosophers and behaviorists find extraordinarily difficult to understand. While hardly unconcerned with precise language, the discipline's practitioners recognize that historical work requires flexible terms and open concepts. In certain subject matters, there is a point at which attempts at quantification and definitional precision become mere pretense and sham profundity, darkening more than they illumine.

Presentism

In 1931 Herbert Butterfield wrote a widely influential book entitled *The Whig Interpretation of History*. In it he criticized authors such as Macaulay for depicting the course of history as unfolding to an alleged contemporary state of perfection (in this case, the Whig political party and Protestantism); for reading their own historically, culturally, and psychologically conditioned concerns into the past; and for meting out praise and blame to “anticipators” and “obstructionists” at the expense of appreciating the contexts, experiences, and modes of life and thought of the latter.¹⁵⁴

For Le Clerc (1729), whom Temkin dubbed the first “modern medical historiographer,” the aim of medical history was avowedly to show the “progress” of medicine.¹⁵⁵ This orientation prevailed through much of the nineteenth century and well into the twentieth, and is hardly unheard-of today. As Temkin wrote, with this in mind,

The Edwin Smith Papyrus [surgical and relatively empirical] has been admired as an early document of true medical science to the disparagement of other medical papyri. Galen has been severely blamed for having assumed the existence of pores in the septum of the heart, only to satisfy his theory. But Harvey, whose theory postulated the existence of [then invisible] capillaries, has been lauded for his fearless logic. His physiological work has been purged of Aristotelian categories to make him appear a modern laboratory man pure and simple. The Middle Ages have been dismissed because they showed little progress, or ridiculed because of their superstitions, and the question has not been seriously raised why men thought so differently from us.¹⁵⁶

In the mid-1960s George Stocking extended this critique to the historiography of the behavioral sciences. He was particularly concerned that historians—especially social science practitioner-historians—were so preoccupied with using history to throw light on current issues and debates within the behavioral science disciplines, that they failed to grasp the particular problems with which their predecessors grappled, and hence compromised their insight into these ancestors’ resolutions.¹⁵⁷ Around the same time, George Mora¹⁵⁸ carried this banner to the history of psychiatry. Most commonly called “presentism,” the “Whig interpretation of history,” or (very confusingly) “inductivism,” the object of Stocking’s and Mora’s attacks has been rampant in the history of science and medicine, with Butterfield himself committing it when turning in 1949 to *The Origins of Modern Science!*¹⁵⁹ Young has documented that such approaches compromise the work of even the best historians of evolution, whose allegiance to various versions of neo-Darwinism and to current definitions of “natural scientist”, have led them to ignore the contemporary importance of figures like Robert Chambers, their impact upon Darwin, and their key role in facilitating eventual public, and even religious, acceptance of evolutionary ideas.¹⁶⁰

Until the last three decades the overwhelming bulk of psychiatric history, like medical history in general, has been written by clinicians, usually with no formal historical training. Though their clinical knowledge and experience have given them valuable insights into the history of their discipline, still, even when they have not been “Whiggish,” they have overlooked the impact of “externalist” factors (cultural, political, economic, etc.) on institutionalized medicine and psychiatry.

On the other hand, as Otto Marx cautioned, “nonpsychiatrists writing psychiatric history will have to become acquainted with the practical problems with which psychiatry has had to contend.”¹⁶¹ Social historians have performed immense services for both historiography and the psychiatric profession (see the subsequent section “Externalism” Versus “Internalism”), although too often ignoring the internal theoretical, investigational, and clinical determinants of psychiatric practice. As already mentioned, the psychiatric histories of professional historians, such as Peter Gay, Peter Loewenberg, and Gerald Grob (in this book and numerous other books), have demonstrated the value of the hands-on psychoanalytic or psychiatric clinical training they later received.¹⁶²

Nevertheless, a clinical vocation is a double-edged sword for the psychiatric historiographer. On one hand, it provides invaluable insight. On the other, it may lead him to search for a medley of “progressives” coincidentally “anticipating” his favorite orientation or clinical theorists, almost as if these ancestors could dimly discern the outlines of the current system they were “groping toward” (in effect

a reversal of the temporal cause and effect relation). Semelaigne and Zilboorg depicted a number of workers painfully pawing their way toward Pinel and Freud, respectively.¹⁶³ Perhaps epistemic “loneliness” is a motive for the psychiatrist-historian’s exaggeration of the resemblances between himself and his predecessors.

In any event, being declared an “anticipator” is often erroneously equated with having a causal impact on the evolution of psychiatry. Paradoxically, it is precisely “anticipators” who often have little direct effect on contemporaries and immediately following generations, who simply fail to understand and appreciate them. While bits and pieces of their concepts may lie fallow in the minds of subsequent workers and even unconsciously influence their thinking, or while their “rediscovery” may actually influence a line of thought, often they are resurrected by theorists and investigators seeking prior support for ideas that they themselves have already formulated. This has quite often been the case in psychoanalysis, where theoretical/methodological innovators feel it necessary to find or create the roots of their thinking in Freud himself (a sort of secular “proof-texting”).

For example, Mora’s crucial reassessment in this book of Weyer preserves the originality of his thought, even affirming its resemblance to certain aspects of our own, though it denies him much influence on the subsequent development of psychiatry. Rather, he was “discovered” by Charcot and others in the late nineteenth century as if to legitimate themselves historically. Gilman (this book) argues a similar point for the case of Morel in the evolution of concepts of schizophrenia. Ellenberger had good reason to advocate purging the word “precursor” from our historical vocabulary!

Consider how present commitments to an orientation or school can color one’s description and assessment of earlier periods. That the physician Erwin Ackerknecht, while not himself a psychiatrist, clearly favored organicist-descriptive approaches over psychotherapeutic-psychoanalytic ones is evident in his otherwise excellent *Short History of Psychiatry*, and his distaste for the Romantics led him to overlook their contributions to psychiatric theory and therapy.¹⁶⁴ By contrast, psychotherapeutically and dynamically oriented psychiatrist-historians have often derogated and ridiculed the somaticist approaches and “brain mythology” of Griesinger, Meynert, and others.

Otto Marx, himself a psychotherapeutically oriented psychiatrist, rises above this factionalism and attempts to understand the contemporary problems confronted by these “brain mythologists.” He reminds us in this book that in the days of the German biologizers many, if not most, psychiatric patients *did indeed have an organic component to their disorder*: general paresis, epilepsy, senile dementia, endocrine states, and pellagra and other nutritional deficiencies. In the latter nineteenth century neurotics were more likely to be seen by neurologists than by psychiatrists, hysteria and neurasthenia being construed as neurological afflictions. The syphilis and nutritional-deficiency syndromes that accounted for much disordered behavior have now been largely eradicated, and over the years the psychiatric patient population has been redefined such that “organic” patients now mostly belong to internists or neurologists. Thus the middle to late nineteenth century “organic” psychiatrists were not so stupid after all; neither were they (e.g., even Griesinger) so totally unpsychological as commonly depicted.

Moreover, American derogators of German “brain mythology” overlook that in German-speaking Central Europe there was not so sharp a distinction between neurology and psychiatry as there was in nineteenth century America. Probably this was partly because of the far more developed medical undergraduate and residency education, university ensconced as they were. Asylum directors had academic appointments, and much of their research was neuroscientific and neuroclinical. The young Freud was quite typical in pursuing neuroanatomical research throughout medical school and a residency that would best be characterized as *neuropsychiatric*. Other than translations, his early books were on clinical pediatric and adult neurology.¹⁶⁵ Meynert, his professor of psychiatry, had made important discoveries in brain anatomy, as had the much-earlier Romantic physician Johann Christian Reil (the founder of German psychiatry but also an important pioneer in neurology). The German-Swiss founder of American academic psychiatry (at Hopkins) Adolf Meyer—famous for his psychobiology and early support of American psychoanalysis—had previously been primarily a neuropathologist. And in Paris, asylum directors of the Bicêtre and Salpêtrière were medical school professors—as much neurologists as psychiatrists—like Freud’s postgraduate preceptor, Charcot.

Another good example of how present perspectives can grossly distort our understanding of ancestors concerns the very definition and identity of the “psychiatrist.” It is difficult for moderns to appreciate that prior to the close of the eighteenth century there were virtually no such professionals. The word “psychiatry” itself was not coined until the first decade of the nineteenth century by Reil. To be sure, psychotherapy is the oldest form of medical treatment (though generally unrecognized as such—for instance, the placebo and relationship effects of inert or even noxious medications and somatic therapies). Problems we consider “psychiatric” have always existed, although cultural factors have shaped their form and content and although contemporaries might well not have conceptualized them as such. Doctors since Hippocrates have addressed these disorders; for that matter, so have philosophy, theology, indigenous healing, and a host of other endeavors.

This issue remains acute even upon entering the age of an explicit psychiatric specialty. Ponder the warfare between the “psychiatrists” and “neurologists” in the final third of nineteenth century America (see Brown in this book). Should not modern psychiatrists identify with their “psychiatric” “precursors” in their seemingly similar battles for turf? Generally they do, thereby committing a serious error. The American asylum superintendent of that day, probably more likely to call himself an “alienist” than a “psychiatrist,” equated the practice of his profession with mental hospital administration and “medical management” and, as we shall see, distanced himself from the rest of the medical profession.

The “neurologist,” by contrast, would actually have been a figure with whom many present-day psychiatrists could more readily identify. For the most part, he treated a *neurotic outpatient population* with an eclectic medley of somato- and psychotherapies (see Brown and Grob, this book). When it came to courtroom struggles—such as those between the deterministic neurologists and the “free-willist” religiously moralistic alienists—over the sanity of President Garfield’s assassin Guiteau, most modern psychiatrists could probably empathize more easily with the former. The present identity of American psychiatry emerged not from one side’s victory, but from an amalgamation of the two and from their subsequent integration with a host of other trends, such as those issuing from the lay mental hygiene movement and the psychobiology and social psychiatry of Adolf Meyer.

If the tendency to overidentify with psychiatric predecessors leads to one kind of problematic historiography, the commitment to a purely progressivist view of the history of psychiatry leads to another. This is essentially “Enlightenment historiography” in which we are conceptualized as getting better and better as we escape the benighted error of our ancestors. Consider Krafft-Ebing’s 1897 repetition of the party line: “the ignorance and superstition of the past have been gradually overcome by enlightened science ... [and] the advance of knowledge has been accompanied by a progressive amelioration of practice.”¹⁶⁶ Social historians such as Foucault, Rothman, and Scull, despite their anti-psychiatric bias and historiographic errors, have, in re-evaluations of late Enlightenment psychiatry and early nineteenth century “moral therapy,” struck salutary blows at such arrogance and facile optimism.¹⁶⁷ For additional postmodernist anthologies, see Cahoon and Anderson, respectively.¹⁶⁸ See Starr for a more-balanced, though critical, history of American institutionalized medicine.¹⁶⁹

Many psychiatric histories—Zilboorg’s, Bromberg’s, Alexander and Selesnick’s spring to mind—combine searches for “anticipators” with Enlightenment progressivism in varying proportions.¹⁷⁰ One cure for this “disease” might be increased attention to periods and individuals—such as German Romanticism, Reil, and Heinroth (see Marx, this book)—that seriously strain our capacities for empathy and understanding. This could have a “therapeutically” transforming effect on historians of psychiatry similar to that of the personal-didactic analysis on psychoanalysts and ethnographic fieldwork on anthropologists.

Identifying the problems and empathizing with the attempted solutions of our predecessors is easier said than done. This is part of the other edge of the clinical sword—that the problems and provisional resolutions with which the clinician-historian is familiar are *current* ones. As Collingwood pointed out, whereas the historical figure may have been careful to expound the steps of his thought, he may not have felt it necessary to carefully delineate the problems, since he was addressing contemporaries who grappled with them too:

And unless the historian knows what the problem was at which [the historical subject] was working, he has no criterion by which to judge the success of his work. ... It is the historian’s endeavor to discover this problem that gives importance to the study of “influences”, which is so futile when influences are conceived as the decanting of ready-made thoughts

out of one mind into another. An intelligent inquiry into the influence of Socrates on Plato, or Descartes on Newton, seeks to discover not the points of agreement, but the way in which the conclusions reached by one thinker give rise to problems for the next.¹⁷¹

Essentially we are addressing the importance of historical relativism, the historiographic analogue of cultural relativism in the anthropological sphere. Such “relativism” is valuational, not epistemological. It does not impugn the objective reality of historical and cultural configurations, or suggest that the structure of these realities was or is in any way dependent upon the presence of the current investigator. What we are talking about is appreciating historical individuals, prior cultures, and problems in their own right.

What makes an individual or trend fit subject matter for psychiatric history is not whether he or it agreed with or “anticipated” our current wisdom, but whether there was a serious grappling with the reality of mental disorder and human pain. This is our criterion, not whether such beliefs and practices ultimately proved true or effective. The history of psychiatry, like the history of medicine, is mostly *the history of error*. By this standard, Renaissance physiognomy, astrology, and alchemy; eighteenth century animal magnetism; nineteenth century phrenology and homeopathy; and the late nineteenth century/twentieth century American wave of religio-psychotherapeutic syncretisms; all deserve our respectful attention (see Mora and Crabtree, this book).

Consider, moreover, that some of these approaches often had considerable therapeutic effectiveness, given the shared belief and action systems of healer and client. Many had unacknowledged influence on present approaches—for example, mesmerism on psychotherapy; phrenology on cerebral localization studies and character typology; Christian science on recognizing the importance of beliefs and attitudes in health and sickness; and turn-of-the-century mind-cure and the Emmanuel Movement on the reception of psychoanalysis and other secular psychotherapies in America. Hahnemann’s homeopathy, with its emphasis on progressive dilutions to “spiritual tinctures,” is easily ridiculed. Yet doing so ignores that Hahnemann was struggling with the damaging heroic drugging, and psychological insensitivity on the part of orthodox “allopathic” physicians, in the early to mid-nineteenth century. Ultimately, homeopathy helped shape currently more holistic attitudes in medicine. Like osteopathy, it eventually, in the late nineteenth and early twentieth centuries, came under the umbrella of mainstream “allopathic” medicine.

All this is mind broadening and sensitivity educating. Let us hope that future generations of psychiatric historians (whether clinicians or not) will apply the same standards to our time: in examining, for example, the long-term side effects of psychosurgery and major tranquilizers and the patient “warehousing” that peaked in the 1950s; that they will seek to understand the clinical, institutional, professional, and socioeconomic problems confronting us; and that they will distinguish between conscious intentions and unforeseen consequences. Given the theoretical-therapeutic pluralism and welter in current psychiatry, the nobility and intrinsic importance of the enterprise itself must be more than sufficient to justify the groping state of the discipline, both past and present. In short, the worth of a discipline is established not purely by the probity of its explanations and the efficacy of its interventions, but also by the significance of its aims and subject matter.

Paradoxically—and we return to this point in the final section, Utility, of this part—history is more “useful” to the psychiatrist if he first apprehends the problems and responses of his predecessors in their own contexts. (This is something Foucault and other one-sided postmodernists—with their tendentious “genealogies” and “archaeologies”—have totally failed to grasp). If, to borrow Collingwood’s example from general history:

[w]e want to abolish capitalism or war, and in doing so not only to destroy them but to bring into existence something better, we must begin by understanding them: seeing what the problems are which our economy or international system succeeds in solving, and how the solution of these is relevant to the other problems which it fails to solve. This understanding of the system we set out to supersede is a thing which we must retain throughout the work of superseding it, as a knowledge of the past conditioning our creation of the future.¹⁷²

If such *historical* points had been kept in mind, then the advocates of rapid “deinstitutionalization,” whose full *current* consequences we are only now beginning to appreciate, would have recognized that large asylums arose, in part, to deal with the unwillingness of local communities to receive dischargeable patients

back into their neighborhoods (see subsequent “Externalism” Versus “Internalism” section and Grob in this book). *They might then have proceeded more cautiously and with a better awareness of the problems to be confronted. The tendentious and one-sided “social control” historians who supported them might have profited from awareness of the clinical, as well as societal, problems facing earlier psychiatrists and their asylums.* In the Utility section I cite another example, concerning proposed solutions to the current American drug problem, of the potentially disastrous effects of presentistic history.

Finally, let us turn to a different aspect of the presentism problem: the application of insights derived from current psychiatric method, theories, and nosologies to situations in which they may not be relevant. The classic example is the interpretation of a variety of “exotic” behaviors as forms of madness or psychopathology. In some ways Freud set the pace for this with his blanket diagnoses and psychoanalytic formulations of “primitive” and religious behavior (e.g., *Totem and Taboo*, 1913; *The Future of an Illusion*, 1927). Zilboorg’s psychopathologizing of “witches” is probably the best known instance. As Mora (this book) suggests, this involved totally ignoring the cultural contexts and social psychological factors in the witchcraft phenomenon. When psychiatry turns to anthropology, it too often commits the same error: diagnosing whole cultures; declaring all shamans psychotic; collapsing culture-bound syndromes into Western diagnostic categories; and paying insufficient attention to sociocultural maladaptation as a criterion of psychopathology.¹⁷³

Now this is certainly not to overlook that current psychiatric-psychological theories may provide insights into historical figures or into contemporary nonliterate cultures. For a time, the reaction to “chronocentric”/ethnocentric interpretations of historical behaviors created odd counter-excesses. Oswei Temkin (personal communication, 1978) described how a student in Leipzig, attempting to explain St. Francis’s stigmata psychophysically, was roundly criticized—on the grounds that St. Francis and his contemporaries viewed it as a true miracle and knew nothing about psychophysiological factors, erythrocytes, capillaries, and so forth!

Applicable here is the “emic”—“etic” distinction in ethnology: the former refers to the *subject’s* experience and explanation of his behavior and the latter to the *anthropologist’s* (or linguist’s) explication of it. It is one thing to understand a shaman’s phenomenology and world-view in sociocultural context and quite another to endorse his animistic system of explanations. Just as anthropologists do not bind themselves to the informant’s *explanation* of his experience and behavior, so the historian need not either. Clearly, aspects of our biological, psychosociological, and psychiatric models are not time and culture bound. Nevertheless, clinician-historians are advised *first* to bracket their theoretical-therapeutic affiliations and then to attempt to think/feel their way into the *Weltanschauung* and cultural-historical context of their subjects *before* attempting to explain them causally—much less diagnose them. This is what Foucault advocated for the mad generally; in *Madness and Civilization* (1961/1965), and in his “Introductions” to re-published accounts by the mad themselves (e.g., Pierre Riviere and Sade): that we first allow the madman to speak with his own voice; rather than immediately silencing him with *present-day* labels and theoretical explanations. The great psychoanalysts and psychodynamic therapists of the mad—such as Frieda Fromm-Reichmann, Harry Stack Sullivan, Lewis Hill and, more recently, Harold Searles—functioned, first and foremost, *as facilitators not silencers*—of the uniquely personal (though also “much more simply human than otherwise,” as Sullivan put it) speech of each suffering mad person. This is one reason that Foucault thought better—or less worse!—of psychoanalysis than of psychiatry/clinical psychology generally. The antipsychotics and other psychotropics have been a great boon to many of the seriously mentally ill. However, they carry with them the danger that clinicians will dispense with psychotherapy altogether—even though many studies have shown that patients do better when treated with both, rather than either alone.

“Internalism” versus “Externalism”

In the history of psychiatry, as in other domains of intellectual history, the internalism-externalism debate has recently been raging. By “internalism” I mean attention to the line of development of theory and practice within the particular discipline itself and the preference for causal explanations that link

ideas to ideas, theorist-practitioners to theorist-practitioners, and intellectual trends to intellectual trends. Until lately, this has been the overwhelming approach in the history of ideas in general and in the histories of science and medicine in particular.

“Externalism,” by contrast, refers to emphasis on the political, social, economic, and general cultural context of ideational currents and disciplinary developments; it favors causal explanations of theory and practice invoking these contexts. It originated in the Marxist school of political philosophy and historical analysis—in Marx’s famous dictum that the mode of economic production determines sociocultural structure and the intellectual features of life, that socioeconomic life determines consciousness, and not the reverse.

Many subsequent Marxians have acknowledged the determinative import of the sociopolitical structures mediating between the techno-economic “base” and the ideological (i.e., intellectual) “superstructure”, and even consider that this last may causally feedback into the substructures from which it allegedly derives. Externalist approaches were carried to the history of science and medicine by a few practitioners of the discipline itself, such as the Christian-socialist historian of Chinese science Joseph Needham, but more commonly by social, political, and economic historians turning to the history of science and medicine/psychiatry. Probably declining vacancies in academic history departments, along with concomitant openings in newly emerging history of science and medicine programs, played a role in moving such historians toward these relatively wide-open fields.

Until lately (mostly clinician) historians of psychiatry have written the specialty’s history as if its theory, science, investigation, and practice developed in splendid isolation. Even the broader *intellectual* context itself—such as philosophy, literature, the social sciences, theology, and the humanities generally—was seldom considered. The history of psychoanalysis is a case in point. Ellenberger’s¹⁷⁴ research into and recognition of the importance of the general cultural and philosophical background of dynamic psychiatry was revolutionary at the time. Janik and Toulmin’s *Wittgenstein’s Vienna*, Schorske’s *Fin-de-Siècle Vienna*, Johnston’s *The Austrian Mind*, and Bettelheim’s *Freud’s Vienna* represent the few comprehensive English-language studies of the political, cultural, humanistic, and artistic ambience of early psychoanalysis.¹⁷⁵

This section examines the internalist-externalist debate primarily in terms of the dichotomy between intellectual and social history, focusing especially on the history of mental hospitals and their place in the development of the psychiatric profession. I elaborate disproportionately on externalism because most likely readers are already familiar with internalist history. This section closes with a look at Robert Young’s plea for the integration of internalist and externalist approaches, or rather for a rejection of the dichotomy altogether.

Socioeconomic externalist approaches may be divided into those (e.g., Foucault, Rothman, or Scull) that emphasize the social control function of psychiatry and those, like Grob’s (this book), that view this as but one function among many and, indeed, as much a consequence as a cause.

In *Madness and Civilization* Foucault submitted that prior to what he termed the “classical age” (i.e., the seventeenth-century or, as some would have it, the “Long Enlightenment”, ca. 1650-1800); society had a relaxed attitude toward mental illness, which he characterized as the “dialogue between reason and unreason.” With the growing seventeenth to eighteenth century encomium of reason, the mad, as the representatives of irrationality, had to be sequestered and confined. The asylums of this “Great Confinement” were built on the very foundations of the leper hospitals, the insane replacing the leper as the scapegoat and stigmatized. With the rise of industrial capitalism and bourgeois values at the end of the eighteenth century, the mad, as the idle and economically unproductive, had to be turned into useful servants of the capitalist economy. The external chains of the “classical age” were replaced by “mind-forged manacles,” the internalization of social control, through the hospital *milieus* of moral treatment. Hence, far from being the culmination of a progressive, humane, and liberating Enlightenment, moral treatment represented an even more insidious and effective means for socioeconomic control. I speak to Foucault throughout the first two chapters and even in the “Epilogue”—and Mora, D. Weiner, Grob, and others do so here as well.

However, I will mention some of Foucault's historical errors. In this book, Foucault concretized and mistook the late-Medieval/Renaissance *purely literary and artistic trope of the "ship of fools" to mean that boatloads of the insane actually shuttled up and down the rivers and canals of Europe! Pari passu* his contention that madhouses were, again *literally*, built on the foundations of former leprosaria.¹⁷⁶ Moreover, the apparent liberty of many Medieval/Renaissance mad persons was really an enforced vagabondage by the towns who "warned them out." And, where tolerated; they were often taken advantage of, cruelly ridiculed, or pelted with stones—by children as well as adults. Indeed, the "dialogue with the mad" had always been more literary/-artistic than actual. Too, contra Foucault, madness continued to be represented on the stage; and aristocrats continued to costume themselves as the mad or simpletons at masques and balls; well into his "Age of Reason." Recall the eighteenth century paintings of such activities by Antoine Watteau and others. In effect, Foucault has performed a Nietzschean transvaluation of all values on Pinel, hospital psychiatry, and of course madness itself. The beneficently-motivated psychosocial/milieu therapeutic attempt to socially and occupationally rehabilitate the mentally ill, is in the service of moving them toward genuine extramural independence; rather than, as Foucault would have it, a sadistically controlling end in itself. *Apropos* his valorization of madness (which most of the mad would be happy to overcome), there are very few instances of mad geniuses such as Nietzsche and Novalis. Most psychotics simply feel miserable or worse. Also, contra Foucault, by *maladies mentales*; Pinel did not mean merely the so-called "minor" or "purely psychological" mental disorders. He included the major mental disorders and "organic brain syndromes"—of which there were many in both the Salpêtrière and the Bicêtre. Finally, Foucault himself admitted that the French "Great Fear" of the contagion of madness occurred only toward the end of the "Classical Age" (mid to latter eighteenth century).

Rothman and Scull repeated aspects of this hypothesis with little variation for Jacksonian America and early nineteenth century England, respectively.¹⁷⁷ According to Scull,

As in the inner world, so too in the lunatic asylum: one could no longer be content with the old emphasis on an externally imposed and alien order, which ensured that madness was controlled, yet which could never have produced self restraint. Control must come from within, which meant that physical violence, now dysfunctional, became abhorrent. The realization of the power, which was latent in the ability to manipulate the environment, and of the possibility of radically transforming the individual's "nature" was translated in the context of madness into a wholly new stress on the importance of cure. The insane were to be restored to reason by a system of rewards and punishments not essentially different from those used to teach a young child to obey the dictates of "civilized" morality. Just as the peasantry who formed the new industrial workforce were to be taught the "rational" self interest essential if the market system were to work, the lunatics, too, were to be made over in the image of bourgeois rationality: defective human mechanisms were to be repaired so that they could once more compete in the marketplace. And, finally, just as hard work and self-discipline were the keys to the success of the urban bourgeoisie, from whose ranks Tuke came, so his moral treatment propounded the same qualities as the means of reclaiming the insane.¹⁷⁸

Doubtless Foucault and company have performed valuable services in countering self-congratulatory Enlightenment-style progressivist historiographies of psychiatry and in alerting psychiatrists to the manner in which their theories, practices, and institutions may unwittingly serve, and be shaped by, a variety of social, political, and economic forces.

If a psychiatrist doubts Foucault's contention that many of our diagnostic classifications are historically-relative; and that, in some measure, we manufacture what we "treat"; let him compare the kaleidoscopic nosographical changes, and the ever-enlarging domain of "mental disorder"; *over the mere 45 years from DSM-I through DSM-IV*. In this context see Wallace, Sadler, and Wallace/Sadler/Radden.^{178a}

Nevertheless, as Dora Weiner (this book) asserts, the facts in France and elsewhere do not support Foucault's thesis of the "Great Confinement" during the "classical age," for this confinement came later, in the nineteenth century. Moreover, patients were neither used for forced labor nor regarded as brutes. Indeed, considering the severe and often intractable nature of their disorders, they probably drained, rather than transfused, the increasingly complex capitalist economy. There were, in any event, insufficient numbers of them to increase economic productivity much—even had they been able to work!

Regarding social control generally, Dora Weiner concludes that this, too, was overdrawn. When, for example, French revolutionaries raided the mental hospitals of the Brothers of Charity in 1790, expecting

to find huge numbers of political prisoners, they were surprised to discover that the inmates were indeed mad—and not poorly treated. In a recent paper on Millerism, a deviant mid nineteenth century American millenarian religious sect, Numbers documented that “asylum physicians at the three [northeastern] institutions rarely, if ever, diagnosed a patient as insane merely because of his Millerite beliefs; in virtually every case pathological behavior was the deciding factor.” Nor did they emphasize Millerism as causal; and where they did so, it was considered merely the “exciting,” not “predisposing,” cause.¹⁷⁹ In addition, many have noted that the asylum was not the preferred way of ensuring the control of deviant elements, being relatively costly. The workhouse and jail were cheaper institutions. Other serious errors include Rothman’s¹⁸⁰ erroneous belief that American asylums were in any sense “discovered” in the Jacksonian era. Perhaps most important, such historians’ eagerness to blame has reopened the historiographic door, which Ranke and others had struggled to close, to the cold winds of moralism.¹⁸¹

Despite all this, such work does raise serious issues about how social control can insinuate itself into otherwise therapeutic motives for hospitalization. Nevertheless, the question of the degree to which psychiatry has in fact so functioned, is an *empirical* issue requiring a factual answer—and not simply metaphysical, moral, political, economic, or philosophical axioms or presuppositions. At this point the returns are still out, though, as noted, there is evidence that the extent of social control has been much exaggerated. I fear, in any event, that many social-control writers already “know” that psychiatry is a bourgeois toady and thus have no need for further evidence—just as orthodox Marxists “know” that techno-economic bases determine all ideological systems but one (*their own*). Indeed, by Marx’s theories, the Communist revolution “should have” occurred in a highly industrialized capitalist country like England or Germany, not in a semifeudal and agrarian country like Russia. In this sense, important aspects of Marx’s philosophical history were falsified from the outset!

To anticipate, again, the discussion of utility, it must be recognized that Marxist-inspired, social-control psychiatric history is an *academic issue with serious economic and political implications for the practice of psychiatry and for the well-being of the chronically mentally ill*. In all likelihood, such “history” has already affected the funding of mental hospitals, judicial attitudes toward commitment and inpatient treatment, and the public image of the profession. (State legislatures have never needed many “reasons” to underfund public psychiatry!). Such one-sided history writing reflects lack of familiarity with the suffering schizophrenics, treatment-refractory depressives and bipolars, “organic” patients, and others who made up much of the pre-1960s state hospital population. It betrays as well a complete lack of recognition of the extent to which certain disorders destroy capacities for judgment and reality testing, rendering “dumped” patients vulnerable to exploitation, abuse, and coercion (“social control!”) in the outside world. The “asylum” that some chronic patients have always needed has now been all but lost (see Grob, this book). Foucault, of all people; having admitted himself to Delay’s psychiatric facility, several times for suicidal depression: where he admits he was well-treated, should have known this. And, as a clinical psychologist and neuropsychiatric researcher there; he saw many instances of the unspeakable pain and dysfunction of the severely mentally-ill. (He had followed his *License* in philosophy with one in Psychology as well as a diploma in psychopathology.) His first book, a short 1954 treatise on psychopathology and personality, was rather traditional: for example, class conflicts lead to the actual brain diseases that constitute “mental illness”. Moreover, he taught psychopathology at the collegiate level for several years; and retained a lifelong interest in the Rorschach Test. Indeed, he thought seriously about pursuing the M.D. and following it with a psychiatric residency under the aforementioned Professor Jean Delay (who would soon become famous for his pioneering treatment of schizophrenics with chlorpromazine). This was quite something, given Foucault’s self-professed hatred of his father, a third-generation doctor; who would have pushed the teenage Foucault into medical school, had it not been for Michel’s mother, who stood-up for her son’s desire to pursue the *License* in Philosophy. During this period (ca. 1948–1955), he also participated in the co-translation of books by the extremely important Swiss psychiatrists Ludwig Binswanger (the existentialist analyst) and Roland Kuhn (later famous for his early use of antidepressant pharmacotherapy). He was especially impressed by Binswanger’s sanatorium, its grounds, and the freedom allowed patients.

And yet, for reasons not entirely comprehensible, in August 1955 Foucault abruptly terminated seven years of intense pedagogical, clinical, and research involvement in psychopathology and psychiatry; to take up the post of French cultural attaché at Uppsala Sweden and its hallowed University. Here he would do a right-about face in his attitudes toward psychiatry; and pursue most of the research for his anti-psychiatric history (*Madness and Civilization*, 1961/1965). Students who knew Foucault in preparatory school and college were struck—apart from his serious psychopathology and off-putting arrogance—by his preoccupation with power and by the seemingly-endless supply of masks he would don and discard. His friend and biographer, Didier Eribon, who noted that Foucault was quite-conflicted about his own homosexuality; tells us that Foucault thought (not very correctly, as it turned out) that homosexuality was much more-tolerated and openly-practiced in Sweden than in France.^{181a} French Communist antipathy toward homosexuality was probably one reason Foucault left the party in 1953/1954; and his disgust at French psychiatry's psychopathologizing of it, may have been a long-simmering reason for his subsequent "monstrosification" of its founder, Philippe Pinel; and for Foucault's identification with the alienated (the mad, prisoners, poor, disabled). Finally, there was likely an element of guilt-laden reaction formation against the period in which *he* wore the clinician's lab coat. In line with this, he did his best to prevent any reprints or translations of his 1954 book; which he totally rewrote—to square with his anti-psychiatric position—in 1962 (see A. Sheridan, trans., *Mental Illness and Psychology*, New York: Harper and Row, 1976). See also David Macey's perspicacious biography, *The Lives of Foucault* (New York: Vintage, 1995). Many of Foucault's works are pertinent to psychiatry (*The Birth of the Clinic*, *Discipline and Punish*, *The History of Sexuality*, etc.); as well as many published interviews and volumes of collected essays. We could easily devote an entire chapter (*pro and con*) to his thinking. See References elsewhere in Chapters 1 and 2.³¹¹

Grob's externalist approach, while acknowledging that psychiatric institutions have sometimes played a role in social control, is more purely "causal" (hence anathema to anti-psychiatric historians and postmodernists), than "functionalist." It attends to a broader array of determinants than Foucault's, Rothman's, or Scull's. Multiple factors converged to produce the unfortunate state into which mental hospitals and their patients had fallen by the early twentieth century. Indeed, woefully inadequate state funding kept hospital staff-to-patient ratios indefensibly out of kilter, which in itself required more emphasis on control than would otherwise have been necessary.

Also, because of this, many state mental hospitals—like the early-founded South Carolina one (in Columbia)—had to be as economically self-sufficient as possible. Hence many had their own farms, dairy cattle, bakeries, and so forth; at which patients worked (as in the laundries, cafeterias, etc.). They were paid in tokens redeemable at Hospital stores or canteens and sometimes in cash. They were not treated like Pharaoh's foreign slaves; nor coerced into such labor if they opposed it. Such activity did often (Foucault and the anti-psychiatrists notwithstanding) function as a form of psychosocially-constructive "occupational therapy" (O.T.). It accomplished several things, in addition to providing for the common welfare: getting them out of their rockers and solitary pathological ruminations, giving them a network of friends and acquaintances, and instilling in them a sense of active worthwhileness. Indeed, as D. B. Weiner reports in this book; the administrators of Catholic or secular private French sanatoria; bemoaned that the aristocrats recovered more-slowly and less-frequently; because of their disdain for such work. In short, it was the French aristocracy, *which prided itself on its idleness* and leisurely conversations (of course interspersed with masques and balls). And Louis XIV encouraged this when they were at Versailles—such that *idleness, per se*, could hardly have been taken to be equivalent to "*dérailson*," as Foucault contends in *Madness and Civilization*.

Among the reasons for the disarray into which public mental hospitals had fallen, that Grob enumerates are the following: (1) Local communities became less and less willing to assume responsibility for the care of discharged state hospital mental patients (itself partly a function of the increased mobility of American society and the breakdown of extended-family networks). (2) There was a great increase in immigration. (3) Increasingly the elderly (by no means always mentally ill) were being sent to state mental hospitals rather than, as before, being cared for at home or in almshouses. (4) There was an exponential growth of the American population with a concomitant increase in the number of mentally ill. (5) The composition of the

mental hospital population changed from persons with predominantly acute and reversible mental disorders to those with chronic, organic disorders for which treatment was not then available. (6) There was insufficient funding to provide adequate numbers of qualified doctors, nurses, and attendants. (7) Institutional policies dictated, in part, by the vastly increased patient population and by the behavior of the patients themselves. (8) There was a shift in power and economic motives of the psychiatric profession, with the complexion of the profession changing from a nineteenth century hospital-based practice to a more lucrative and prestigious twentieth century private outpatient practice.

Grob's analysis; while not always concerned with clinico-empirical and theoretical determinants of psychiatric thought and practice, is still correct insofar as it goes. Moreover, he had undertaken sabbatical clinical training at the Worcester State Hospital—in sharp contrast to purely “social control” historians. His magisterial three-volume history of American mental hospitals and of attitudes toward the mentally ill is a prototype for the systematic and synthetic histories of broad-ranging psychiatric topics that mostly remain unwritten (see Grob, this book, for references). The history of American psychiatric education, for example, cries out for an overall synthesis. Purely “social control” historians seem less concerned to reconstruct the past in its own right than to ferret out and pillory, with simplistic uncausal explanations, a variety of bogeymen allegedly responsible for conditions current and remote.

Without denying that there were genuine deficiencies and abuses inherent in the structure of the mental hospital system, Grob reminds us that:

Few institutions—if any—are either absolutely moral or even immoral; the mental hospital was no exception to this rule. With all of its shortcomings, it is among the few institutions that provided some minimal basic care for persons whose mental and physical condition—whatever the origins of this condition—rendered them dependent upon others for their very survival. This basic fact alone—to say nothing about those individuals who benefited from their confinement and were able to return to the community—should have tempered the unyielding attack on the legitimacy of mental hospital care. To patients the choice was not between mental hospital forms of care and other alternatives; the choice at the time was between institutional care and no care at all.^{181b}

Young, a historian of evolutionary theory, has agreed with the externalist critique that the history of science has been blind to socioeconomic and political factors and that, moreover, science—and its historians—has often justified the status quo and served the ends of capitalist society. However, he rejects the dichotomy between externalist and internalist approaches. For Young, social, political, economic, philosophical, theological, and scientific factors (both theoretical and empirical) form a complex and inextricable web of causation. Science is born of nature and of society, mediating the latter's structures and values.

The social and political controversies surrounding Darwinism (and neo-Darwinism) cannot be sequestered from the scientific ones without “falsify[ing their] texture”:

It is well-known that the 19th century debate on parish relief and the Poor Laws centered around Malthus's theory. He became the fundamental touchstone of the debate on the relationship between human industry and provision for the indigent. At its own basis lay a view of nature and human nature which was deeply pessimistic and offered progress only through painful struggle, in which human inequality was taken as given, the results of God's wisdom and benevolence. This image of nature and society was carried over into the evolutionary debate, and the resulting fusion was the basis for debates on the social meaning of evolutionary theory. The line from Malthus to Darwin and on to so-called Social Darwinism is unbroken and continues to the recent writings on biology of, for example, Morris, Ardrey, and Dawkins [i.e., so-called “sociobiology”]. From start to finish this has been a reconciling approach. It has served as the basis for a secular theodicy of industrial society and depends on a class doctrine.¹⁸²

Young has cogently warned that, if one begins with the secondary literature and works one's way backward to the referenced nineteenth century sources (the way history of science and medicine are too often done), then one would never apprehend that these were elements of a single debate. Only by immersing oneself in the periodical literature of the time, or by being alerted to look for such issues by the sociology of knowledge and Marxism, would one be inspired to do so.¹⁸³

We have only to think of the ostensibly “scientific,” but actually philosophical—and initially pre-Darwinian—evolutionism and “survival of the fittest,” of the British upper-middle class's intellectual hero

(and secular “theodicist”) Herbert Spencer, to see Young’s case in point. The surprisingly rapid acceptance of Darwinism—in the absence of sufficient paleontological data, much less of a scientific theory of heredity (Mendelian and molecular genetics were still decades away)—may well have been partly due to the externalist factors Young cited.

Young has contended that internalist history of science itself, like Darwinian biology, also supports the capitalist status quo. In its place he has plumped for a radical historiography of science designed to promote social change: to produce a society “where the division of labor need not be hierarchical and exploitative, one in which inegalitarian structures are no longer maintained by being mystified and justified by a spurious foundation in the laws of nature.”¹⁸⁴

The risk in this strategy is obvious: that one allegedly tendentious tool of social-political philosophy will be exchanged for another. Moreover, while well-researched history can at times militate change (as with Grob’s, or Musto’s, which we consider later), to make this the *raison d’être* of history-writing is to applaud the propagandistic historiography of Foucault and company.

Nevertheless, historians can profit from Young’s critique of internalist overemphases, of overly sharp internalist–externalist dichotomies, and of potentially conservative political usage of the history of science, without necessarily advocating his political goals or overlooking altogether the empirical bases of scientific theories. Relevant here also are recent feminist approaches to the history and philosophy of biology, such as the brilliant and provocative *Reflections on Gender and Science* by Evelyn Fox Keller.¹⁸⁵ See also Elaine Showalter on “Hysteria, Feminism, and Gender”; and Sue V. Rosser’s *Biology and Feminism*.¹⁸⁶

The histories of science, medicine, and psychiatry have far to go if they are to assume their proper place as departments of the history of civilization. One-sidedly internalist or externalist approaches have too often dominated, with insufficient attempts to appreciate the complex intersectional, multiple, and interactive causality of the scientific and medical enterprises.

Applications of Psychiatry to History

The utilization of psychiatric approaches to throw light on historical problems is but one chapter in the application of the insights, theorems, and methods of other disciplines to historiography. This book illustrates a number of them, such as (1) Mora’s carrying of social psychological and anthropological insights to witchcraft phenomena; (2) Simon’s utilization of psychoanalytic and anthropological concepts in elucidating ancient classical stances on the mad; (3) Mora’s usage of studies of schizophrenic art in his discussion of certain Renaissance painters, and of Warburg school ideas on the Renaissance generally; (4) Gilman’s application of linguistic perspectives; (5) Tomes’s drawing on the sociology of the professions and the sciences; and (6) the integration of sociological, economic, and historical perspectives in many chapters.¹⁸⁷

Recent utilizations of iconography (art and photography)—such as Gilman’s *Seeing the Insane*, MacGregor’s *The Discovery of the Art of the Insane*, and Gamwell and Tomes’s *Madness in America*¹⁸⁸—are also noteworthy, as were the seminal applications by Dodds¹⁸⁹ of psychoanalysis and anthropology to the study of Greek culture and history; and of psychoanalysis and sociology by Rosen¹⁹⁰ to the historical study of madness and society. Consider also key usages of demographic and epidemiologic perspectives in the study of mass epidemics such as the Black Plague and of the differential effects of medicine and public health reform on bills of morbidity and mortality.¹⁹¹ Regarding this last, McKeown has demonstrated convincingly that the efforts of pre-antibiotic sanitation and public health reformers had as much—and maybe more—impact on decreasing disease incidence as/than physicians’ subsequent “magic bullets.”¹⁹² Moreover, today we appreciate that indiscriminant M.D. prescription of broad-spectrum antibiotics has contributed to the problem, rather than its solution, by fostering the natural selection and mutation of antibiotic-resistant micro-organisms.

Here I focus purely on the application of psychiatry to history, which is in fact far older than the purely psychoanalytic approaches with which we are so familiar. No attempt to document this tortuous history will be made. Suffice it to say that such approaches arose with the professionalization of psychiatry itself—in

Pinel's early psychopathologizing of witchcraft phenomena—and that they continued through the French and Italian schools of “degenerationist” psychiatry and criminal anthropology, respectively (which, unfortunately, assumed racist overtones). Möbius was a noted turn-of-the-twentieth century writer of “pathographies.” In addition, Bynum has documented a long fascination with psychiatric approaches to *Hamlet*, using these as a barometer for the development of psychiatric thinking itself.¹⁹³

The popular equation of “psychoanalytic” with “psychiatric” regarding the topic of historical pathobiography is not entirely unjustified. From the outset the psychoanalytic movement was fascinated by historical figures; fully one-third of the ninety papers of the Vienna Psychoanalytic Society from 1906 to 1909 concern historical and cultural topics.¹⁹⁴ Freud himself set the pace with his psychoanalytic analyses of biographical, cultural, and historical phenomena—*Delusions and Dreams in Jensen's “Gradiva”* (1907), *Leonardo da Vinci* (1910), *Totem and Taboo* (1913), “The Moses of Michelangelo” (1914), “A Seventeenth century Demonological Neurosis” (1923), and *Moses and Monotheism* (1939).¹⁹⁵ I have elsewhere examined these works in considerable detail.¹⁹⁶

Leonardo da Vinci became the paradigm for psychoanalytic biography, as well as for early psychoanalytic art history and criticism, while *Moses and Monotheism* stood for quite some time as the paradigmatic psychoanalytic history of civilization. These two works are, however, highly problematic, from both the historiographic and psychoanalytic points of view. *Leonardo da Vinci*, for example, makes no attempt to criticize its sparse sources—hence mistaking the artist's childhood memory/fantasy of a kite for a vulture; has no appreciation of the wider currents in art history and the cultural context of the genius; does not make adequate use of extant primary and secondary sources; and, most important, is very poor psychoanalysis in building an immensely speculative formulation from scant and suspect “clinical” data. *Moses and Monotheism* is, if anything, even shakier. It relied on very problematic Egyptology and attempted to analyze—using the “repression/return of the repressed” model of symptomatology—Judaism and its history as if it were one analysand on the couch. It is no wonder that *Moses and Monotheism* elicited a storm of protest from Jews when it appeared in book form in 1939—of all times for a book to appear arguing that Moses was an Egyptian rather than a Jew! I have argued that both pieces tell us far more about Freud himself than about either of their subjects.¹⁹⁷

In 1967, the diplomat William C. Bullitt published *Thomas Woodrow Wilson: A Psychological Study*, a collaborative psychobiography with Freud. Freud's input seems to have been largely conversational. Many Freud apologists have wanted to dissociate Freud entirely from this problematic book. Nevertheless, his role in its psychoanalytically interpretive aspects seems hard to deny, for Bullitt did not have the analytic sophistication to have mounted them. Rather, Bullitt probably supplied the biographical, political, and diplomatic raw material. It was widely known that the post–Great War Freud detested Wilson quite as much as Bullitt did, with both men blaming Germany's 1930s militarism on Wilson's role in the blatantly pro-French Versailles Treaty. It is, regrettably, an exercise in psychoanalytic name calling; and charity bids us to attribute some of it to Freud's progressively cancerous condition. In any event, it is a sad affair altogether.¹⁹⁸

In 1911 Freud published his analysis of the Saxon judge Daniel Paul Schreber's 1903 *Memoirs of My Nervous Illness*. Schreber had been successfully treated for depression by the neuropsychiatrist Paul Flechsig in 1884 to 1885, then readmitted as a voluntary patient in Flechsig's hospital in 1893 following a psychotic depression rooted in concerns about his career and marriage. In June 1894 he was transferred to the Sonnenstein Asylum, where Superintendent Guido Weber diagnosed incurable chronic paranoia, which resulted in his permanent legal incompetency and involuntary status as a patient. At this point and for the next several years Schreber was severely delusional, believing that Flechsig was persecuting him and had seduced God to engage in a plot to “commit soul murder on him” and sexually abuse him as a woman. By 1897 Schreber had come out of his delusional depression. Now lucid and rational but hampered by Weber's diagnosis of mental incompetency, Schreber successfully sued to rescind the incompetency and was granted his freedom and the right to his fanciful “religious beliefs,” which he eloquently expounded in his book, written while in the asylum. Freud agreed with Guido Weber's diagnosis of religious paranoia, explaining it in terms of his famous formula whereby homosexual desire and conflict cause persecutory paranoia. Freud admitted that he was ignorant of the details of Schreber's life. Consequently he based an entirely fictional

pathogenesis of Schreber's second illness on the historically incorrect premise that Schreber's core conflict was a passive homosexual wish toward Flechsig. Freud interpreted "soul murder"—in fact a reaction to Flechsig's actions towards Schreber—as the transformation of an already existing homosexual desire into a persecutory delusion. For Freud, Flechsig did not cause Schreber's sexual desire but was merely the object of his preexisting psychic wish. Freud's Schreber analysis was subsequently extended to a canonical formula for explaining schizophrenia (Otto Gross had first claimed in 1904 that Schreber suffered from dementia praecox). Freud did, however, view Schreber's symptoms as an attempt at self-healing.¹⁹⁹

The Schreber case, made famous by Freud's paper, assumed a life of its own, ultimately creating a minor industry of Schreber interpreters. Beginning in 1959 the psychoanalyst William Niederland published a number of papers reinterpreting Schreber's second illness as caused by his father's sadistic treatment using "torture machines" when young Daniel was 3 to 4 years old, an interpretation that became popular and widely accepted by the publication of his 1974 book on the Schreber case—as well as the expatriate American psychiatrist Morton Schatzman's 1973 book *Soul Murder*. These interpretations have not withstood subsequent historical inquiry. Schreber père was a German physician whose 1855 *Medical Indoor Gymnastics*, a forerunner of modern rehabilitation medicine, became a wild success with at least 33 editions in the next 50 years. In 1858 he published *Kallipädie*, the most comprehensive and famous of several child-rearing books he wrote near the end of his life, which were notably less successful than his book on medical gymnastics. Other than Niederland's quite imaginative readings of the illustrations in Schreber père's late books as instruments of alleged child torture, there is no evidence whatever that Daniel Paul was abused as a child.²⁰⁰

As with *Leonardo da Vinci*, Freud was remiss in not investigating the facts of Schreber's life. Ignoring the roots of Schreber's fantasies and delusions in recent real-world experiences, Freud used Schreber's text as a means for exemplifying a ready-made theory he had already formulated in 1908 and shared with Jung and Ferenczi. Undoubtedly this was partly determined by Freud's career-long emphasis on "psychical" as opposed to "actual" reality causes, ever since his analysis of his own dreams in the late 1890s had convinced him that sporadic patient reports of parental seduction were the return of hitherto repressed wishfulfilling fantasies rather than remembrances of actual events.²⁰¹ Despite Masson's acerbic diatribe, we simply lack sufficient evidence to conjecture reliably on the proportion of Freud's early patients who may have been sexually abused.²⁰² What is to the point, however, was Freud's lifelong accent on psychical reality. Insofar as this drove home the psychological fact, that *anyone's* historically determined motivational/defensive/perceptual set is the *immediate* engine of his consciously accessible experiential and behavioral patterns, it was as indispensable to historians as to clinicians. However, the extent to which this mental set derives from the actual behavior of others during the person's formative years is not merely academic, for it makes a considerable clinical and scientific difference as well.

Despite all the problems; in alerting us to the potential value of psychoanalytic insights to history, Freud made a signal contribution to later psychoanalytically informed historical studies that were more controlled and better evidenced. As historians we must place him in context and recall that he had no historiographical training. Although he had an interest in cultural-historical phenomena for their own sake, his "applications" of psychoanalysis to culture and history were, above all, attempts to work out psychoanalytic problems and to further demonstrate the power of his discipline.²⁰³

However, it is more difficult to adopt a charitable historical relativism toward certain post-Freud "psychohistorians," who seem to have learned nothing more than he knew. *The History of Childhood Quarterly*, a now-defunct psychohistorical journal, is filled with such problematic pieces. Its contributors made deep and univocal psychoanalytic interpretations of long-dead figures (in the absence of psychologically pertinent data) and even collapsed complex sociocultural events into alleged childhood determinants, such as the editor Lloyd deMause's invocation of alleged weaning patterns to explain the American Revolution!

Even usually more conscientious psychoanalytic scholars have occasionally put on the couch entire cultures, eras, or historical personages even absent relevant psychological information. Ernest Jones's collected essays on applied psychoanalysis exhibit some of the best and worst features of this genre. Considering the early period in which he wrote them, some—like his piece on the eccentric New Orleans chess genius Paul Morphy—are remarkable and still well worth reading.²⁰⁴

Unfortunately, the scholarly howlers committed by the more reductive “psychohistorians” are used by some historians to dismiss psychoanalysis itself, and not just psychoanalytic perspectives on history. Some, like Stannard, have made no effort to understand dynamic psychology at all. He engages in an intemperate diatribe that is almost embarrassing to any serious reader.²⁰⁵ Others, such as Barzun, undertake more measured, but still insufficiently informed, critical stances.²⁰⁶ For contrast, see the historian/philosopher Friedlander’s interesting and sympathetic assessment.²⁰⁷ For arguments supporting the scientific status of psychoanalysis, see Wallace²⁰⁸; and end-note 312. Out-of-hand rejection of psychoanalytic perspectives in history is regrettable since a concept of motivation has always figured among history’s primary explanatory tools. That such motives can also operate unconsciously, and at times conflict with one another, would seem a valuable complement. The already much-discussed historians Bloch and Carr respectively commented on the surprising neglect of such factors by many historians:

Moreover, what a curious contradiction there is in the successive attitude of so many historians: when it is a question of ascertaining whether or not some human act has really taken place, they cannot be sufficiently painstaking. If they proceed to the reasons for that act, they are content with the merest appearances, ordinarily founded upon one of those maxims of commonplace psychology which are neither more or less true than their opposites.²⁰⁹

Everyone knows that human beings do not always, or perhaps even habitually, act from motives of which they are fully conscious or which they are willing to avow; and to exclude insight into unconscious or unavowed motives is surely a way of going about one’s work with one eye willfully shut.²¹⁰

Erikson’s “great man in history” model has a wider sensitivity to cultural-historical context, with Erikson himself having done anthropologically informed cross-cultural child-developmental and adult psychological studies.²¹¹ Indeed, Erikson’s (1958) *Young Man Luther* was perhaps the first serious and sober work in psychoanalytic history, though it has been cogently criticized on a number of grounds. His later Gandhi biography improved considerably on the Luther one.²¹² In both books, the “great man in history” model connects the historical agent of change with broader issues among the subject’s peers. The “great man” has a heightened awareness of social and intrapsychic conflicts that are present, but less recognized by others, in the culture around him. For example Luther, for many reasons (including psychologically predisposing ones), was quite exercised by conflicts in Catholicism between grace and works. He was considerably discomfited by corruption in the Roman Catholic hierarchy and by the way it played upon popular superstition (the selling of indulgences as “get out of purgatory free” cards). His explosive insight, emphasizing faith through grace alone, resolved such theological issues for both him and his compatriots and became institutionalized in the new Protestant religion.

R. J. Lifton’s “shared themes” approach to understanding individual and group responses to overwhelming disasters (notably the Holocaust and Hiroshima), based on both oral history and archival research, modifies traditional psychohistory in important ways. His approach is summarized, along with essays by other revisionist psychohistorians, in a useful 1974 anthology. His 1986 book *The Nazi Doctors* is a landmark in the history of medicine and medical ethics. Later in this chapter, in the brief subsection Historical Psychology, we encounter Lifton again.²¹³

In 1958 the President of the American Historical Association, William Langer, enjoined historians to become familiar with psychoanalysis.²¹⁴ As mentioned, Gay and Lowenberg are excellent professional historians who have not only utilized psychoanalytic concepts in important works, but also received formal analytic training. In addition, the cultural anthropologist-lay analysts Melford Spiro and Robert Levine have developed ethnologically sophisticated psychoanalytic insights that apply to both historical and present-day institutions (for which see also Philip Bock).²¹⁵ Bruce Mazlish and Leon Edel have applied psychoanalysis in a sober way to their biographical work; and Zinsser has edited a similarly-pertinent anthology of the psychological and other reflections by six major American biographers.²¹⁶ See also Pomper, Gay, Runyan; and anthologies by Wolman, Mazlish, Runyan, and Strozier and Offer; on the application of psychoanalytic methods to historical research more generally.²¹⁷ All of these contain extensive bibliographies on the application of psychoanalysis to history and biography. See Peter Gay’s usage of psychoanalysis in social and cultural history, as well as others on the application of psychoanalysis to the history and criticism of art and literature.²¹⁸

Nevertheless, a number of caveats must be borne in mind. To begin with, one must appreciate that psychoanalysis is a *clinical* method, applicable to one situation alone—the ongoing interaction between therapist and patient in the consulting room. It is only there that one can listen to the train of associations; frame the questions, confrontations, and clarifications through which so much pertinent information is garnered; observe the unfolding historically determined patterns of the transference; and test one’s clinical hypotheses (i.e., interpretations) against the patient’s subsequent recollections and nonverbal behavior. It is important to appreciate that when psychoanalysis is applied to history, what is transferred are *insights* about human nature originally arrived at by the psychoanalytic method *but not the method itself*. Such insights applied to history cannot be treated with the same assurance as the clinically based propositions of psychoanalytic therapy.²¹⁹

If the historian recognizes the issues I have discussed, then I see no reason for him not to use psychoanalytic theory and developmental concepts to draw limited inferences about the personalities of his subjects. Indeed, when he uses economics and social science in his work, it is generally their theory and insights that he is transplanting rather than the methods. Certainly he cannot pass out questionnaires to, arrange experiments with, and do ethnographic fieldwork upon, his subjects. The historian’s rough-and-ready notions of individual and group motivation can be considerably enriched by psychoanalytically informed systematization and by appreciating the role of unconscious motives, defensive processes, and intrapsychic conflicts in human affairs. Moreover, that psychoanalysis is the most “historical” or “genetic” psychology (in actual clinical-investigative method) will appeal to many academic historians.²²⁰

However, psychoanalytically informed inferences can be used only with personages about whom there is a wealth of reliable information, such as diaries, letters, reports of contemporaries, and perhaps even (as with Freud and Osler) accounts of dreams. In this sense, paradoxically, the psychoanalytically informed historian has certain advantages over his clinical counterpart, who generally lacks access to third-party and archival verification of the accuracy and actual reality of the patient’s reported history. The historian’s access to contemporary descriptions and opinions of/on his subject are invaluable. Moreover, the historical figure’s personal experiences and memories are often recorded by him shortly after their occurrence. Although the historical subject’s personal reports and interpretation of events may well be fallible, such archival sources at least protect the memory trace from the kind of subsequent conscious or unconscious elaboration and distortion one sees in patients. Still, archives can distort and omit; and observations and inferences by contemporary witnesses may be awry. Consider how family, friends, and physicians sometimes distort or deny the reality of recollections by patients of sexual abuse, aggression toward the child, and parental mental illness or suicide.

The academic historian cannot hope for the wealth of rich “inner” (or private) phenomenological data if it were never recorded or disclosed to even the individual’s closest contemporaries, nor for access to verbal and nonverbal patterns in the historical subject’s behavior, preoccupations, perceptions, interpretations, defenses, and motivations of the kind that the analyst encounters. Analysts, moreover, usually have at least some *indirect* access to archives and contemporary witnesses when patients check memories and perceptions against those of friends and older siblings, or dig out diaries, letters, poems, stories, home movies, photographs, and the like. Neither do general psychiatrists disallow themselves contact with such sources, either directly or through social workers, therapists, or family members.

Whatever the value of psychoanalytic insights in elucidating the motives of individual historical figures, their application to whole cultures is much more problematic. To what degree can processes of individual psychology throw light on group behavior? Of course, it is in no sense correct to speak of a “mass mind” (as did Durkheim²²¹), with structures and functions identical to those in the individual. Still, the idea seems at least suggestive that entire nations may “repress” troublesome aspects of their histories; or recapitulate in the present unresolved national or sociocultural issues; or actively try to master passively experienced historical traumata; or perennially attempt to fulfill ancient, but not fully articulated strivings. The notion that whole cultures can institutionalize certain aspects of individual psychological function is an interesting one. The list includes defensive maneuvers like projection, compromise formations (combinations of motivation and defense), and “primary-process” or infantile-fantasy-driven material (e.g., animism/magic).

Psychoanalysis will likely remain most useful to more individualistic historical studies, such as biography and certain varieties of intellectual, cultural, and art history. Since psychodynamic factors must be examined within the context of all the other relevant historical factors, I feel there is no justification for a subspecialty of “psychohistory.” History is simply history, and will make use of any insights at its disposal—psychoanalytic ones included. See R. K. Berkhofer.^{221a}

Surely it would be a mistake to restrict psychiatric and psychological approaches to psychoanalytic ones: biological, behaviorist, and social psychological insights also have clear relevance here. Interpersonal/object relations psychoanalytic concepts can often function in tandem with those from social-learning theory and social psychology in general. Finally, psychiatrists have applied neurobiological and hereditarian perspectives to history (and especially biography) for much longer than the psychological ones. While often facetiously reductive “pathographies,” more cogent and better-evidenced approaches have recently been introduced by neurobiological psychiatric clinicians. As an example, consider the research clinician Kay Redfield Jamison’s historical study of inherited bipolar disorder in notable figures in literature and the arts.²²²

To return to psychoanalysis: its most important historiographic contribution may be in refining and monitoring the historian’s best instrument-himself. To the extent that he becomes aware of his own historical conditioning, including the unconscious factors shaping his personality, to that degree will he approach the unrealizable ideal of objectivity. Finally, psychoanalysis contributes to the historian’s appreciation of his methodological and epistemological issues, just as history does to the psychoanalyst’s.²²³

Historical Psychology

In this section we pick up the other end of the stick and ask how human experience and concepts of personhood have changed over time. In the mid-twentieth century American anthropological studies of “national character” were popular, notable instances being Ruth Benedict’s (1946) *The Chrysanthemum and the Sword* on Japan and Margaret Mead’s (1942) book on American character *And Keep Your Power Dry*. The American neo-Freudian psychoanalyst and anthropologist Abram Kardiner’s (1939) *The Individual and His Society* and (1945) *The Psychological Frontiers of Society* developed influential empirically based models for culture-and-personality and historical psychological studies.²²⁴

Unlike the anthropological literature, the Western *historical* literature on “culture and personality” has mostly limited itself to the “West.” With an exception or two our terse coverage of the literature will thus necessarily be Eurocentric. Current and future historical studies of the formative impact of social structure and culture on personality in non-Western cultures will considerably enrich the field.

Elsewhere²²⁵ I have examined the ramifications of “historical psychology,” cultural anthropology, and transcultural psychiatry for Western concepts of “mental health” and “psychopathology.” A huge multidisciplinary literature on these issues exists, beginning in the early twentieth century, of which I shall mention only a few—one being an excellent recent four-volume comparative Western-Japanese study on contemporary sex, marriage, and family. R. E. Hegel and R. C. Hessney have edited and translated an anthology of Chinese literature; which powerfully illustrates Chinese experiences and conceptions of “self,” as they develop over a long expanse of time. D. K. Kondo has written a psychoanalytically-informed ethnography on power, gender, and identity in a Japanese workplace.²²⁶

The Japanese psychoanalyst, Takeo Doi, has done many articles in Anglo-American psychoanalytic/psychiatric periodicals, and many book chapters on key aspects of Japanese culture, personality, and childhood/adolescent psychosexual and self-identity development (see Johnson’s below-discussed book for references). Doi’s work, and that of Johnson (who collaborated with him, as well as doing his own psychoanalytic/ethnographic work on Japanese and Japanese Americans); give the lie to postmodernists, such as Barthes and Derrida and deconstructionist anthropologists; who assert the radical linguistic/psychological incommensurability between significantly-differing cultures (or historical periods, for that matter). F. A. Johnson’s *Dependency and Japanese Socialization: Psychoanalytic and Anthropological Investigations into ‘Amae’*^{226a}, offers a very-thick description of the concept and its manifestations in child/adolescent/adult/family and

occupational embeddedness. Johnson's treatise is so psychoanalytically and anthropologically rich and broadly-based, that it threatens to burst at the seams.

In *Problems of Historical Psychology* (1961), Zevedei Barbu reviewed some of the salient literature on the topic and undertook studies of the "emergence of personality" in ancient Greece and of the historical evolution of "English character." His book helped to popularize the term "historical psychology."²²⁷ A more recent, sweeping history of human relationships and experiences and concepts of selfhood, is Theodore Zeldin's 1994 *An Intimate History of Humanity*.^{227a}

Western postindustrial concepts and experiences of personhood or life-world are more individualized and less community governed than are those in more traditional, socially cohesive, and communally oriented societies. The "postindustrial" person and his or her most recent version, Rieff's "psychological" or "therapeutic man," seems more introspective, causally self-attribitional, autonomous, and self-determining. Social structures and cultural institutions are less compelling and more open and evolving. Physical architecture and less-crowded living conditions allow for forms of privacy unknown in earlier times. Undoubtedly this has also affected types and incidence rates of what we deem psychopathology, and it has given rise to personality types rare or absent in the past. Here, Lifton's concept of the "protean self" is also germane. Differing radically from past modes of being, it is characterized by "continuous exploration and personal experiment" and by frequent changes in philosophical or religious systems, moral values, jobs or careers, geographic locations, marital partners, social networks, and so on.²²⁸ See too: Baumeister, Hunter, Lasch, Lorenz, Thompson, Rickels, Bloom, Johnson, and Kramer.^{228a}

In response, novel forms of healing have arisen to treat new modes of mild to moderate distress and dysfunction. In the past Western world, somewhat similar disturbances and dysphorias were usually conceptualized—by sufferers, healers, and society alike—as spiritual and moral malaise. The sufferer experienced and comprehended his or her distress and dysfunction in more homogeneously socialized forms. The curing or amelioration of conditions approximating our contemporary concept of neurosis or character disorder—and psychosis too—was achieved by the sufferer's confession, participation in socially sanctioned healing rituals, and reintegration into the socially normative group. Most commonly these rituals embodied magical or animistic practices, religious convictions, activities, and institutions.²²⁹

Such cohesive communities and their supernatural belief and action systems have gradually eroded. At least in the current Western world, they have been replaced by a pluralistic culture with fewer universally shared beliefs and mores; by a popular faith in science and medicine; and by secularized conceptions of cosmos, personhood, and personal distress. Many Westernized mental sufferers now turn to physicians and therapists rather than, as before, to shrines, sorcerers, temples, and priests (although many people still consult clergy). For such "protean" persons, it is as impossible to experience and interpret their problems in traditional spiritual and moral terms as it is for them to be helped in that manner.²³⁰

However, it would be remiss to ignore the growing Western interest in spiritual concerns, whether manifested in the more traditional Judeo-Christian denominations, twelve-step movements, exploration of Eastern religions, religio-psychotherapeutic syncretisms, or whatever. This reflects not only a desperate search for a bygone rootedness, but also what Lifton views as *ad hoc* attempts to adapt—by fastening together cultural bits and pieces—to kaleidoscopically rapid societal and techno-economic change.²³¹

It is no accident that our period has seen an upsurge in theories of adult development, as opposed to Freud's notion that adult character was relatively fixed by the close of adolescence. This reflected, of course, the quintessentially Victorian side of Freud, along with his own launch toward a career and fiancée by end of adolescence. He solved an age-forty crisis by hammering out a comprehensive psychological system and movement that, I have elsewhere argued, satisfied personal needs that for some people religion satisfies.²³² Jung, whose midlife crisis was much more severe, was the first major psychologist to theorize about adult development, though he never developed an explicit model of stages.²³³

This was left for Erikson, whose 1950/1963 *Childhood and Society*, with its eight developmental stages, virtually became part of the mid-twentieth century Zeitgeist.²³⁴ However, it was Daniel Levinson, a psychoanalytically oriented social psychologist, who fleshed out the first systematic empirically based model of adult development, first with men in 1978 (extensive recorded interviews with 40 subjects), then in 1994

with women (46 subjects, posthumously published). G. E. Vaillant's longitudinal study of a cohort of men did not result in a stage theory of adult development, though it is quite useful.²³⁵ A bevy of adult-developmental studies and theories have followed (such as Fowler's on personal religious development and Piaget's and Kohlberg's on moral development).²³⁶

Moving backward, it is of course impossible to enter the mind-set of, say, a Middle Kingdom Egyptian, a second-millennium B.C.E. Babylonian, or a medieval noble, cleric, or peasant. Even so, there is ample historical and archaeological evidence that there was then less social heterogeneity and individualism. Apparently, in earlier times there was considerably less demarcation between (a heavily enculturated) individual and collective experience and behavior. Moreover, there seems to have been a much less "interiorized" and expansive sense of self than there now is.²³⁷ Something as ordinary as the compactness and closeness of family dwellings probably codetermined this. Ethnologists in such public, non-private living conditions have themselves reported a strong pull-into-the-group mentality with a concomitant and disturbing sense of the incipient loss of their own autonomies and self-identities.²³⁸ (On issues of empathy see "Egyptian Interlude" in Chapter 2.)

There probably was some variation across socioeconomic classes. For instance, in ancient Egypt the Pharaoh's sense of individuality likely differed from that of his peasants, although it is hard to be sure because of Egypt's highly stereotyped and relatively timeless modes of individual and collective representation. Still, even the Pharaoh's personal identity was inextricably bound up with his "divinity," his ancestors, the gods, and the nation. His experience and behavior were so restricted by the hoary ritualistic requirements of his role that he probably had a less autonomous experience and self-concept than even a factory laborer in early industrial England. In any event, a would-be psychiatric historian who does not realize that it is a mind-stretching exercise to attempt to "approximate" the mental sets and self-concepts of a British, French, or German Enlightenment physician—or of the German Romantics—had best stay out of the field altogether.

Pre- and early Homeric age Greeks were similarly less self-circumscribed and possessed a far less integrated experience of personhood than modern Westerners. Thoughts and passions were often experienced as externally implanted or inserted, often by a deity. Motivation, too, was first experienced and conceptualized as originating outside the body—from deities, spirits, or actual inhalations of the ambient air. Initial "internalizations" or privatizations of the experience and concept of motivation localized it to an autonomously operative region of the diaphragm, or *phthumos*. Personal qualities or excellences (*arête*) were thought to be gifts from without, from a god or whatever. Latter-day phenomenological distinctions between somatic sensations and mental/emotional feelings were then barely experienced or even conceptualized.²³⁹

It was apparently in democratic Athens that experiences and concepts of selfhood more like ours first emerged, although still closely merged with community and the sense of surrounding divinity (or divinized nature), in a way that we can scarcely imagine. Nor were they an industrialized people or anything remotely resembling Rieff's "therapeutic" or "psychological man." For all its rationality, Dodds and others have documented the coexistence in classical Greek culture of deeply irrational undercurrents.²⁴⁰ For changes in the literary representation of self over the centuries, from Homeric Greece onward, see Dodds, Lain Entralgo, Rosenthal, Simon, Austin and especially Auerbach.²⁴¹ For anthropological/cross cultural-historical "takes" on the visual representation (i.e., art) of persons and sociocultural/physical ambience; see Otten, Layton, and Anderson.^{241a} Also pertinent are Lloyd, Bremmer, Cornford, Wijzenbeek-Wijler, Annas, Harrison, Guthrie, and Jaeger.^{241b}

A remarkable series of five edited volumes on "A History of Private Life" in Europe was produced in France in the 1980s and soon translated into English. The books begin with Rome and Byzantium (Volume I) and proceed through the Middle Ages and early Renaissance (Volume II), the later Renaissance through the Enlightenment (Volume III), the French Revolution to World War I (Volume IV), and from World War I to the present (Volume V).²⁴² Also pertinent has been an explosion of historical studies on the development of the family, marriage, sexuality, and childhood—usually by psychoanalytically informed social historians. Demos has provided an excellent historical overview of the family and life course in America. Indeed, there is a growing multinational literature on these and related topics.²⁴³

Worthwhile too are: W. K. Lacey, *The Family in Ancient Greece*; S. C. Humphries' brilliant *Anthropology and the Greeks*; D. M. Halperin *et al.*, eds. *Before Sexuality: The Construction of Erotic Experience in the Ancient Greek World*; K. J. Dover's *Greek Homosexuality*; and E. C. Keul's *The Reign of the Phallus: Sexual Politics in Ancient Athens*.^{243a} For additional general works relevant to issues of historical culture and personality, see end-note 243b. More items on sex/eroticism are under end-note 243c. And, finally, histories of women's roles and social statuses are listed in end-note 243d. Foucault's 3-volume *A "History [sic]" of Sexuality* is not without historiographically provocative ideas. However, he is too general and insufficiently-nuanced on many issues—such as Greek (male of course) homosexuality. *Moreover, his volumes overlook the sexuality of 51% of the population—i.e., women!*

Utility

That a historiographical essay would have such a section—and such a large one at that—doubtless confirms the suspicion of professional historians that clinician-historians are basically medical plumbers out to bend history to the ends of their trade.

Oakeshott maintained that the true historian's attitude toward the past is entirely theoretical and dispassionate. He studies the past for its own sake, not to unearth any presumed relevance to the present day.²⁴⁴ Arthur Lovejoy (America's first great intellectual historian, and a philosopher as well), while acknowledging that the historian's research is often motivated by a desire to understand the present, warned that this should not interfere with a realization that "his ancestors had ends of their own which were not solely instrumental to his ends, that the content and meaning of their existence are not exhaustively resolved in those of the existence of their posterity."²⁴⁵ To be sure, it is in such self-transcendence that the mind-enlarging, liberalizing, and sympathy-widening effects of history reside. In the history of psychiatry insufficient recognition of this resulted, as we have seen, in a plethora of presentistic writing.

Other historians, such as Croce and Bloch, feel that writing history with an eye on the present is not only permissible, but mandatory, if the result is to be relevant to the reader.²⁴⁶ On a trip to Stockholm with Henri Pirenne, Bloch was surprised that the great Belgian historian wanted to begin their tour with the modern town hall. Pirenne explained, "If I were an antiquarian, I would have eyes only for old stuff, but I am a historian. Therefore, I love life."²⁴⁷ Frederick Jackson Turner (who originated the notion of the expanding Western frontier) contrasted the antiquarian approach to the historian's. The former is absorbed in pastness for its own sake, while the latter tries to enrich our understanding of the present by showing how it has developed from the past.²⁴⁸ The ultimate aim of history, Carr maintained, is to throw light upon, and perhaps even to transform, the present.²⁴⁹ Walsh described one of the historian's motives as wanting to discover what prior ages were like in order to assess them in and for themselves as well as to judge his own time in light of what he has learned.²⁵⁰ Barbara Tuchman's history of the fourteenth century, *A Distant Mirror*, is a good example of this²⁵¹—as are all her books. Tuchman, a prolific scholar, is both a masterful prose stylist and a model of assiduous historical research (whom the "postmodernists" would do well to read). And the Chinese have enjoyed an age-old conviction in history's utility (see Chapter 2).

For Ortega y Gasset and Dilthey, history is less about reconstructing historical occurrences than it is about incorporating the past in the construction of the future. In fact, it seems more common than not that professional historians, who take great pains with evidence and other non-postmodernist desiderata, believe that properly crafted history is pertinent to the present.²⁵²

Temkin, while castigating presentistic approaches, still advised that the medical historian be able to account for the pragmatic value of the subjects he chooses—that is, methodologically act like a historian but have the aims of a physician.²⁵³ Temkin mastered Greek, Latin, Hebrew, and several modern languages and was a patient and meticulous surveyor of published and archival sources. In a half-dozen magisterial books and countless articles he demonstrated that one can write non-Whiggish history about historically crucial topics that still bear on current medical science and practice: for example, his 1945 history of epilepsy, which he much later revised and expanded; his multivolume history of the concepts of "sensitivity" and "irritability," key to earlier and present-day neuroscience and neurology; and his essays on the history of

surgery. He always worried that he might be overlooking an important source in Polish or Hungarian, two of the few European languages that he could not read (personal communication, 1978)!

In any event, most historians now appreciate that the idea of a “definitive” history of anything is misguided and that it is the task of each succeeding generation of historians to reinterpret the past from the vantage point of the interests, methods, and knowledge of the present. Writing history with one foot in today—or, more accurately, with a frank acknowledgment that this is the only way one can write it—is not the same thing as presentism. Indeed, it may be the best protection against it. As Raymond Aron wrote, “The historian does not become scientific by depersonalizing himself but by submitting his personality to the rigors of criticism and the standards of proof.”²⁵⁴ Leading points of view and intense commitments in current controversies—such as Gifford’s (this book) to lay analysis, Herbert Weiner’s to a holistic and organismic medicine (this book), and Young’s²⁵⁵ to social-political reform—are permissible if honestly acknowledged and if every attempt is made to be sure that they do not, as did Zilboorg’s²⁵⁶ psychoanalytic allegiance, govern the selection and interpretation of the data.

Nevertheless, while acknowledging and utilizing his current perspectives, the clinician-historian needs to appreciate the paradox that history is more likely to be of service to the present’s attempt to understand itself if that history is first reconstructed in its own right—again, *contra* the “genealogies” of Nietzsche and his disciples. Consider the movement to legalize heroin for American addicts in the 1960s and 1970s, justified by pointing to Great Britain’s 1920 Dangerous Drugs Act, which permitted the distribution of heroin to registered addicts. The “humanitarian” British stance was contrasted with the “reactionary” American juridical one. In fact, reminded psychiatrist-historian David Musto,

there were very few heroin addicts, hundreds at most, in Great Britain in the 1920’s, but ... the policy of giving some of these addicts legal heroin was believed, in another country and in a later generation, as being the reason for the low number of addicts rather than the reason for allowing some maintenance.²⁵⁷

This spurious history was subsequently used to argue for making heroin easily available to a 1973 U.S. population of over 250,000 addicts—and now of course many more!

Let me say unabashedly that good history of psychiatry can be relevant to the current clinician, theorist, or experimenter and can be useful in their present-day concerns. History is not the property of the American Historical Association, and historians have not written only for historians. Pedro Lain Entralgo’s *Doctor and Patient* is an excellent example, not just of history, but of historically informed medical humanism—an examination and taxonomy of the doctor-patient relationship in different times and places.²⁵⁸

Above all, “usage” of history must avoid the pitfalls of presentism. It must appreciate that the problems of a particular time are peculiar to its historical context, and realize that its “solutions” may be irrelevant or even dangerous to our own. History is useful not because the past clones itself or because historical analysis dictates our response but because, as Musto²⁵⁹ has advocated, *it provides a broadened context for decision-making.*

Appreciating the far-reaching changes in American society—and its increasingly negative attitudes toward the mentally ill—since the small country asylums of the moral treatment era, might have influenced deliberations upon deinstitutionalization and might have prevented the precipitous “dumping” of the chronically ill on communities long unwilling and unprepared to receive them. One has only to read the unpublished 1860s records of Dr. John Minson Galt II (medical superintendent of the nation’s oldest mental hospital, the Eastern Virginia Asylum in Williamsburg, whose father with the same name was the first superintendent), to appreciate that even then relatives and communities were often unwilling to take back even inpatients who were much improved or again able to work.

History suggests that forensic psychiatric imperialism has not been well tolerated by the law and the public at large. This is surely relevant to determining the current aims and approaches of that subspecialty. See J. Robitscher, psychiatrist and lawyer.²⁹⁹

In short, historical knowledge may protect us from well-intentioned but simplistic and often impetuous “solutions” like the civil libertarian eviction onto the streets of chronic patients needing “asylum” for survival and protection. The best intentions can and often do produce unintended consequences: for instance, the mental hygiene movement leading to the eventual neglect of the chronic patient and mental hospitals; or

Dorothea Dix's asylum-building program ultimately resulting in patient warehousing. But there are instances in which unfortunate consequences ensue *because we act in ignorance of available knowledge about our own historical context and background.*

Mora contends that there are thematically recurring aspects to the historical process, and hence that psychiatrists may profit from knowing them.²⁶⁰ Although this can be overemphasized and, indeed, if taken literally, become a metaphysic, it is surely correct that broadly similar circumstances can recur. Consider, for example, the co-optation of hereditarian biological psychiatrists by racism and eugenics in various eras in the American South and Northeast and in France and Germany. That certain American psychiatrists compromised the confidentiality of their patients in the McCarthy era warns us that, in similar circumstances, clinicians may be prone to do so again.

Mora points to periods of relative predominance of psychosocial theories and therapies (early nineteenth century and mid-twentieth century) or of biological ones in America (mid- to late nineteenth and early twentieth centuries, and from the 1980s to date). Although there has always been considerable overlap between these two approaches ("Psychikers" and "Somatikers" in early to mid nineteenth century Germany) and although every age has had its prominent representatives of both (Freud, Janet, and a host of therapists of the unconscious, and of suggestion, began work in the very heyday of nineteenth century biological psychiatry), Mora is correct to a considerable degree.

To the extent that a whole specialty, like an individual, may enact repetitive themes and patterns, then heightened awareness of these and insight into their contexts and determinants, might well lead to more self-conscious shaping of professional development. For instance, better understanding of the intellectual and socioeconomic, cultural, and political determinants of periods of psychosocial versus biological hegemony might help fashion a more integrated psychiatry, thereby avoiding quasi-Hegelian cycles of thesis and antithesis—with only short-lived syntheses.

Tomes's essay on the rise of the nonmedical mental health professions alerts us that psychiatrists' motives in interdisciplinary "turf battles" have not always been purely scientific and clinical. Economic and professional-prestige factors have clearly operated, perhaps even in the founding of the American Board of Psychiatry and Neurology (1934) at a time when many associated nonmedical disciplines were gaining momentum. Consider, moreover, that it was Federal impetus (in 1946 and thereafter) that eventually boosted these professions (including Ph.D. clinical psychology) to near parity with psychiatry and not the generous concessions of physicians. Still, we should not forget that the founder of twentieth century American academic psychiatry, Adolf Meyer, included social workers and Ph.D. psychologists in his psychobiologically and social psychiatrically oriented Phipps Institute at Johns Hopkins. And some key Boston and Chicago psychiatrists did likewise.

In the remainder of this section, I enumerate and briefly discuss four more areas of potential contribution by history to psychiatry.

First, historian H. Stuart Hughes (very interested in psychoanalysis as well) termed his specialty "retrospective cultural anthropology."²⁶¹ There is a sense in which this is surely true, for the historian, like the anthropologist, is in effect studying other cultures. Sound historiographic method adopts the ethnographic attitude. It attempts to enter into and understand the ways of perception, thought, and practice of other periods and peoples. It suspends moralizing and presentistic scientific judgment in favor of understanding contemporary contexts, problems, and solutions as defined by the participants. It recognizes that relatively recent ages, with apparent resemblance to our own, may yet have been quite different and may require strenuous empathy and ethnography adequately to comprehend them.

History can have the same mind-broadening and tea-table-upsetting value that Geertz²⁶² claims for ethnology. A healthy dose of historical relativism may lead us not only better to respect the theory and practice of our psychiatric ancestors, but also to tolerate better the "alternative" theories and therapies in our own culture. This is especially evident when we consider the history of American medicine, in which, although one can always identify a "mainstream" allopathy continuous with its European wellspring, there have been numerous (often stronger) converging and diverging cross-currents, such as homeopathy, naturopathy, phrenology, osteopathy, chiropractic, pastoral care, and folk-healing. Psychiatry never dominated—and still far from dominates—approaches to the mentally ill.

History helps us appreciate that the American public has long had access to a wide variety of individual and group nonmedical secular, religious, syncretistic, and indigenous psychotherapies. Many of these are serious attempts, however unlikely their theoretical explanations, to help troubled individuals from within the contexts of their subcultural belief and action systems. For example, studies show that family physicians and other primary-care doctors prescribe most of the psychotropics, for better or worse.

In a field like psychotherapy, in which many of the returns are still out, there may be real value in keeping alive a variety of traditions, including even the self-help movement with its vast popular literature and certainly the twelve-step programs like Alcoholics Anonymous (the very first one, which still yields better results with alcoholism and addictions than purely medico-psychiatric remedies). Of course, this in no way precludes serious theoretical and empirical evaluation of these avenues and their alleged outcomes; such investigation may eventually lead to important integrations, as well as to some salutary disposals. (On psychoanalytic therapeutic outcome studies, see end-note 313.)

Both history and anthropology instruct us about the considerable degree to which the form and content of psychiatric disorders may vary with culture and social structure.²⁶³ This is not purely a matter of changing diagnostic terms and fashions. Syndromes, such as lycanthropy or monomania, no longer exist; it would be hazardous and even silly to try to force many of them into current Western classifications—as is equally true for many culture-bound syndromes. Even in cross-temporally recognizable disorders, such as melancholia and schizophrenia, historians like Simon, Jackson, Berrios, and Gilman (this book) teach us that time and place determine key aspects of what patients experience and manifest to their doctors. Similarly, what doctors have been taught to see can shape patients' phenomenologies and presentations of their illnesses (see Gach, Chapter 23 in this book).^{263a}

In the complex sociopsychobiological condition of melancholia, for example, the emphasis of both patients and physicians on the affective component has intensified over time, while pathological guilt and somatic preoccupations have come in and out of style. In the United States and much of Western Europe conversion hysteria and catatonic schizophrenia, once extremely common, have seldom been seen since the early 1970s. And multiple personality disorder, long-rare in the West, has returned with a vengeance (see Chapter 2).

Second, history can contribute to elucidating core clinical, theoretical, philosophical, and ethical issues of the discipline. I once argued that history is perhaps more relevant to psychiatry than to the rest of medicine because the former is in some respects “behind the times.”²⁶⁴ Now, the notion of being “behind” or “ahead of” the times is of course historically and logically problematic. What I meant was that psychiatry differs from the more purely laboratory and technology-oriented biomedicine in other specialties by the relative predominance of history taking and clinical observation, by its still often “empirical” treatments, and by its division into a number of theoretical and clinical “schools.” In these respects it does resemble eighteenth and early nineteenth century medicine (the “great age of systems”). With more empirically and statistically sophisticated diagnostic manuals, better-researched psychotherapies, and the combined neuroscientific and psychopharmacological revolutions, much of this is rapidly changing.

Still, it may well make our ancestral problems and approaches more relevant to psychiatry than theirs are to the internist or surgeon. Of course, these other specialties (especially internal medicine) trade in inference and uncertainty much more than they care to admit. There is often disagreement over the most basic diagnoses, and maintenance therapies still far outnumber etiological ones. Many of their most cherished medications and treatments are still largely “empirical” and do not approximate the documented efficacy of psychiatric treatments such as the pharmacotherapy of major depression or bipolar disorder. Moreover, the best clinicians in every specialty rely as much on history taking, physical diagnosis, and sheer clinical wisdom as on the laboratory.

Unfortunately, however, there is a significant segment of doctors who substitute the “shotgun-ordering” of expensive “high-tech” laboratory and radiological tests; for skilled, rapport-based, patient interviews and hands-on physical diagnosis. The great Hopkins internist, Sir William Osler, always accented *patient-centered* history-gathering more than anything else (“If you *listen* to the patient, he will tell you what ails him.”). Good history-gathering (which always includes an *empathic attunement*) tells the clinician where to focus the physical examination, and which laboratory/radiological tests are genuinely indicated.

Psychiatrists, who once considered themselves the listeners and history-takers *par excellence*; are increasingly relying on “descriptive [sic]”; *DSM-IV* (labeling-oriented)—and much abbreviated interviewing. Many follow-up their patients with *ostensibly quantitative* symptom-rating scales. And Psychiatry Oral-Board Examiners grade the candidates based on such “interviewing” acumen.

Be all this as it may, psychiatry’s relative lack of laboratory access and comparatively small pharmacopoeia may actually have been blessings in disguise. They forced psychiatrists to continue refining the physician’s most potent investigative and therapeutic tool—the doctor–patient relationship. For long, psychiatry spearheaded the emphasis on medical holism and helped medical generalists to realize the importance of interviewing attitudes and techniques—perhaps its most significant contribution to medicine.

Of course the burgeoning knowledge of clinically relevant neuroscience, more sophisticated psychopharmacology, and neurobiological techniques like brain imaging should be mined for all they are worth. Still, in this heady rush, it would be ironic if we jettison the more holistic biopsychosocial model and associated psychotherapeutic modalities just at the time that general medicine seems to be appreciating them (See “Epilogue”).

Gilman’s, Jackson’s, and Berrios’s work (this book) illuminate debates on the ontological status of “disease”—that is, the extent to which our diagnostic categories reflect external realities versus the degree to which they are the products of assumption and fashion. While not denying the objective reality of certain signs and symptoms or of their underlying psychobiological disorders, Gilman, especially, emphasizes theoretical-nosological commitments and linguistic usages that have shaped what clinicians actually see. Recall, in this light, Stanton and Schwartz’s seminal (1954) *The Mental Hospital*.²⁶⁵ It is difficult to imagine that a doctor could digest essays such as these without their influencing his work as a nosologist.

Psychiatry, like the rest of medicine, has been characterized by clinical and explanatory-theoretical/investigative dimensions. The relationship between the two is not so simple as we might suppose. Jackson points out that therapeutic approaches to melancholia often remained similar, even when etiologic theories changed; and Dora Weiner that Daquin and Chiarugi, though innovative administrative therapists, operated with traditional solidist pathologies (this book). Moreover, Temkin is correct that the concept of “doctor” includes both natural science/investigative and healing aspects. In actual practice the aims and methodological requirements of the two do not always logically, empirically, and morally coincide (recall Sinclair Lewis’s *Arrowsmith*). The history of medicine—especially later nineteenth and early twentieth century medicine—may help clarify the issue. It was the mid-twentieth century discovery of gross patient abuse (especially the Tuskegee V. A. Hospital syphilis studies) that led to patient informed consent and the powerful bioethics movement.²⁶⁶

The broad sweep of medical history would seem to support medical philosophers Lain Entralgo’s and Pellegrino and Thomasma’s contention, following Aristotle, that while medicine makes use of science, it is overwhelmingly a practical art or *techné*—embracing technique, persuasion, and, at best, *philia* (“medical friendship”).²⁶⁷ These are powerful points for both physicians and historians of medicine, demarcating as they do their disciplines from both science and the history of science.

History helps us identify the cultural, social structural, and economic factors that both shape the various psychotherapies and account for their effectiveness. What, for example, made the New Thought, Mind Cure, and Emmanuel Movements such popular and, presumably for some at least, effective psychotherapies in the turn of the century American milieu? Did, as Rieff suggests, the dynamic psychotherapies arise to meet needs formerly met through the “commitment therapies” of less pluralistic and individualistic, more cohesive and religious societies?²⁶⁸ Or, as I have queried, did secular theories/therapies, such as Freud’s psychoanalysis and Jung’s analytical psychology, become—at least for some—what sociologists call “quasi-religions?”²⁶⁹

Among the many contributions of history to theoretical issues in dynamic psychiatry are: (1) its attenuation of extravagant assumptions of psychic unity, by pointing out the relativity over time of aspects of human character, culture, and psychopathology; (2) its restraint on the potential for nomothetic excesses inherent in the analytic conception of fixed and universal developmental stages, by emphasizing an idiographic, historicist approach to the understanding of human symbolic phenomena; (3) its emphasis on the

role of sociocultural factors in individual psychology and psychopathology; (4) its heightening the clinician's awareness of his own place in history and, consequently, enriching his appreciation of what he brings to encounters with patients; and (5) the perspective of the philosophy of history on vital methodological and epistemological issues in psychiatry.²⁷⁰

Finally, in the areas of *Weltanschauung*, metaphysics, and morals, the vicissitudes of the history of psychiatry, in its mutually determinative relationships with culture, drive home that the specialty is not a value-free enterprise. Consider especially the relationship between psychiatry and religion (Simon, this book).²⁷¹ (See note 277.)

Psychiatry rests, like the rest of modern medicine, on an idealization of "health values" that, Temkin²⁷² notes, has hardly been universal—compare, for example, the medieval emphasis on preparation for eternal life, and even ascetic mortification of the flesh, as the *supremum bonum*. "Health," while overlapping in psychiatry with that supreme good in the rest of medicine, is even vaguer, broader, and, in its connection with moral and religious categories of the good life and person, more problematic than its general medical sister. In dynamic psychiatry, for instance, the premiums on adaptation, autonomy, self-awareness, self-expression, and nonjudgmental views of sexual, aggressive, and egoistic fantasies and feelings clearly constitute values in the moral sphere.²⁷³

Doctrines like the absolute determinism of mental life butt up against popular moral and religious conceptions of freedom of the will. While Augustine, Luther, Calvin, and Jonathan Edwards were thoroughgoing determinists—in the psychical as well as salvational sphere—most Christian, and all Judaic, denominations posit a realm of free will, of unpreetermined volition.²⁷⁴

Rieff, Browning, and Wallace are among many who discuss the moral and metaphysical overtones of psychoanalysis, Jungian and Adlerian psychologies, behaviorism, and other medico-psychological and psychotherapeutic orientations.²⁷⁵ In their co-optation of issues formerly dealt with by clergy and moral philosophers, secular psychotherapies provide some foundation to charges that they psychopathologize religious and moral issues, and perhaps even manufacture some of what they study and treat.^{276, 277} Still, there have been important dynamic psychiatrist-clergy collaborations, giving rise to the mental hospital chaplaincy and clinical pastoral movements. If psychiatry denies the metaphysical and moral dimensions of its theories and therapies (and neurobiological/pharmacological psychiatry has them too), then it falls into bad faith and forfeits the possibility of examining and self-consciously shaping itself.²⁷⁸

When history is used to illumine theoretical and philosophical issues, there is the perennial danger of presentism. Despite Lakatos's aphorism, "Philosophy of science without history of science is empty; history of science without philosophy of science is blind," his aims were overwhelmingly philosophical, and his history suffered from judging earlier scientists by current criteria.²⁷⁹ Moreover, the manner in which philosophers and historians read a text differs considerably: the philosopher's exegesis is dominated by the attempt to solve burning current conceptual issues; the historian on the other hand is occupied with understanding the context, background, and sources of an author's or movement's point of view. Of course, the two need not rule out each other, if proper precautions are taken. And scholars such as Johns Hopkins' A. O. Lovejoy succeeded brilliantly at both.²⁸⁰

Third, study of the history of medicine reminds us of the solid contributions of past figures and trends, lest these be lost in a storm of present-day self-congratulatory and moralizing rhetoric. For example, critiques of standard psychoanalytic theories about feminine development and psychology are among the most salient contributions to modern psychiatry. These include pointing out (1) the degree to which classical assumptions such as "penis envy," the inherent weakness of the female superego, and the purely psychical—rather than the too-often actual—reality of incest, serve to support the male-dominated status quo; (2) the extent to which male perspectives interfere with recognition of, and empathy for, key issues in the psychology of women; and (3) the impact of masculine attitudes on norms for mental health (emphasizing autonomy at the expense of intimacy).²⁸¹

However, deriding Freud for failing to realize feminist insights of those reared a century later indicates failure to grasp the cultural-intellectual context in which he wrote (and hence what it was possible to appreciate in his time); as well as a lack of distinction between Freud's conscious intentions and

theoretical/clinical struggles and the unfortunate consequences of some of his ideas. Such historically inapt ridicule also reflects a lack of recognition of what he in fact contributed to knowledge of feminine psychology, as well as to the medical legitimation and treatment of the mental disorders from which many women suffered at the turn of the century (however socioculturally codetermined they may have been).

It should be possible to point out and criticize—on current theoretical, empirical, philosophical-ethical, and even political grounds—the errors and omissions of our ancestors without engaging in ahistorical self back-patting that risks losing their insights along with their mistakes. When future generations of clinical theorists, investigators, and historians inspect current work, we may wish for similar charity, respect, and humility.

A different species of bias has resulted in the failure of “mainstream” psychoanalysis to acknowledge the contributions of “outsiders” like Alfred Adler, Harry Stack Sullivan, Carl Jung, Abram Kardiner, Clara Thompson, and Karen Horney. For example, Kardiner and Horney had a more interpersonal and culturalist orientation—and Horney’s writings a more feminist twist as well. Adler’s emphasis on self-esteem, overcompensation, and the aggressive drive all influenced Freud and psychoanalysis. Both Adler and Jung influenced ego psychology.

But the most blatant instance of an “outsider” or “defector” being ignored by party-line histories and theories of psychoanalysis is Harry Stack Sullivan. He is faintly praised as a brilliantly intuitive therapist of schizophrenics, all the better to ignore his genuine theoretical achievements, such as his contributions to object relations theory and to a more genuinely interpersonal theory and therapy. His terminological innovations (e.g., “proto-, para- and syntaxis”) are diagnosed away as “neologisms”—in curious contrast to attitudes toward Freud’s, especially the hypertechnical neologisms used in the English translations of his works.

In fact, Sullivan’s terms (e.g., “parataxis”) were novel concepts: attempts to capture communicational and interpersonal dimensions ignored by more intrapsychically oriented classical analytic concepts such as “transference.” This lack of appreciation for the problem-context in which Sullivan worked, and persistence in understanding his concerns in terms of their Freudian counterparts, drive home the difficulties in doing the history of even the most recent figures and trends (e.g., 1920s through 1940s).

These *historical* errors have allowed “orthodox” analysis to persist in two unfortunate current attitudes, to wit failure to acknowledge (1) the originality of Sullivan’s interpersonal insights, and his extraordinary contributions to clinical-theoretical dynamic orientations that are now taken for granted, and (2) his path-breaking work in what is now the cutting edge in psychoanalysis-object relations theory and even, to some degree, “self psychology.”

Not only has this led to erroneous assessments of Sullivan’s proper place in psychiatric history, but it has helped perpetuate *the myth that analytic contributions arise purely from within the movement’s mainstream, thus reinforcing lack of dialogue between institutional psychoanalysis and other disciplines*. Sullivan and the entire dynamic culturalist school of psychoanalysis—Horney, Thompson, Kardiner, and others—are almost never read by Freudian analysts, even though in fact their work still rewards careful reading. Much the same applies to other important movements and figures within “dynamic psychiatry” (understood broadly): Jung and analytical psychology (contributions to ego psychology, adult-development theory, the psychiatry-religion interface, and existential issues generally); and Adler’s individual psychology (the aggressive drive, “self-esteem” and “overcompensation,” ego psychology, and the interface between psychiatry and sociology/education).²⁸²

It is refreshing to see that Kohut’s²⁸³ contributions may not fall into this familiar mould. While still viewed by some “mainstream” analysts as a Chicago peculiarity, Kohut’s “self psychology” has been incorporated, and further developed, by important psychoanalytic theoreticians outside the Midwest. He is now being acknowledged as a major theorist. This may well be a sign of growing openness and historical consciousness in mainstream psychoanalysis—a movement that is, after all, barely a century old.

Much more involved in process and outcome studies, analytic theorists and clinicians now take seriously and are involved with experimental social psychological, perceptual psychological, and psychophysiological research (e.g., on subliminal perception, unconsciously selective inattention, unconscious motivation, dichotic listening, psychical conflict, unconscious affect, tachistoscopic visual stimulation, and so forth).

There have been salient theoretical and therapeutic integrations between psychoanalysis and social learning theory.²⁸⁴

Fourth, history stands to contribute to the knotty and perennially vexing issue of the personal and group identity of psychiatrists. To begin with, the history of psychiatry teaches that the discipline has not been characterized by a unitary theme, line of development, or set of functions and determinants. The field of psychiatry has overlapped with philosophy, ethics, religion, and theology; with the social and natural sciences; with neurology; with social welfare; with popular culture; and with a variety of defunct pseudo-sciences such as animal magnetism and phrenology. A multitude of alternative therapies exists today; often these are religio-psychological syntheses.²⁸⁵

While the medical causes and consequences of psychiatry have been considerable, they are far from sufficient to account for psychiatry's history and current state. Psychiatric history suggests the psychiatrist has absorbed some of the functions of priest and moral philosopher.²⁸⁶ However embarrassing to many clinicians, this is a point to be heeded. Freud [who, I have argued (see note 269) was very far from being a "post-religious" man] himself termed the psychoanalyst a "secular pastoral worker" ("*Seelesorge*"), and dubbed the Catholic fathers [confessors] "our predecessors in psycho-analysis." He was always enamored by St. Augustine's *Confessions*. He admitted that faith, in the form of the positive transference, played a role in the analytic, just as in the religious, cure; and wrote the pastor-analyst Pfister that analysis is "pastoral work of the highest order."²⁸⁷ Despite their philosophical/theological differences; Pfister was one of the few early analysts with whom Freud remained fast friends to the end (Freud never feeling personally-close to his "bull dog" Jones!).

The asylum superintendents, founders in 1844 of the organization that became the American Psychiatric Association—the first American specialized medical society (after the dental one), preceding even the American Medical Association—saw themselves as quite different from other physicians. They repeatedly declined invitations to join the subsequently founded American Medical Association, considering themselves more upper-middle class, better educated, and more broadly cultured than their general medical counterparts (most of whom lacked a baccalaureate, or even high school, degree). Be that as it may, their etiologic theories and therapeutic approaches drew on a broad arc of disciplines and cultural concerns: general and moral philosophy; theology; biology; pharmacy; the social sciences; the nascent psychological theories of the day; "moral therapy"; and so forth ("moral" then also referred to what we would call "psychological" or "psychosocial"—as in Cambridge's prestigious, and still-flourishing, interdisciplinary "Moral Sciences Club," where Wittgenstein and Russell perennially went at it!).

The twentieth century psychiatrist was born of the curious union of latter nineteenth century alienists, who practiced medical administration, with neurologists, who practiced crypto-psychotherapy on neurotic outpatients. Child psychiatry emerged from the interface among pediatrics, social welfare, child pedagogy, and public demands. Community psychiatry arose from the commingling of psychiatrists with the lay mental hygiene movement and social workers. On all this and more, see Grob, Brown, Tomes, and other writers in this book.

Again, while historiography supports that important sources and aspects of psychiatry were medical, there were equally significant nonmedical contributions as well. In its current rush to "remedicalize," the discipline is denying important facets of its development and current functioning. It is truncating itself instead of integrating the brilliant neuroscientific and pharmacological resurgence into its formerly comprehensive *biopsychosocial* model. Current "organic" and "descriptive" psychiatrists seem to believe psychiatry can, and should, solve its medical identity problems by shedding its psychosocial orientations like the outgrown skin of a snake.

Paradoxically, once more, they are jettisoning the comprehensive biopsychosocial theoretical and therapeutic model just at a time when family medicine and other primary-care arenas are lapping it up. History teaches that psychosocial therapies have been practiced by the discipline since its formal inception in the late Enlightenment. Moreover, the social-community orientation in the United States goes back at least as far as Adolf Meyer and the mental hygiene movement—and, some would say, even to the much earlier era of moral treatment.

Though, as its history instructs, psychiatry is a *medical* specialty, in many respects it is also a discipline *sui generis*, with considerable extramedical input to theory and practice. In my opinion, these nonmedical aspects need to be retained, else psychiatry will lose its breadth, its autonomy, and its unique position mediating between medicine and the general culture. In an earlier paper I referred to psychiatry as “the healing amphibian” (pluralistic and pragmatic—à la William James).²⁸⁸

The idea of an eternally holistic medicine is mostly mythical, as Herbert Weiner’s chapters in this book make clear. This should hammer home how fragile an attainment is the multifactorial biopsychosocial approach, as emphasized by the internist-analyst George Engel (himself much influenced by Adolf Meyer’s psychobiology and also by the psychosomatic movement). Throughout history medical theory and practice have been overwhelmingly “somatic,” even though the efficacy of medical intervention was often due to usually unappreciated psychological aspects of treatment (e.g., placebo or transference effects). There was little or no attempt at systematic psychotherapy prior to the nineteenth century. Though isolated medical pioneers like Paracelsus in the sixteenth century recognized the importance of social factors long before moral therapy, it was not until psychiatry was born as a discipline towards the end of the eighteenth century that medicine began to appreciate the importance of social ambience (with a few exceptions like Sydenham and Vienna’s Franck).

Rudolph Virchow, the great mid-nineteenth century cellular pathologist who also founded social medicine, called medicine a “social science.” A member of the Prussian parliament, he was instrumental in the formation of the first nationalized health-care system and worked to improve Berlin’s water and sewer systems. In contrast, sanitation and public health reform were mostly spearheaded by lay reformers in Britain and the U.S. Medical historian Ronald Numbers has shown that the turn-of-the-twentieth century American Medical Association even came close to endorsing a system of nationalized health care! I wager that much of this (*only one year post-Flexner*), was because proprietary medical schools (many virtually “diploma mills”) had glutted the market with M.D.s; such that even many Medical College graduates had to supplement their incomes with farming or commerce (store-keeping, etc.)—sometimes even preaching! But perhaps I’m too cynical: some, surely, were prompted by Christian or secular humanitarian ideals. In 1911, Great Britain took over working men’s health insurance, with women and children not included until the formation of the National Health Service in 1948. In the United States—still lacking comprehensive health care for all its citizens—the mentally ill take a back seat, as they do in many national health care systems (with some important European exceptions). The decrease in federal funding of mental hospitals, community mental health centers, and addiction rehabilitation programs in the 1980s left a gap that the American state legislatures have mostly refused to fill.²⁸⁹

History, strictly speaking, never “repeats” itself. Nevertheless, if American psychiatrists abandon their humanistic and psychobiological or biopsychosocial approach; for a purely molecular biological and pharmaceutical one, they will indeed be repeating what their late nineteenth and early twentieth century counterparts had done. Seized by a comparable desire to medicalize, those turn-of-the-twentieth century doctors relinquished the psychosocial insights and practices of the previous generation, thereby sacrificing psychiatry’s unique contribution to general medicine.

On such matters; H. Weiner, G. Grob, D. Healy, J. Gach, and most of us are in accord (see again the “Epilogue”). Nor am I so out-of-tune with M. Foucault’s *Birth of the Clinic*—one of his most genuinely historical works (with important philosophical insights too)—as you might suspect. (I come neither to bury “Caesar” nor to enthrone him). Moreover, he reminds us otherwise too-uniformitarian historians of the importance of occasional *historical “disjunctures”*: though I’ll be damned if I’m going to let him wrest causality from me. In medicine’s evolution, there is sometimes no great gain without an equally-great loss. In 1978 the medical humanist, S. J. Reiser (referenced elsewhere); exemplified this with the progressively-sophisticated physical diagnostic instrumentation, starting in the earlier-nineteenth century Paris school. After some decades—and certainly today—this increased to the point at which it decreased the doctor’s physical and psychological intimacy with the patient. Foucault emphasized the distanced and more “scientifically (?)” dispassionate relationship with the patient; deriving from the young genius (dead at 31), Bichat’s, tissue pathology and his (too often *post-mortem*) clinical-pathological correlations. Its skyrocketing Parisian popularity,

swept-aside the emphasis of Sydenham—and the Leyden and Edinburgh Schools (pathoanatomically-and surgically-sophisticated though the latter was)—on acute bedside observation of signs, careful “historizing” of symptoms, and hands-on physical exams; with what Foucault deemed a radically-different “medical gaze.” The clinician no longer saw his charge as first-and-foremost *an ill person*; but rather as a repository of signs and symptoms, pointing to the morbid solids-within-spaces, inside of him or her: diagnoses, again, all-too-often confirmed on the autopsy slab. Twenty-first century doctors have a vast array of imaging, live-patient biopsy, clinical laboratory tests, and other highly-technological diagnostic procedures. Primacy is still-given to those morbid solids/functions in internal spaces—over and above the living/breathing/feeling ill person himself or herself. Is not psychiatry beginning to place its italics on such patient-distant procedures as well? In his two holistic chapters in this book; H. Weiner bluntly dubs this “a medicine for corpses.”

Make no mistake. The physical diagnostic instrumental extensions and clinico-pathological correlation (“CPC”) of the Parisian Academy would—much, much later—bear enormous therapeutic fruit. And the “Clinical Statistics” of Pierre Louis flowered even then—by crushing any rationale whatsoever of the patient-harming/killing antiphlogistic and toxic heavy metal and other forms of noxious heroic drugging. Too, the great founder of cellular pathology, Rudolph Virchow again; proved that one could be, not only a scientist and a patient-centered physician, but an humanitarian social and public-health reformer too. *In short, he showed us the way down a win/win path; on which too few have followed him.*

In an age of countless theories and therapies, Mora (this book) believes that the history of psychiatry serves an integrating function. In addition, it probably helps prevent doctors from bending in the wind of every new medical “trend”; and keeps them from becoming mere technocrats. Recall that some knowledge of the history of one’s vocation has traditionally been considered one of the marks of a learned profession, as opposed to a trade or craft. Indeed, many of today’s “high-tech” diagnostic and therapeutic medical specialties have virtually become guilds of *extremely well-paid* tradesmen or technicians.

The second of Dora Weiner’s essays in this book, reminds us that psychiatry has always been overwhelmingly national; with psychiatrists reluctant to read the writings of foreign practitioners unless translated into their own language. One of the downsides of losing Latin as the international scholarly language. National traditions often differ significantly even with a shared language—witness the longstanding gulf between British “medical psychology” and American “psychiatry.” Beyond question such parochialism has contributed to a narrowness of orientation and identity. America’s early to mid-twentieth century psychosocial orientation, dominated by psychoanalytic concepts, might have been corrected by increased familiarity with Europe’s more organic-descriptive outlook; which in turn might have mitigated the extreme American biopsychiatric backlash that began in the late 1970s and continues to date. In contrast, British psychiatry could have used a larger dose of American “psychosocialism.” American psychoanalysis would have profited from earlier exposure to Continental phenomenology and existentialism,²⁹⁰ and European psychoanalysis would have gained from exposure to American interpersonalism and dynamic culturalism.

Finally, knowledge of the history of psychiatry gives the practitioner or investigator a sense of continuity with the noble tradition of medical-mental investigation and healing, which can lead to patience and a sense of mission; both being helpful in the vicissitudes and uncertainties of quotidian clinical investigation and practice. The intrinsic worth of the attempt to understand, cure, and care for the mentally ill justifies the specialty of psychiatry more than does the probity of its theories and the efficacy of its therapies.

Conclusion

In his 1935 Introduction to Zilboorg’s *Medical Man and the Witch in the Renaissance* Henry Sigerist, dean of American medical historians, remarked with characteristic perspicacity on the striking similarities in the procedures of historians and psychiatrists.²⁹¹ He marveled that, given the field’s “genetic” (i.e., clinical-historical and developmental) approach, so few psychiatrists had written the history of their discipline. This would soon be corrected. In 1937 the lay journalist Albert Deutsch’s seminal *The Mentally Ill in America* was published.²⁹² In 1941 the flamboyant Zilboorg’s *History of Medical Psychology* appeared; and the Committee

on History (later the “Committee on History and Library”) of the American Psychiatric Association was founded. In 1944, under American Psychiatric Association sponsorship, the landmark centennial volume *One Hundred Years of American Psychiatry* appeared, as well as a centennial issue of the *American Journal of Psychiatry*.²⁹³

A number of books and articles on the history of psychiatry appeared in the twenty years between the centennial volume and Mora’s two signal 1965 articles on the state of the field.²⁹⁴ In 1965 Mora lamented the rampant presentism; the plethora of “great man” studies; the lack of republication of psychiatric classics; the tendency of authors to work from often problematic secondary sources; the paucity of treatises on clinical syndromes; the relative lack of involvement of professional historians; and the tendency of psychiatrists to write history reflecting their own biases. Since then, of course, things have changed immensely! The historiography of psychiatry is now maturing. Possibly, it is the most interdisciplinarily active area in all of the history of science and medicine.

In a 1961 survey of 100 psychiatric residency programs in North American universities only 21% acknowledged formal seminars in the history of psychiatry (even though 75% declared it to be “essential”). Six years later the percentage offering seminars had doubled.²⁹⁵ In 1989 the History and Library Committee of the American Psychiatric Association authorized E. R. Wallace, IV to prepare a questionnaire on the teaching of the history of psychiatry. It was sent to Training Directors at all U.S. and Canadian University Psychiatric Residency Programs. There was a 45% response rate. Of the respondents, two-thirds had history of psychiatry in their curricula; *with most offering six to ten hours—out of a four-year residency!* The most utilized texts were the much-dated and problematic ones (still in print in paperback) by Zilboorg, and Alexander and Selesnick. Zilboorg’s authorized paperbound edition elided the two best chapters in the 1941 hardback: Henry’s on organic psychiatry and Hurd’s on hospital psychiatry!²⁹⁶ Moreover, we know nothing about the historical qualifications of the psychiatrists leading these seminars; or how often they are actually offered. *Finally, that 55% failed to respond (whereas a 40% nonresponse rate is deemed acceptable with questionnaires) may reflect an indifference to the matter altogether.*

Still, guidelines of the accrediting body of American psychiatric-residency programs expressly mention that the trainee should “obtain an appreciation of the history of psychiatry and its relationship to the evolution of modern medicine.” Besides acquainting apprentice psychiatrists with the history of their discipline, such courses can address broadly humanistic topics, to wit: moral values and epistemology; the relationship of psychiatry to popular culture and to its socioeconomic and political ambience; and literature, including the important genre of first-person accounts by mental patients themselves.²⁹⁷ Social historians and sociologists have warned us, albeit sometimes in exaggerated fashion, that psychiatry can become a means of exercising social control.²⁹⁸ See again the great American forensic psychiatrist Jonas Robitscher.²⁹⁹

The field of psychiatric history has matured since 1965, so that most of Mora’s laments no longer pertain. “King and battle” psychiatric history is passing out of vogue; the sin of presentism, while still perpetrated, is widely condemned and avoided. Psychiatric historians now more often use primary sources and apply critical methods. Clinical syndromes and nosologies are being explored. In the 1970s and early 1980s Arno Press reprinted numerous psychiatric classics in a series edited by the late Eric “Ted” Carlson and Gerald Grob. From 1988 to 1996 Leslie Adams issued about 100 volumes of facsimile reprints in the *Classics of Psychiatry and Behavioral Sciences Library*. Dawson’s in London issued from 1955 to 1974 five volumes in the *Psychiatric Monograph Series*, edited by Hunter and Macalpine, which included the first (and only) translation into English of Schreber’s famous memoir. The New York Academy of Medicine’s *History of Medicine Series* issued in the 1960s a number of reprints of classic psychiatric texts. Oxford University Press published in 1963 Hunter and Macalpine’s classic anthology *Three Hundred Years of Psychiatry 1535–1860*, with the introductory discussions of the texts essentially comprising a history of British psychiatry up to 1860. Thoemmes Press issued in 2004 a five-volume reprint edition of all the principal Kraepelin texts that had been translated into English as well as a reprint of the definitive eighth edition of Kraepelin’s *Psychiatrie* in German.³⁰⁰ The Cornell Section for the History of Psychiatry and the Behavioral Sciences is flourishing. More psychiatric clinicians have received formal historical training. Perhaps most promisingly, professional intellectual and social historians have flocked to the field.

The Committee on the History of Psychiatry (now called “History and Library”) continues to thrive. The American Psychiatric Association published in 1979 an invaluable bibliographic monograph, *The Report of the Task Force on the History of American Psychiatry*.³⁰¹ *The American Journal of Psychiatry* continues to feature more historical articles than probably any other major medical specialty journal—including whole issues and supplements on the topic.³⁰² The Wellcome Institute of the University of London has probably the largest cadre of professional psychiatric historians in the world. Its faculty and students have published prolifically. *The Journal of the History of the Behavioral Sciences*, established in 1965, has from the beginning included papers on psychiatric history. In 1991 *History of Psychiatry* was inaugurated as the first journal exclusively devoted to psychiatric history. There are now probably many more books and articles on the history of psychiatry published per year than were published per decade prior to 1980!

On a related note; the Association for the Advancement of Philosophy and Psychiatry now has many M.D. and Ph.D. members and chapters around the globe. It publishes a quarterly journal, *Philosophy, Psychiatry, Psychology*, and regular newsletters as well.³⁰³ It has two annual meetings: one in conjunction with the American Psychiatric Association, and the other independently. It participates in international congresses and maintains liaison with related organizations. The history and philosophy of psychiatry are so interrelated that they are perhaps best taught in one seminar, or as two with the history preceding the philosophy. Philosophical issues are as vital to psychiatric concerns as historical ones.³⁰⁴

Even so, there is perhaps some cause for concern. Mora maintains that psychosocially oriented clinicians are more attentive to history than are their biological and pharmacological colleagues. For example, the psychological von Feuchtersleben’s *Principles of Medical Psychology* contained an introductory historical overview, while Griesinger’s biologically oriented *Mental Pathology and Therapeutics*, also published in 1847, did not.³⁰⁵

Mora’s excellent *monographic* chapter—probably, with Ackerknecht’s short book, the best general survey of the history of psychiatry prior to the 1980s—appeared in the 1967 first edition of what is now the bible of the American specialty, *The Comprehensive Textbook of Psychiatry*, and was expanded for both the 1975 second and 1980 third editions. Unfortunately, it was drastically truncated and moved from the front to the rear for the 1985 fourth edition. From the 1989 fifth edition through the 2004 seventh edition the chapter has been written by Ralph Colp as a much shorter piece, still shunted to the end. It is significant that, instead of a historical chapter; the *Textbook* now begins with lengthy sections on “Neural Science” and “Neuropsychiatry and Behavioral Neurology.”³⁰⁶

Recent editions of the Psychiatry Resident-in-Training Examination (“PRITE”), prepared under the auspices of the American College of Psychiatrists and considered the standard trainee preparation for the written examination of the American Board of Psychiatry and Neurology, contain few questions on the history of psychiatry. Written tests of the Board itself, once containing at least 10% historical questions, now ask almost none.

It is noteworthy that the psychological—particularly psychodynamic—orientations are intrinsically more historically and developmentally grounded than their pharmacological cousins. In the days when dynamic psychiatry dominated most American psychiatry teaching programs, the student at least read Freud, Sullivan, and some of the other psychodynamic theoreticians. Few residencies today stress reading the authors whose writings shaped the reigning neosomaticist paradigm: Bleuler, Kahlbaum, Kraepelin, Jaspers, Leonhard, Luria, Schneider, and their ilk. In short, even the great neurobiological and nosological psychiatrists (some of them relatively recent) are ignored. Rather, their ideas (if known at all) are filtered through the lenses of current writers and teachers, sparing students the task of reading the original texts carefully and critically, and perhaps ensuring they absorb their instructors’ proclivities. This constitutes a dogmatism unbecoming a would-be scientific medical specialty.

While psychiatric historiography has never been healthier, much remains to be done. Its history is still at the stage where detailed essays and monographic treatments of circumscribed topics are mostly in order. Few areas of the field are sufficiently well historied for even provisional syntheses to be undertaken—hospital psychiatry being one of the few exceptions, for which Grob, Dain, and others have pointed the way.³⁰⁷ The British, too, have “historied” a great deal of their hospital psychiatry; and the Germans, Italians,

and French have been pursuing this area more avidly. Notably, there is little to nothing on the history of American psychiatric education, even while the history of medical education in the country has been thriving in the hands of both M.D. and Ph.D. historians.³⁰⁸

Psychiatric education for medical students, departments of psychiatry in medical schools, and psychiatric residencies all lagged far behind the rest of American medicine. Indeed, many departments of psychiatry in medical schools were not founded until after World War II. Often they were united with neurology (another long-peripheral American discipline). For long one of the few academically oriented psychiatry departments in the country was at Johns Hopkins, founded in 1910 with Adolf Meyer as chairman, with the Phipps Clinic completed in 1913. Except for a few medical school departments and the Menninger School of Psychiatry; until after World War II most psychiatrists received on-the-job “training” at mental hospitals or mental hygiene clinics. One reason psychoanalytic training became increasingly popular was doubtless because there were otherwise so few American outlets for postgraduate psychiatric training. The rejection of recruits for psychiatric reasons during World War II, the successful psychiatric treatment of “battlefield neurosis” (now Post-Traumatic Stress Disorder), and the important positions held during the war by figures like the Menningers’, led to post-war federal funding for psychiatric residencies and clinical psychology training programs. *The Collected Papers of Adolf Meyer* (also a neuropathologist), whose integrated “psychobiological” approach had a major impact on American academic psychiatry, are an important barometer of the development of American psychiatric theory, treatment, investigation, education, and politics from the 1890s to the mid-twentieth century.³⁰⁹

Although its ensconcement as a branch of the history of civilization is an ultimate goal; this ideal, if attained at all, will be the synthetic fruit of the work of many species of scholars. It would be a mistake to legislate, as Temkin did, that the medical historian be a historian in method but a physician in aim. Such clinician-historians are indeed needed—to write the history of ideas of their various subdisciplines and of investigation, clinical practice, and syndromes; these histories need not account for all or most internalist or externalist factors to make valuable partial contributions. Historians are, in any event, rarely if ever in the position to advance plausible necessary and sufficient explanations of their events—any more than are natural scientists.

The field also needs more professional scholars able to perform rigorous historical research on periods and topics, regardless of apparent immediate clinical relevance. Clinician-historians often struggle with identity conflicts resulting from the simultaneous pursuit of academic and clinical careers. The history of the profession must reflect the diversity of the profession itself, as Simon (this book) suggests. Moreover, let us apply the canons of historical relativism to our historians themselves. The history of history documents that there have been countless ways to be a historian. And although we feel—quite rightly, I believe—that the study of history has reached a new level of sophistication, we must not blind ourselves to the historical contexts and contributions of our history-writing ancestors.

This is in no way to endorse a postmodernist epistemic nihilism. For example, one could do an externalist and internalist life-and-times biography of Kraepelin, attempting to elucidate the factors progressively inclining him toward the crucial separation between—and diagnostic codification of—dementia praecox (“schizophrenia”) and manic-depressive illness (“bipolar disorder”). Though the diagnostic criteria have changed somewhat with more-refined thinking and empirical work, the core of his great nosographical achievement is intact. Historicism has not “relativized” that away.

Zilboorg, for example, whom I have often castigated; was writing when there were no sterling models of psychiatric history. Nor can we fault him overmuch for failing to meet historiographic standards met by few medical and science historians of the time (1935 and 1941).³¹⁰ His mistakes do not erase his contributions, which are considerable: introducing, through his text, whole generations of clinicians and historians to the history of psychiatry; carving out a domain in which subsequent detailed work could be done; reminding us of the intrinsic importance of relatively neglected theorists such as Weyer and Vives; utilizing psychoanalytic concepts in the study of history; giving us a better historical appreciation of the psychoanalytic movement (a dozen-plus years before the first volume of Jones’s three-volume Freud biography appeared); and much more besides.

In historiography, as in other endeavors, there is seldom a great gain without some loss. Consider that the backlash against psychopathologizing witchcraft and other historical and cultural belief-action systems has proceeded so far that authors are chary to point out when such practitioners have exhibited obvious psychopathology. Moreover, cultural institutions can provide modes of expression, or adaptation to, individual psychopathology. Finally, no essay in this volume escapes all criticism on methodological grounds—including my own, in which obviously I have not overcome all influence of psychiatric commitments and identity on my assessments of historiography.

Remember, again, that we scholars who judge will one day be judged. And we shall be found to labor under biases, deficiencies, and illusions of which we not only do not, but also *cannot*, know anything at all. Again, there are no “ultimate” histories. It is the task of each generation of historians to reassess—in light of new knowledge, concerns, and methods—earlier trends, figures, and epochs. Presently unforeseeable consequences may give rise to historical interest in topics currently neglected. Of course this will no more vitiate our contributions than ours do Zilboorg’s, nor will it ensure that future historians will in all respects surpass present and prior ones.

If this diverse panoply of scholars, working across time and space and from multiple perspectives, hammers out a history of psychiatry *qua* history of civilization, then it will be showing the way to the rest of the history of medicine.

Note: The reference and content notes to Chapter One appear after the Appendix. Many of these are rather extensive elaborations upon the text, including bibliographic histories of key psychiatric books.

Appendix. Historiography as the History of History: An Annotated Bibliography with Short Essays

I include this somewhat lengthy, but actually quite abbreviated, section for two reasons: (1) since the complementary meaning of “historiography” is the “history of history,” the essay would be incomplete without it, and (2) it is integral to my *primary aim—that the history of science, medicine, and psychiatry will become an integral part of the history of civilization*. This has already begun to occur, to some degree, with the history of science, though perhaps less so with the histories of medicine and psychiatry. *Hence, in a significant sense, this annotated bibliography is as important as the main text of this chapter.*

Pari passu for the following chapter, Contextualizing the History of Psychiatry. Annotated Bibliographies and Short Essays: Addenda A-F, is also essential to this goal. It has the following addenda: (A) General World History; (B) European (and Asian) Intellectual and Cultural History; (C) Philosophy of Science and Technology; (D) History of Science and Technology; (E) History of Medicine; and (F) History of Psychiatry, Psychology, and Psychoanalysis (titles not elsewhere referenced).

Some items on historiography as the history of history have been mentioned in the text and notes of the chapter—as it is impossible to totally avoid one while doing the other. Most of these will not be re-cited here. For example, several good books, some of them anthologies, with ample references to the psychohistorical literature are cited in the chapter, and more will not be added here. Of course space permits only hitting the high-points. Many worthwhile titles have been omitted. However, they are often to be found in the bibliographies of those cited.

General Overviews

- P. K. Conkin and R. N. Stromberg, *Heritage and Challenge: The History and Theory of History* (Arlington Heights, IL: Forum Press, 1989). This excellent, and relatively short, text covers the history of history in the first half and the philosophy of history in the second. Our concerns are of course with the first half of the book, which is an excellent coverage of the history of history writing from the biblical Hebrews and classical Greco-Roman antiquity to the present day. It has an extensive selected bibliography by periods, geographic areas, and topics (e.g., social history and the history of everyday life). It also includes an extensive bibliography on the philosophy of history at the end of the book.
- S. Baron, *The Contemporary Relevance of History: A Study in Approaches and Methods* (New York: Columbia University Press, 1986). This is an excellent narrative history of historical texts and methods from the Bible

through classical antiquity, the Middle Ages and Renaissance, through the Enlightenment and the nineteenth century historical revolution, to contemporary times. It also has excellent bibliographic essays on learning from history; history for history's sake; interdisciplinary relations (between history and sociology/ economics/ anthropology); psychohistory; quantitative history; social science approaches; and socio-religious historical method.

- D. R. Kelley, ed., *Versions of History from Antiquity to the Enlightenment* (New Haven, CT: Yale University Press, 1991). Excerpts from great historians from classical antiquity through the eighteenth century. Also a good selected bibliography on historiographic periods.
- P. Gay, G. J. Cavanaugh, and V. G. Wexler, eds., *Historians at Work*, 4 vols. (New York: Harper & Row, 1972–1975). Excerpts from the major historians from classical antiquity to the Twentieth-Century; good commentaries and selected historiographical bibliographies.
- H. E. Barnes, *A History of Historical Writing*, 2nd rev. ed. (New York: Dover Press, 1963). From classical antiquity to ca. 1960. Two excellent analytical/critical chapters on the Annales school. A matchless bibliography of the great historians throughout the ages. Unfortunately, the narrative itself is often tedious reading; such that the book is most useful as an encyclopedic reference work.
- E. Breisach, *Historiography: Ancient, Medieval, and Modern* (Chicago: University of Chicago Press, 1983). Competent and comprehensive. Covers its topics in depth. Splendid bibliography.
- H. J. Blackham, *The Future of Our Past: From Ancient Greece to Global Village* (Amherst, NY: Prometheus, 1996). Covers the broad scope of historiography from Biblical times to the present. He sees pagan Greece, Yahweh's Judea, and Christian Rome as the three universal models that have shaped Western views of the past and present. "We cannot know where we are going if we do not know where we came from."
- G. H. Clark, *Historiography: Secular and Religious*, 2nd ed. (Jefferson, MD: Trinity Foundation, 1994). A history of secular and religious speculative or philosophical histories.
- H. Butterfield, *Man on His Past: The Study of the History of Historical Scholarship* (Boston: Beacon Press, 1960). Especially good on the rise of modern historical scholarship in nineteenth century Germany. Also traces the process of secularization in historical studies.
- John Barker, *The Super-Historians: Makers of Our Past* (New York: Charles Scribner's Sons, 1982). An especially good treatment of the great black American historian W. E. B. Dubois. Also excellent essays on Herodotus, Thucydides, and St. Augustine. Shows how our greatest historians can actually affect the subsequent historical process itself.
- E. Le Roy Ladurie, *The Territory of the Historian*, trans. B. and S. Reynolds (University of Chicago Press, 1979). Broad-ranging chrestomathy of historiographic topics, including quantitative approaches to social history.
- D. Hay, *Annalists and Historians: Western Historiography From the Eighth to the Eighteenth Centuries* (London: Oxford, 1977).
- A. Momigliano, *Essays in Ancient and Modern Historiography* (Oxford: Oxford University Press, 1977). An historiographical classic.
- J. W. Thompson, *A History of Historical Writing*, 2 vols. (New York: Macmillan, 1942). By the great English social historian.
- M. T. Gilderhus, *History and Historians* (Englewood Cliffs, NJ: Prentice-Hall, 1987). A short and easy read, with good bibliographies.
- M. A. Fitzsimons, A. G. Pundt, and G. E. Nowell, eds., *The Development of Historiography* (Harrisburg, PA: Stackpole, 1954). Essays by major contemporary scholars on historians from antiquity through the twentieth century. Its coverage of nineteenth and twentieth century national historiographies is truly worldwide-including "Third World" countries whose historians are rarely recognized by Western European and U.S. scholars.
- A. Marwick, *The Nature of History*, 3rd ed. (New York: Macmillan, 1989). The first third of the book treats the overall development of Western historiography. There follow treatments of "history, science, and social science" and additional historiography, with brief excerpts from great historians. A pungent collection of aphorisms by the greats from Machiavelli to Gordon Leff. Also a section on the craft of history and on important ongoing historical controversies as seen through the eyes of different generations of scholars.
- J. T. Shotwell, *An Introduction to the History of History* (New York: Columbia University Press, 1923). Broad overview of Western historiography.
- H. Butterfield, *The Englishman and His History* (Cambridge: Cambridge University Press, 1944).
- R. Grandsden, *Historical Writing in England*, 2 vols. (Ithaca, NY: Cornell University Press, 1974–1982). Also the broad sweep, though more comprehensive than Butterfield.

Antiquity

- R. Dentan, *The Idea of History in the Ancient Near East* (New Haven, CT: Yale University Press, 1955).
- M. I. Finley, *The Use and Abuse of History* (Baltimore: Penguin, 1987). Treats ancient Greek history from a variety of perspectives-including anthropological.
- M. I. Finley, ed., *The Portable Greek Historians* (New York: Viking, 1967). An excellent anthology of excerpts.
- J. V. Geters, *In Search of History: Historiography in the Ancient World and the Origins of Biblical History* (New Haven, CT: Yale University Press, 1985).
All of the great Greek and Roman historians are available in the Loeb Classical Library and many in Penguin (Baltimore) paperback translations.
- J. B. Bury, *The Ancient Greek Historians* (New York: Dover, 1958). Published in 1908; it is still an indispensable Baedeker.
- H. Butterfield, *The Origins of History* (London: Methuen, 1981). Very clear, readable text on the ancient Greek and Roman historians.
- M. Grant, *The Ancient Historians* (New York: Barnes and Noble, 1994). One of the most readable, and yet still historiographically well-grounded, accounts of the ancient Greek and Roman historians. By a prolific writer on Greco-Roman history.
- M. Grant, *Greek and Roman Historians: Information and Misinformation* (London: Routledge, 1995).
- C. W. Fornara, *The Nature of History in Ancient Greece and Rome* (Berkeley: University of California Press, 1983).
- M. L. W. Laistner, *The Greater Roman Historians* (Berkeley: University of California Press, 1947). A classic.
- L. Edelstein, *The Idea of Progress in Classical Antiquity* (Baltimore: Johns Hopkins University Press, 1967). A brilliant study by the great historian of ancient medicine.
- J. L. Myres, *Herodotus: Father of History* (Oxford: Oxford University Press, 1953).
- C. N. Cochrane, *Thucydides and the Science of History* (Oxford: Oxford University Press, 1929).

Medieval

See also items on Christianity under “Philosophical History.”

- W. J. Brandt, *The Shape of Medieval History* (New Haven, CT: Yale University Press, 1966).
- R. H. C. Davis and J. M. Wallace-Hadrill, eds., *The Writing of History in the Middle Ages* (Oxford: Oxford University Press, 1981).
- M. Reeves, *The Influence of Prophecy in the Later Middle Ages* (Oxford: Oxford University Press, 1969).
- J. Dahmus, *Seven Medieval Historians* (Chicago: Nelson-Hall, 1982).
- Einhard and Notker the Stammerer, *Two Lives of Charlemagne*, trans. L. Thorpe (Baltimore: Penguin, 1969). A rare historiographical opportunity to compare two early (Carolingian “Renaissance”) contemporaneous biographies of the same individual.
- R. Grant, *Eusebius as Church Historian* (Oxford: Oxford University Press, 1980).
- I. Stern, ed., *The Greater Medieval Historians: A Reader* (Lanham, MD: University Press of America, 1983).

Renaissance and Reformation

- P. Burke, *The Renaissance Sense of the Past* (New York: St. Martin's Press, 1969).
- N. S. Steuver, *Language and History in the Renaissance* (Princeton, NJ: Princeton University Press, 1970).
- E. Cochrane, *Historians and Historiography of the Italian Renaissance* (Chicago: University of Chicago Press, 1981).
- M. Phillips, *Francesco Guicciardini: The Historian's Craft* (Toronto: University of Toronto Press).
- R. Weiss, *The Renaissance Discovery of Classical Antiquity* (Oxford: Oxford University Press, 1969).
- D. Wilcox, *The Development of Florentine Humanist Historiography in the Fifteenth-Century* (Cambridge, MA: Harvard University Press, 1969).
- Giorgio Vasari, *The Lives of the Most Excellent Painters, Sculptors, and Architects* [1568], 2 vols., rev. ed., trans. G. Bull (New York: Penguin Classics, 1987). Though often mistaken, it is one of the very first “modern” histories. It remains an indispensable reference for present-day Renaissance art and architectural historians.
- J. E. Seigel, *Rhetoric and Philosophy in Renaissance Humanism: The Union of Eloquence and Wisdom, Petrarch to Valla* (Princeton, NJ: Princeton University Press, 1968).
- P. Bondanella, *Machiavelli and the Art of Renaissance History* (Detroit: Wayne State University Press, 1974).

- J. Franklin, *Jean Bodin and the Sixteenth-Century Revolution in the Methodology of Law and History* (Cambridge: Cambridge University Press, 1973).
- D. R. Kelley, *Foundations of Modern Historical Scholarship: Language, Law, and History in the French Renaissance* (New York: Columbia University Press, 1970).
- A. G. Dickens and J. M. Tonkin, *The Reformation in Historical Thought* (Cambridge, MA: Harvard University Press, 1985).
- F. S. Fussner, *The Historical Revolution: English Historical Writing and Thought, 1580–1640* (New York: Columbia University Press, 1962).
- E. H. Harbison, *The Christian Scholar in the Age of the Reformation* (New York: Scribner's, 1956).
- C. K. Pultapully, *Caesar Baronius: Counter-Reformation Historian* (Notre Dame, IN: Notre Dame University Press, 1975).
- J. M. Levine, *Humanism and History: Origins of Modern English Historiography* (Ithaca, NY: Cornell University Press, 1988).
- F. J. Levy, *Tudor Historical Thought* (San Marino, CA: Huntington Library, 1967).
- A. D. Ferguson, *Clio Unbound: Perception of the Social and Cultural Past in Renaissance England* (Durham, NC: Duke University Press, 1979).
- H. Butterfield, *Christianity and History* (New York: Scribner's, 1950). Not to be confused with his aforementioned 1953 book. Deals with ecclesiastical and historical writing in the Reformation and Counter-Reformation.
- W. K. Ferguson, *The Renaissance in Historical Thought: Five Centuries of Interpretation* (Cambridge, MA: Riverside Press, 1948). Excellent historiographical account of five centuries of historical thinking about the Italian and Northern Renaissance.
- Lorenzo Valla, *The Treatise of Lorenzo Valla on the Donation of Constantine*, trans. C. B. Coleman (New Haven, CT: Yale University Press, 1922). Originally published in 1440. An extraordinary early classic in historical and philological sleuthing-over two centuries before Mabillon's systematization of historical/philological "diplomats" (assessing the authenticity of historical documents). Once and for all, Valla proved the inauthenticity of the extremely politically important 'Donation of Constantine.'

Seventeenth Century

- O. Ranum, *Artisans of Glory: Writers and Historical Thought in Seventeenth-Century France* (Chapel Hill: University of North Carolina Press, 1980). Historical research in the time of the "Sun King" (Louis XIV), who involved France in rip-roaring diplomatic intrigues and expensive military enterprises, taking control of the nobility and aristocracy by forcing them to leave their estates and live under his nose at grandiloquent Versailles. Louis XIV did much to eventually weaken his successors and pave the way to revolution. Among his most lasting legacies (with pernicious effects on the feet of countless women) was his invention of the spiked high-heel shoe-to show off his legs, of which he was most proud, to better advantage.
- M. W. Brownley, *Clarendon and the Rhetoric of Historical Form* (Philadelphia: University of Pennsylvania Press, 1985). This mid to latter Stuart-era historian was one of contemporaneous Europe's greatest. He pursued English political and constitutional history, which latter of course required a fluency in Latin (which was not then uncommon among the educated English class). However, he also pursued diplomatic history. He did brilliant work on King James I and the abortive "Spanish match" and on the Elector Frederick's ill-timed acceptance of the Bohemian throne (against which James strongly advised him). His account of the diplomatic and military vicissitudes of the Thirty-Years War, which Frederick ignited by accepting the Czech throne, has never been surpassed. It required facility in Spanish, German, and French. This "religious [sic]" holocaust was conducted with the utmost brutality on Protestant and Catholic sides. Countless peasants were caught in the middle. They were massacred by the hecatombs and their stores looted to feed ravenous armies. Thousands of villages in Central Europe were razed to the ground, and the earth was salted-over so that it would bear fruit no more. Additionally, hundreds of thousands of these people died of starvation and disease. Europe had never before seen armies of such size, or with such deadly artillery, or with such wholesale involvement of innocent civilians. A whole generation was born and died during this seemingly endless bath of carnage. It lasted without surcease from 1618 to 1648, during which time hundreds of thousands of soldiers perished as well. In tragic irony, the peace of Westphalia left things pretty much as they were before the war. It was the most costly conflict that Europe had seen-prior to the Great War of 1914 to 1918. *I hazard the notion that it ultimately did more for the progressive secularization of European society and politics, from the succeeding eighteenth century on through the nineteenth and twentieth centuries, than any other historical factor.*

Curiously, many of James' contemporary Britons favored the entry of the kingdoms which James himself had, after all, united in 1603 (the first Great Britain and Ireland) full scale into the Continental conflagration. And surprisingly many seventeenth through nineteenth century British historians reviled him for not committing Britain's all to the Continental Protestants. Clarendon however, perspicacious as always, defended the Scots King on a number of cogent constitutional, political, diplomatic, economic, military, and reliogimoral grounds. He pointed out, moreover, that James exhausted every diplomatic means of bringing the mutually self-destructive parties to the negotiating table. Britain would not see another historian of Clarendon's caliber until Macaulay and Acton in the nineteenth century. Clarendon's *History* spanned eight massive—but felicitously written—volumes.

J. G. A. Pocock, *The Ancient Constitution and the Feudal Law: English Historical Thought in the Seventeenth-Century* (New York: Norton, 1967). Probably the most important period in English constitutional law-before or after Magna Carta. The King's power *vis-à-vis* Parliament (especially the House of Commons) was still at its peak under James I, Britain's last absolute monarch. He did not have to call Parliament because he lived within his means (the income from the Crown's substantial domains). Moreover, as mentioned, he refused to involve England in what would have been an extremely costly (in lives and money) involvement in the Thirty-Years War despite widespread English popular pressure to do so. Their navy, which was their strength, would have made no difference in a continental land war. Their army was small by European standards. James would had to have shipped thousands of men to Europe with no qualifications.

Within two decades the king's power had fallen to a nadir because Charles I was a spendthrift, alienating the Crown's lands to pay debts. Hence, he had to call Parliament to meet his extravagant needs. The Commons made him pay dearly in political coin. Charles's first mistake was calling Parliament; his second was waiting too late to dissolve it. His third was a consistently arrogant attitude. Hence the Civil War; and its royally disastrous aftermath. Though the monarchy was later restored; the balance of power between the King and the Commons had changed forever. In twenty years, Charles destroyed the royal solvency, power, and respect that Henry, Elizabeth, and James had strenuously established. After his defeat by Cromwell's forces, Charles contributed to his own execution-by churlishly plotting with foreign powers. Clarendon also did a masterful multivolume history on the Restoration of Charles II-remarkably objective, considering the King patronized it.

The Enlightenment (Eighteenth Century)

An age of sweeping progressivist philosophical histories and the pre-Germanic dawn of scientific history; see Gibbon (below) for a combination of both. However, Enlightenment historians such as Voltaire, Hume, and Gibbon and the French philosophes and Encyclopedists clearly saw their age as a quantum-leap forward in every respect. They were especially contemptuous toward the "thoroughly benighted" Middle Ages, toward which they could never adopt a genuinely historical attitude. Hence, they ignored vital Medieval contributions to philosophy, semiotics, mathematics, and natural science (e.g., Abelard of Bath, William of Ockham, Roger Bacon).

M. S. Anderson, *Historians of Eighteenth-Century Europe, 1715–1789* (Oxford: Oxford University Press, 1979).

G. Vico, *The New Science of Giambattista Vico* [1749], trans., comm. T. G. Bergin and M. H. Fisch (Ithaca, NY: Cornell University Press, 1984).

L. Pompa, *Vico: A Study of the 'New Science'* (Cambridge: Cambridge University Press, 1975). Vico was not only a historiographically and philologically adept ancient Italian and Roman/Italian legal and political scholar; but he was also a very important speculative philosopher of history. The contemporary fascination with his work also reflects a revived interest in the empirical assessment of various philosophical histories. On the whole, I think this a positive development. Vico's *New Science* was published in 1730 and considerably revised in 1744. Like the later writer Voltaire, Vico was disturbed by the overemphasis on the physical sciences—including the conviction that they presented the only worthwhile models for gleaning new knowledge and the only respectable purviews for understanding and explanation. In short, "scientism" was in full-swing by the Enlightenment.

In far-off Naples, he proclaimed his battle-cry for the necessity of independent epistemic models in philological, legal, and historical studies (as opposed to the mathematical laws of physics and chemistry): *we can understand human history because people like ourselves made it, and hence we can grasp the workings of their minds*. Clearly this must have influenced Collingwood. Unlike the *philosophes*, *Encyclopédistes*, Voltaire, Gibbon, and even Hume (despite some protestations to the contrary), Vico did not adopt the "rationalist fallacy"—that is, the universality of the psychical processes of man everywhere and always. This belief in an extreme psychic unity was well captured by Hume as a programmatic assumption of his mid-Enlightenment history of Britain: "mankind are so much the same, in all times and places, that history informs us of nothing new or strange in this particular. Its chief use is

only to discover the constant and universal principles of human nature”—the natural science-type laws that Vico deemed erroneous when applied to human history. Hume’s “human nature” was suspiciously like the Enlightenment one (*i.e.*, 18th century Eurocentrism).

Indeed Vico had a much better grasp of cultural anthropology than the latter nineteenth century “cultural evolutionist” founders of that discipline—Enlightenment epigones who stressed both “psychic unity” and the alleged “fact” that contemporary “primitives” represented much earlier phases in the development of that pinnacle of world civilization, eighteenth and nineteenth century Europe. Vico’s concept of psychic unity was limited to the most fundamental human mental processes, which he deemed extensive enough for the latterday historian to empathize with them, and to appreciate culturally/historically determined differences, along with the similarities. This adumbrated Dilthey’s latter-nineteenth-century insistence on *Verstehen* (cognitive/affective *Einfühlung*)—thinking/feeling one’s way into the experiences and mind-sets of earlier societies/cultures-before presuming to historically explain (*erklären*) them. Vico’s stance also anticipated current cultural anthropology’s requirement that the ethnographer first understand the social structure and cultures as his or her informants do, *in order to then optimally develop and apply Western anthropological concepts and explanatory categories*. He also developed a version of 20th century anthropology’s “functionalism.”

Moreover, Vico went on to assert two fundamentals of modern historical research: (1) the study of the past gives a fuller comprehension of human nature—the greatest objective of knowledge; and (2) we understand things primarily when we know their origin, growth, and experience. In the first point he was calling for the mind-broadening result of nonjudgmentally understanding the many different ways of being human across time and space. Vico deemed this the greatest gift of historical studies. Recall Ranke’s later desideratum that the scholar treat each period and culture as “equidistant to God.” Vico’s second point represents the first call for a genuinely “genetic” (*i.e.*, historical/developmental) approach, which was novel at the time.

L. Pompa, ed., *Vico: Selected Writings* (Cambridge: Cambridge University Press, 1982).

G. Vico, *The Autobiography of Giambattista Vico*, trans., comm. M. H. Fisch and T. G. Bergin (Ithaca, NY: Cornell University Press, 1975).

A. P. Caponigri, *Time and Idea: Theory of History in Vico* (Chicago: Regnery, 1953).

J. M. Brumfitt, *Voltaire, Historian* (Oxford: Oxford University Press, 1958). Many of Voltaire’s histories are rather philosophical and not distinguished by the sort of scholarship one finds in Gibbon, much less in the later Rankian historical revolutionaries. Strong prejudices, like Gibbon’s as well, against the medieval period and Christianity characterize Voltaire’s at times irritatingly flippant remarks. Still, he was a founder of modern cultural history, and he could be a remarkably astute political historian as well.

E. Gibbon, *The Decline and Fall of the Roman Empire*, 3 vols. (New York: Modern Library, N.D.). A monumental and extraordinarily well-written book (six volumes in its original format). It is still perhaps the most widely read history by the educated public—because of its expository brilliance. However, since the mid nineteenth century ancient historians have viewed it mainly as a literary, not scholarly, masterpiece. Gibbon’s thorough reading was limited to mostly secondary sources: from the antique Roman historians right onto later Roman and Byzantine historians; up to those of his own time. Though Gibbon was aware there were multiple causes of the “decline and fall,” he blamed much of it—in good Enlightenment fashion—on Christianity. His work is replete with leading (mostly Enlightenment) philosophical ideas.

Still, it is one of the better histories prior to the nineteenth century German historical revolution—with the exception of the aforementioned Clarendon and the then-obscure Vico. Stylistically, Gibbon’s volumes stand as some of the finest history ever penned. “Scribble, scribble, scribble, Mr. Gibbon,” said George III when the scholar presented him with the final installment of his masterpiece!

D. P. Jordan, *Gibbon and His Roman Empire* (Urbana: University of Illinois Press, 1971). Balanced critical study.

A. Flew, *Hume’s Philosophy of Belief* (London: Routledge, 1961). By a noted British analytical philosopher and a staunch atheist. It treats Hume’s (1758) *An Enquiry Concerning the Human Understanding, the retitling of his 1748 Philosophical Essays Concerning Human Understanding*.

V. G. Wexler, *David Hume and the History of England* (Philadelphia: American Philosophical Society, 1979). Paradoxically, long better known for this multivolume history; (completed by Dr. Smollett after Hume’s death) than for his philosophy, which was a great deal better. Indeed, the 29-year-old Hume was devastated when his remarkable *A Treatise of Human Nature* fell still-born from the press (1739 to 1740). A very ambitious man, he was determined to make his mark in some literary endeavor. Hence he turned to the history of Britain, which gave him the fame he so desperately desired; even though it was Whiggish and lacked Clarendon’s scholarly brilliance.

J. B. Black, *The Art of History: Four Eighteenth Century Historians* (New York: Russell and Russell, 1966).

- F. M. Barnard, *Johann Gottfried von Herder on Social and Political Culture* (Cambridge: Cambridge University Press, 1969). Herder expressed the late eighteenth century Romantic reaction to Enlightenment historiography—especially to the latter’s profoundly progressivistic and optimistic self back-patting stance and its derision of the Middle Ages.
- P. Reill, *The German Enlightenment and the Rise of Historicism* (Berkeley: University of California Press, 1975). Deals with the philosophical precursors (such as Herder and Kant) to the nineteenth century German revolution in scientific philological and historical methodology.

The Nineteenth-Century Historical Revolution

This was the watershed in Western historical research and writing. With the nineteenth century, we are standing firmly on historical ground. *On one hand*, this was the great age of “scientific history”—the systematic researching of unpublished archives and primary sources in multiple languages and from the pertinent nations’ and figures’ various points of view. Such studies grew out of modern philology (the history of languages) at the University of Göttingen. In the 1820s/30s the long-lived Leopold von Ranke, later professor of modern history at Berlin, became the leader of this school and remained so for six decades. He and his students influenced the first genuinely academic history departments in the United States (see below). While Ranke gave courses of lectures, he came to view his “seminar” method as the keystone of bringing his students up methodologically. As mentioned earlier, these were ongoing cases of his students’ research—and at times Ranke’s own work in progress. The other students were encouraged to “critique” one another’s work and to receive Ranke’s comments, criticisms and suggestions. By the early twentieth century, the leading American history departments had adopted Ranke’s pedagogical and research approach (e.g., Johns Hopkins, Columbia, Harvard, Yale, and Michigan). Gone forever were the days of simply relying uncritically on prior historians’ opinions (i.e., “secondary sources”)—what Temkin (1979) called the “doxographic” approach.

On the other hand and ironically, the two most influential philosophical historians of all time—Hegel and Marx—were hammering out their theories then too. Hegel has been referenced several times in the text; his primary sources will not be reiterated here. *Pari passu* with Marx, except for a few secondary studies, and examples, of twentieth century Soviet Marxist/Leninist history (and Chinese ones, itemized in the final subsection). Even though Hegel’s system was a philosophical historical one; he quickened the pace of historicism.

F. Gay, *Style in History* (New York: McGraw-Hill, 1974). Deals with the relation of style to content in Gibbon, Ranke, Macaulay, and Burckhardt—the last three being nineteenth century figures. An interesting and informative brief volume. Burckhardt was the student of Ranke who developed “cultural history.” Macaulay was a dedicated Whig party historian but one of the best historical stylists of all time. He did a very lengthy and balanced review of Ranke’s great multivolume history of the popes.

J. W. Burrow, *A Liberal Descent: Victorian Historians and the English Past* (Cambridge: Cambridge University Press, 1983). “Liberalism” then emphasized the liberties and rights of the individual; whereas 20th century “liberalism” emphasizes equality (and redistributive economics—i.e., “welfare”).

R. Jann, *The Art and Science of Victorian History* (Columbus: Ohio State University Press, 1985). Both books (i.e., Burrow and Jann) examine the Whig historians as well as some with different vantage points.

F. Engel-Janosi, *Four Studies in Nineteenth Century French Historical Writing* (Baltimore: Johns Hopkins University Press, 1955).

W. R. Keylor, *Academy and Community: The Foundation of the French Historical Profession* (Cambridge, MA: Harvard University Press, 1975).

Many of the great nineteenth century French historians (e.g., Michelet), like many of their English counterparts (e.g., Carlyle, Macaulay, and Froude); were nationalistic, progressivist, and politically partisan (as was Bancroft, the prolific historian of America). Increasingly, however, they tempered this with large doses of nineteenth century German historical method and more strenuous attempts at objectivity. And they were brilliant stylists. Unfortunately, some of them later adopted the Darwin—and, especially, Herbert Spencer—derived, and ultra-conservative, theories of social Darwinism and the notions of evolutionary laws of the historical process. Thomas Henry Buckle, an 1860s historian of England, was an early exemplar of this. Buckle influenced Freud’s notion of psychic causality, and his *Totem and Taboo* (1913).

Of course in Germany, methodologically rigorous studies continued to appear throughout the nineteenth century, such as Theodor Mommsen’s monumental multivolume *History of Rome* (1853 to 1856), a definite improvement on Gibbon. In America, the mid-to latter nineteenth century historian Francis Parkman was the methodological and stylistic successor to the great Prescott, who had independently hammered out his own version of primary source-rich Rankian scholarship as well as demonstrating its critical attitude toward secondary sources (of which

Prescott had gone through hundreds). Like Prescott, Parkman had compromised vision—though he was able to read copiously, and was somehow a dead-eye with a rifle! His first (and probably still most popular) work, *The Oregon Trail* (1851), represented his apprenticeship as a writer—though, strictly speaking, it was from his pre-historical phase. He traveled the area extensively himself (1847 to 1848), such that it included his own eyewitness impressions of indigenous tribal life prior to the conquering influx of white Easterners. It is thus as important ethnographically as it is historically. Several edited and abridged twentieth century paperbound versions of it are easily obtainable (in its 1892 fifth edition), as are one-volume edited and abridged paperback issues of his two-volume *La Salle and the Discovery of the Great West* (2nd ed., 1878). This is his other currently most widely read work. The 1902 Frontenac Edition (published in Boston by Little, Brown, and Co.) is a beautifully formatted set of all 16 of Parkman's volumes, mostly dealing with the rise of New France and its explorers (including, importantly, Jesuits) down the Mississippi to the Gulf. It ends with *Montcalm and Wolfe*, encompassing the defeat of New France by the British and the Colonists (2 vols.), and *The Conspiracy of Pontiac* (2 vols.). There is an excellent biography of this great historian by Charles H. Farnham (also in this series).

- K. J. Weintraub, *Visions of Culture: Voltaire, Guizot, Burckhardt, Lamprecht, Huizinga, Ortega y Gasset* (Chicago: University of Chicago Press, 1966). Excellent treatment of five cultural historians and one philosopher of history.
- J. Burckhardt, *Force and Freedom: Reflections on History*, ed. J. H. Nichols (New York: Meridian, 1955). Two excellent scholarly chapters by Nichols on Burckhardt's overall interpretation of history precede a series of papers by Burckhardt on his approach to historiography.
- J. Burckhardt, *The Civilization of the Renaissance in Italy* [1860], trans. S. G. C. Middlemore (New York: Penguin, 1990). The prototypical and still classical cultural history by, again, a former student of Ranke. Also did an important study of the age and culture of Constantine the Great.
- S. Hook, *From Hegel to Marx: Studies in the Intellectual Development of Karl Marx* (Ann Arbor: University of Michigan Press, 1962).
- M. Rader, *Marx's Interpretation of History* (New York: Oxford University Press, 1979).
- J. D. Rosenberg, *Carlyle and the Burden of History* (Oxford: Oxford University Press, 1985). Examines Carlyle's robust conservatism and its impact on his great histories. Carlyle—and his friend Edmund Burke—wrote very interesting and prescient histories of the French Revolution in the 1790's.
- J. Clive, *Macaulay: The Making of a Historian* (New York: Knopf, 1973). Includes a psychobiographical and political perspective. Again, Macaulay's style is terrific; drawing the reader effortlessly forward. His masterpiece is the 4-volume history of England during the short reign of James II—begun, Whiggishly, with an account of Victorian political and technological achievements. His essays, too, were remarkable; such as the 100-page published review of Ranke's magisterial (*and incredibly impartial*—he was himself a dedicated Lutheran) history of the Popes. Macaulay's essays (also on literary topics) are available in many edited collections.
- Friedrich Meinecke, *Historicism: The Rise of a New Historical Outlook* (New York: Herder and Herder, 1972). An excellent account by one of the major players in latter-day German historicism.
- L. Krieger, *Ranke: The Making of History* (Chicago: University of Chicago Press, 1977). The history of Ranke's prepotent role in the rise of nineteenth century German historicism. Ranke, also, was a pungent prose-artist.
- G. Iggers, *The German Conception of History: The National Tradition of Historical Thought from Herder to the Present* (Middletown, CT: Wesleyan University Press, 1968). Notably good on historicism.
- C. Diehl, *Americans and German Scholarship, 1770–1870* (New Haven, CT: Yale University Press, 1978). Especially noteworthy for its illustration of the powerful impact of Rankian historians on the formation and character of history departments and graduate programs in the elite American universities.
- G. S. Metraux and F. Crouzet, *The Nineteenth Century World* (New York: Mentor, 1963). Several chapters on historical studies.
- G. Himmelfarb, *Victorian Minds: A Study of Intellectuals In Crisis and Ideologies In Transition* (Chicago: Ivan R. Dee, 1995). Also looks at historians, such as Edmund Burke.
- M. Ermarth, *Wilhelm Dilthey: The Critique of Historical Reason* (Chicago: University of Chicago Press, 1978). Brilliant meditations on Dilthey's voluminous writings on doing history and on his epistemological view of the endeavor. Dilthey focused on the methodological distinctions between the natural sciences (*Naturwissenschaften*) and the "human sciences" (*Geisteswissenschaften*). The latter nomenclature has shades of Hegel's "*Geist*" ("Spirit") or "*Weltgeist*" ("World Spirit"): "*Geisteswissenschaften*" meaning "sciences of the human spirit"—or, secondarily, of the human "mind." Still, Dilthey was no devout Hegelian; though he respected "the Master's" contributions. I contend that, despite the metaphysics of works such as *The Phenomenology of Spirit*, *The Philosophy of History*, *Lectures on World History*, and *The History of Philosophy*; Hegel has, if only indirectly—say, as transmogrified by Marx and Engels—influenced twentieth century historians far-more than they can imagine or

would care to admit. This is certainly true of the French Postmodernists, including Foucault; as they have readily-acknowledged. Moreover Marx, in trying to bring Hegel “down-to-earth”—with dialectical “*materialism*”—ended up, in many ways, with a theory of history that was almost as philosophical, or “ideological”; as his Master’s. The Russian Communist Revolution was spearheaded, root-and-branch, by ideological intellectuals—from the bourgeoisie, not the working class: and in St. Petersburg, one of the few industrialized regions, in what was otherwise a mostly-agrarian [even semi-feudal] country. Indeed the peasants, *the real Russian working-class*; were either indifferent or actually opposed, to the political revolution in the capital. In fine, as touched-on earlier; by Marx’s *iron-laws* of the economic determination of historical *developments* [read Enlightenment-style “Progress”]; the Communist Revolution was supposed to develop in a highly industrialized hornet’s-nest of advanced capitalism—such as England, northern/Rhineland Germany, or France. Hence, the Russian Revolution stood Marx on his head; for it was the ideological “superstructure [*sic*],” which determined the changes in the modes and relationships of production [i.e., the “material base”]; and not the reverse. *In any event*, Dilthey held that the “human sciences”; for example, psychology, sociology, anthropology, philology/linguistics, literary/artistic studies, and of course history; utilized *empathic understanding* (“*Verstehen*”) and *interpretation*. Hence the philosophy of the human sciences centered-on the “hermeneutics”; or interpretative modes and methods; proper to its various disciplines particularly. By contrast, the *Naturwissenschaften* sought “nomothetic,” or “lawful” (ideally mathematicizable), explanations of their subject matter. Still Dilthey’s emphasis on empathy, interpretation, and meaning; did not necessarily disallow—more idiographic, than nomothetic—*causal explanations* in the human sciences. Indeed, he wrote at times as if *Verstehen* and hermeneutics were the necessary prerequisites to the ultimately causal explanations [“*Erklären*”]; toward which the human sciences aspired. Unfortunately, postmodernist “hermeneuticians” (such as Foucault) have used Dilthey to support their cancellation of any causality whatsoever in the domain of history and the human sciences. I do not believe that Dilthey would have followed them there. It was nomothetic causation—*not causation generally*—which Dilthey opposed in history (*the prototypical discipline for the human sciences*). However, despite brilliant flashes of insight and voluminous writings; Dilthey was weak as a synthesizer. His works are not without internal contradictions. As just mentioned, history was his overarching concern. His lifelong goal was to produce a coherent and comprehensive “*Principia Historiographica*”; at which he knew he had failed.

- P. Geyl, *Debates with Historians: Ranke, Carlyle, Michelet, Macaulay, Sorokin, Berlin, Toynbee* (New York: Meridian, 1971). Michelet, despite his great strengths; was ultra-Francocentric; and philosophically, a rather-naïve empiricist. For example, whenever his patriotic students applauded a lecture, he would consistently reply: “*Do not clap for me; for it is history which speaks through me.*”!
- J. Cannon, ed., *The Historian at Work: Gibbon, Ranke, Macaulay, through Butterfield and Braudel* (London: Allen and Unwin, 1980). Edited selections from eleven great eighteenth, nineteenth, and twentieth century European historians.
- F. Stern, ed., *The Varieties of History from Voltaire to the Present* (New York: Vintage, 1978). Selection from the work of thirty preeminent European and American historians.
- J. H. Hexter, *New Views on History and Society in Early Modern Europe* (New York: Harper, 1961). Much more of this sort of work cries out to be done.
- A. M. Melzer, J. Weinberger, and M. R. Zinman, eds., *History and the Idea of Progress* (Ithaca, NY: Cornell University Press, 1995). Essays by leading contemporary historians on the philosophical historians of progress from Machiavelli, Kant, Hegel, and Toynbee on through current times.

Twentieth Century

- D. L. Hoggan, *The Myth of the New History: The Techniques and Tactics of the New Mythologists of American History* (Nutley, NJ: Craig, 1965). Criticizes politically-motivated “revisionist” histories of America’s wars.
- G. Iggers, *New Directions in European Historiography*, rev. ed. (Middletown, CT: Wesleyan University Press, 1984). Includes the crisis of the conventional conception of “scientific history,” the *Annales* tradition, and recent developments in German historiography. Unfortunately this last has been neglected; due to the din from the French postmodernists.
- J. H. Hexter, *On Historians* (Cambridge, MA: Harvard University Press, 1979). Critical essays on a number of twentieth century American and European historians.
- T. K. Rabb and R. I. Roberg, eds., *The New History* (Princeton, NJ: Princeton University Press, 1982).
- O. Zunz, ed., *Reliving the Past: The Worlds of Social History* (Chapel Hill: University of North Carolina Press, 1985).
- D. C. Watt, ed., *Contemporary History in Europe* (New York: Praeger, 1967).

- F. Gilbert and S. Graubard, eds., *Historical Studies Today* (New York: Norton, 1972).
- G. R. Elton, *Which Road to the Past? Two Views of History* (New Haven, CT: Yale University Press, 1983).
- T. Stoianovich, *French Historical Methods: The Annales School* (Ithaca, NY: Cornell University Press, 1976).
- J. Goldstein, ed., *Foucault and the Writing of History* (Cambridge, MA: Blackwell, 1994). A variety of critical essays by divergent interpreters.
- G. Gutting, ed., *The Cambridge Companion to Foucault* (1994).
- P. Carrard, *Poetics of the New History: French Historical Discourse from Braudel to Chartier* (Baltimore: Johns Hopkins University Press, 1992).
- S. Lash, *The Sociology of Postmodernism* (London: Routledge, 1990). Views it as largely a neo-Romanticist movement.
- L. Niethammer, *Posthistoire: Has History Come to an End?*, trans. P. Camiller (London: Verso, 1994). Deals with post-modernist French history; contains trenchant observations and criticisms.
- E. LeRoy Ladurie, *The Mind and Method of the Historian*, trans. S. and B. Reynolds (Chicago: University of Chicago Press, 1984). Reflections on method by one of the greatest French social historians.
- G. Lerner, *The Majority Finds Its Past: Placing Women in History* (Oxford: Oxford University Press, 1979).
- J. Kelley, *Women, History, and Theory* (Chicago: University of Chicago Press, 1984).
- R. Hofstadter, *The Progressive Historians: Turner, Beard, Parrington* (Chicago: University of Chicago Press, 1968).
- M. Kraus and D. Joyce, *The Writing of American History*, rev. ed. (Norman: University of Oklahoma Press, 1985). Revision of Kraus's 1953 *magnum opus*.
- H. Wish, *The American Historian* (New York: Oxford University Press, 1960). A classic history of American histories—especially intellectual history.
- E. Wilson, *To the Finland Station: A Study in the Writing and Acting of History* (Garden City, NY: Doubleday Anchor, 1953). Elegantly written gem on socialist historians and social thinkers from Saint-Simon, Michelet, and Fourier through Marx, Engels, Lenin, and Trotsky. Something of a philosophical history.
- E. Loone, *Soviet Marxism and Analytical Philosophies of History*, trans. B. Pearce (New York: Verso, 1992). Creative attempt to adapt Marxism to actual events in recent world history (including the collapse of the Soviet Communist empire and the Eastern European Communist bloc).
- C. Black, *Re-Writing Russian History: Soviet Interpretations of Russia's Past* (New York, Vintage, 1962).
- G. M. Enteen, *The Soviet Scholar-Bureaucrat: M. Pokrovskii* (University Park: Pennsylvania State University Press, 1978).
- N. W. Heer, *Politics and History in the Soviet Union* (Cambridge, MA: MIT Press, 1971).
- J. Appleby, L. Hunt, and M. Jacob, *Telling the Truth About History* (New York: W.W. Norton, 1994). Excellent critique of postmodernism.
- V. H. Minor, *Art History's History* (Upper Saddle River, NJ: Prentice-Hall, 2001). Deals with both the history of art history-writing and of its philosophical and theoretical foundations under one brilliantly-terse cover; by a master practicing art historian.
- C. W. Haxthausen, *The Two Art Histories: The Museum and the University* (Yale, 2002). Edited collection of essays pointing-up the different perspectives of curatorial and academic art historians.
- J. Harris, *The New Art History: A Critical Introduction* (London: Routledge, 2001). Historically- and philosophically-sensitive critique (pro and con) of art historical movements since 1970, including: Marxist, feminist, homosexual, psychoanalytic, semiotic, structuralist, postmodernist, and activist generally. Compares and contrasts these with more traditionalist art history.
- M. Podro, *The Critical Historians of Art* (Yale, 1982). A discussion and analysis of the great 20th century art historians Semper, Riegl, Wölfflin, Warburg, and Panofsky; and of the impact on their concerns by the aesthetic theories of Kant, Schiller, and Hegel.
- Guest Ed., S. Bann, *The New Art History, History of the Human Sciences* (1989):1–93.
- S. Barnett, *A Short Guide to Writing About Art*, 7th Ed. (New York: Longman, 2003). Still the standard work on doing art history.

Additional Speculative, or Philosophical, History

Some of these have already been cited in the text (and in the general historiography references). For a few more see the following.

- H. Butterfield, *Christianity in European History* (New York: Macmillan, 1953). Especially strong on medieval historiography. Butterfield was a practicing Christian, and parts of his 1953 text assume the character of Christian philosophical history.

- M. D'Arcy, *The Meaning and Matter of History, A Christian View* (Cleveland, OH: Meridian, 1961).
- J. Maritain, *On the Philosophy of History* (New York: Charles Scribner's Sons, 1957). The perspective of a Christian existentialist historian and a leading Thomist philosopher.
- Arnold Toynbee, *A Study of History Illustrated: The First Abridged One-Volume Edition* (New York: Barnes and Noble, 1972). A coffee table-sized, beautifully illustrated, one-volume edition (by Toynbee and J. Caplan). In addition to my prior comments on Toynbee, it is essential to note that he saw civilization evolving toward a synthesis of the truths of the world's half-dozen great religions. One is reminded of Aldous Huxley's "perennial philosophy." Toynbee's other books are cited in the forthcoming end-notes of Chapter 1.
- M. R. Cohen, *The Meaning of Human History* (La Salle, IL: Open Court, 1961). Deals not only with the possibilities for a philosophical history, but with a variety of epistemological and methodological issues in historical research.
- E. Voegelin, *Anamnesis* (Columbia: Missouri University Press, 1990).
- H. Bloom, *The Lucifer Principle* (New York: Atlantic Monthly Press). A multi-deterministic theory of the evil necessitated in human history.
- J. G. Merquior, Philosophy of History: Thoughts on a Possible Revival, *History of the Human Sciences* 1 (1988): 23–31. Very provocative view on the timeliness for a resurgence of philosophical history.
- D. W. Livingston, *Hume's Philosophy of Common Life* (University of Chicago, 1984). One of the rare comprehensive examinations of Hume's historical writing, the philosophy of history undergirding it; and the relationship between the former and his explicitly-philosophical work.
- G. W. F. Hegel, *The Phenomenology of Spirit* (1807/1831), trans. A.V. Miller; with a textual analysis by J. N. Findley (Oxford, 1977).
- G. W. F. Hegel, *Lectures on the Philosophy of World History: Introduction* (1822/28/30), trans. H. B. Nisbet (Cambridge, 1980). The raw material for Hegel's much-larger *The Philosophy of History*, trans. J. Sibree (New York: Prometheus, 1991); published shortly after Hegel's death, by his son.
- A. MacIntyre, ed., *Hegel: A Collection of Critical Essays* (New York: Doubleday, 1972).
- G. D. O'Brien, *Hegel on Reason and History* (University of Chicago, 1975).
- M. Inwood, ed., *The Oxford Companion to Hegel* (1985).
- B. Croce, *Historical Materialism and the Economics of Karl Marx* (New York, 1914). By the famous Italian historian and philosopher of history.
- W. H. Shaw, *Marx's Theory of History* (Stanford, 1978).
- P. Anderson, *In the Tracks of Historical Materialism* (London: Verso, 1983).
- J. G. Merquior, *Western Marxism* (London: Collins, 1986).
- J. C. Alexander, *The Antinomies of Classical Thought: Marx and Durkheim* (University of California, 1985); J. C. Alexander, *The Classical Attempt at Theoretical Synthesis: Max Weber* (University of California, 1985). Marx, Durkheim, and Weber can be conceived as philosophical historians, as much as historical sociologists—hence my inclusion of them here. The aforementioned tracts are Volumes 2 and 3 of Alexander's masterful four-volume history, exegesis, and critical analysis; *Theoretical Logic in Sociology*, Volume One treats positivism (Comte) and neo- and post-positivism; and Volume Four treats Talcott Parsons, the major mid-twentieth century theorist (also, incidentally, importantly influenced by Freud and psychoanalysis). *Much nineteenth and twentieth century sociology is eminently-relevant to both the theory and practice of history.*
- E. Kurzweil, *The Age of Structuralism: Levi-Strauss to Foucault* (Columbia University, 1980). Her inclusion of Foucault within "Structuralism" may seem idiosyncratic. I maintain, however, that it is not, on two grounds: (1) the early Foucault was in transition from structuralism to postmodernism (post-structuralism); and (2) though Foucault soft-pedalled it, he retained Levi-Strauss' binary opposites, as a theoretical/critical tool: for example, *raison-dérison*; normal-deviant; bound-free; controlling-liberating and, hidden beneath all these; *a virtually-Manichean split between good-evil.*
- C. Levi-Strauss, *Structural Anthropology*, 2 vols., trans. C. Jacobsen and B. G. Schoepf (New York: Basic Books, 1963/65). By one of the most brilliant and broadly-influential (on a variety of disciplines, including history, literary studies/theory/criticism, and linguistics) cultural anthropologists of the twentieth century. His theory of the role of deeply-unconscious structures of binary opposites was influenced by Hegel/Marx, the linguist Saussure, and Freud and psychoanalysis (and probably Jung as well, with his archetypal polarities). He garnered a great deal of trans-cultural/historical evidence for the manifestations of these binary opposites in myriad aspects of social structure and cultural institutions (from cooking and exogamy rules to language itself). His approach embraced an element of historicism as well. Apropos this, in his autobiographical Brazilian ethnography, *Tristes Tropiques*; he discloses that his adolescent/young adult vocational-wafflings were between historical geology, psychoanalysis,

and anthropology. For a late, far-ranging (including autobiographical) collection of essays, see: *The View from Afar*, trans. J. Neugroschel and P. Hoss (University of Chicago, 1992). His impact on American anthropology has been profound. Unfortunately, it has been less-so on history and literary studies; largely because of the (mid-1960s on) noise of the French postmodernists in American Academe.

- For two phenomenological approaches to history, see: W. H. O'Neill, *Perception, Expression, and History: The Social Phenomenology of Maurice Merleau-Ponty* (Evanston, IL: Northwestern University Press, 1970); and D. Carr, *Phenomenology and the Problem of History* (Northwestern University, 1974).
- A. O. Lovejoy, *Reflections on Human Nature* (Hopkins, 1961); W. H. McNeill, *The Human Condition: An Ecological and Historical View* (Princeton, 1979); and H. Arendt, *The Human Condition* (University of Chicago, 1958).
- A. T. Peperzak, *System and History in Philosophy* (Albany: SUNY Press, 1986).
- P. Ricoeur, *Time and Narrative*, 3 vols., trans. K. McLaughlin and D. Pellauer (University of Chicago, 1985). By the great Franco-American hermeneutic phenomenologist; who also wrote the brilliant *Freud and Philosophy* (University of Chicago, 1970).
- L. Strauss, *Natural Right and History* (University of Chicago, 1963). By the great political philosopher.
- L. Ferry, *The System of Philosophies of History*, tran. F. Philip (University of Chicago, 1992). Vol. 2 of his 3-volume *Political Philosophy*.
- C. R. Bambach, *Heidegger, Dilthey, and the Crisis of Historicism* (Cornell University, 1995).
- J. C. Merquior, *From Prague to Paris: A Critique of Structuralist and Post-Structuralist Thought* (London: Verso, 1986).
- O. Marquard, *In Defense of the Accidental: Philosophical Studies*, trans. R. M. Wallace (Oxford, 1991). See especially the chapter on universal versus "multiversal" history.
- O. Barfield, *History, Guilt, and Habit* (Wesleyan University, 1981).
- A. Schmidt, *History and Structure: An Essay on Hegelian-Marxist and Structuralist Theories of History* (Cambridge: MIT Press, 1983).
- O. W. Holmes, *Human Reality and the Social World: Ortega's Philosophy of History* (Amherst: University of Massachusetts Press, 1975). A study of Ortega y Gasset's phenomenological theory of history.
- H. Arendt, *Between Past and Future* (New York: Penguin, 1977). A political philosophical history.
- R. Wright, *Nonzero: The Logic of Human Destiny* (New York: Vintage, 2001). Grand-scale deterministic theory of history by a biocultural evolutionist.
- M. de Unamuno, *The Tragic Sense of Life in Men and Nations*, trans. A. Kerrigan (Princeton: Princeton University Press, 1972). A thoughtful, sensitive, and very influential philosophical history.

Non-Western Historiography: Chinese, Islamic, and Indian (see also Chapter Two)

- D. E. Brown, *Hierarchy, History, and Human Nature: The Social Origins of Historical Consciousness* (Tucson: University of Arizona Press, 1988). Truly global in scope; gives equal weight to Western, South Asian, Chinese, Japanese, and Muslim historiography. Argues that Chinese historiography achieved its progressive excellence from 200 B.C.E. to 1500 C.E. (far ahead of Europe during its medieval and early Renaissance days) because in China there was some possibility for upward social-class mobility based on scholarly attainment. This is as opposed to India, which never developed a truly indigenous secular historiography because of, Brown contends, its rigidly divided, religiously based caste system.
- Chinese secularization started before its development elsewhere (including in the West). Confucian philosophy was ethical and not, strictly speaking, religious. Even Taoism was more of a spiritual affinity with the forces of nature (also manifested in man) than a theistic religion-unless one wants to view it as a Chinese version of "Spinozistic" pantheism. *There was a firm Chinese conviction in the relevance of history to the thinking through of current public, political, and diplomatic affairs-hence, the importance it assumed in Chinese civil service examinations.*
- Brown points the reader to many primary and secondary sources in Chinese historiography. For example, I. Miyrazacki, *China's Examination Hell[!]: The Civil Service Examinations of Imperial China* (New York: Weatherhill, 1976). Brown praises, too, the development of Islamic historiography (also far ahead of European history-writing in the Middle Ages). Pertinent writers, such as Ibn Khaldun, are cited, as well as the historiography of much more recent Islamic history writers. Ibn Khaldun was also a pioneering ethnographer/ethnologist.
- W. G. Beasley and F. G. Pulleyblank, eds., *Historians of China and Japan* (London: Oxford University Press, 1961). See especially the editorial "Introduction" and W. Franke's essay, "The Veritable Records of the Ming Dynasty" (pp. 60-77).

- C. S. Gardner, *Chinese Traditional Historiography* (Cambridge, MA: Harvard University Press, 1961).
- A. Dirlik, *The Origins of Marxist Historiography in China, 1919–1937* (Berkeley: University of California Press, 1978).
- J. Needham, *Science in Traditional China: A Comparative Perspective* (Cambridge, MA: Harvard University Press, 1981). A wonderful short introduction to Needham's- and Wang Ling's 5-volume *Science and Civilization in China* (Cambridge: Cambridge University Press, 1975). Documents that Chinese pure and applied sciences (engineering and technology) were far ahead of those in Europe until the Galilean/Newtonian/Harveyan mathematical physical and experimental biological revolutions. Given the sheer intellectual power and scope and careful documentation of Needham *et al.*'s work, it is remarkable that most Western, Eurocentric histories of science still overlook it-perpetuating the historical falsehood that the pure and applied scientific method developed only in Western Europe.
- R. C. Majunda, *Historiography in Modern China* (New York: Asian Publishing House, 1970).
- S. P. Sen, *Historians and Historiography in Modern India* (Calcutta: Institute of Historical Studies, 1973). A genuinely historical (as opposed to mythological) tradition began developing in India only after the Muslim Conquest. It was of course further influenced by the mid-eighteenth through mid-twentieth century British dominance of the sub-continent.
- A. Feuerwerker, ed., *History in Communist China* (Cambridge, MA: MIT Press, 1968).
- F. Rosenthal, *A History of Muslim Historiography*, 2nd rev. ed. (Leiden: E. J. Brill, 1968). Best book in English on the topic. Also see Rosenthal's three-volume translation of Ibn Khaldun's masterful *The Maqaddimah: An Introduction to History*, 3 vols. (Princeton, NJ: Princeton University Press, 1958). In short, the Islamic, like the Chinese, historiographical tradition was well ahead of European historical work until the middle Renaissance. It was, again, the Muslims that brought mythology/caste-ridden India its first really historical traditions. On this see A. L. Bashan, *The Wonder that Was India: A Survey of the Indian Subcontinent Before the Coming of the Muslims* (New York: Harper & Row, 1962). See also B. S. Cohn, *India: The Social Anthropology of a Civilization* (Englewood Cliffs, NJ: Prentice-Hall, 1971). On what approximated (by a considerable stretch of the term) an indigenous, pre-Islamic, Indian "historiography" see V. S. Pathak, *Ancient Historians of India: A Study of Historical Biographies* (New York: Asia Publishing House, 1966), and F. E. Pargiter, *Ancient Indian Historical Tradition* (Delhi: Motilal Banarsidass, 1972).

Encyclopedic References, Dictionaries, and Methodological Manuals

- P. P. Weiner, editor-in-chief, *Dictionary of the History of Ideas*, 5 vols. (New York: Charles Scribner's Sons, 1968–1973). Useful on the philosophy and methodology of history, as well as on pertinent cultural and intellectual developments (including those of science, medicine, and psychiatry).
- J. Cannon, R. H. Davis, W. Doyle, and J. P. Greene, eds., *The Blackwell Dictionary of Historians* (Oxford: Basil Blackwell, 1987). Important both for the history of history and for its philosophy and methodology.
- S. K. Kimmell, ed., *Historiography: An Annotated Bibliography of Journal Articles, Books, and Dissertations*, 2 vols. (Santa Barbara, CA: ABC-Clio, 1987).
- P. Edwards, editor-in-chief, *The Encyclopedia of Philosophy*, 8 vols. in 4 (New York: Collier Macmillan, 1967). A long-needed revision and expansion is supposedly under way.
- E. and M. Beardsley, eds., *Prentice-Hall Foundations of Philosophy Series* (Englewood Cliffs, NJ, 1964–1990s). Eminently readable, terse, and pithy volumes by distinguished experts in their fields. Good references to further reading in each: *Philosophy of Art*, V. Aldrich; *Philosophy of Language*, W. Alston; *Philosophy of Mathematics*, S. Barber; *Theory of Knowledge*, 2nd ed., R. Chisolm; *Philosophy of History*, W. Dray; *Social Philosophy*, J. Feinberg; *Philosophy of Economics*, C. Dyke; *Political Philosophy*, J. Feinberg; *Ethics*, W. Frankena; *Philosophy of Law*, M. Golding; *Philosophy of Religion*, 3rd ed., J. Hick; *Philosophy of Education*, J. Lenz; *Philosophy of Social Science*, D. B. Brooke; *Philosophy of Natural Science*, C. Hempel; *Philosophy of Biological Science*, D. Hull; *Logic*, 3rd ed., W. Salmon; *Philosophy of Logic*, 3rd ed., W. Quine; *Metaphysics*, R. Taylor; *Philosophy of Mind*, J. Shaffer; and *Philosophy of Psychology*, J. Margolis.
- P. C. Brooks, *Research Archives: The Use of Unpublished Primary Sources* (Chicago: University of Chicago Press, 1969). Very useful guide for the would-be historian.
- T. G. Rawski, ed., *Economics and the Historian* (Berkeley: University of California Press, 1996). A number of essays by historians and economists on applying economic theory, methods, and data to historical research.

- K. H. Jarausch and K. A. Hardy, *Quantitative Methods for Historians: A Guide to Research, Data, and Statistics* (Chapel Hill: University of North Carolina Press, 1991).
- D. J. Gary, ed., *The Harper Collins Dictionary of Sociology* (New York, 1991). Useful overview for the potential applications of sociology to historical studies.
- P. Abrams, *Historical Sociology* (Ithaca, NY: Cornell University Press, 1982). A sound exposition of this relatively new and hybrid discipline. Illustrates the various sociological understandings of historical processes.
- J. D. Willigan and K. A. Lynch, *Sources and Methods of Historical Demography* (New York: Academic Press, 1982). Relates population densities, increases, and declines (including epidemic ones such as the “Black Death”) to historical changes in sociocultural, political, and economic structures.
- P. Burke, *Sociology and History* (London: Allen and Unwin, 1980). Theoretical and methodological discussions of the reciprocal usefulness of sociological and historical perspectives to one another.
- A. L. Stinchcombe, *Theoretical Methods in Social History* (New York: Academic Press, 1978). Considers a variety of approaches such as that of the Annales school, J. W. Thompson, Ladurie, and others.
- J. Carey, ed., *Eyewitness to History* (New York: Aron, 1990). Eyewitness excerpts from Thucydides on the plague at Athens to James Fenton on the fall of Philippine President Marcos. Informative and entertaining.
- D. P. Henige, *Oral Historiography* (London: Longman, 1982). A thorough exposition of approaches to taking and utilizing oral histories in relatively recent or contemporary historical research (whether biographical or more broadly sociocultural).
- J. Vansina, *Oral Tradition as History* (Madison: University of Wisconsin Press, 1985). Looks at both the faithfulness and the fallibilities in longstanding oral historical traditions.
- F. A. Yates, *The Art of Memory* (Chicago: University of Chicago Press, 1966). This classic study can be read in conjunction with Vansina’s aforementioned book—and Nesser and Le Goff below. It recounts mnemonic devices from classical Greece and Rome, through the Medieval and Renaissance epochs, on to the seventeenth century scientific revolution. It forcefully reminds us of the incredible mnemonic powers of many educated persons and groups prior to the Gutenberg revolution in moveable type, which eventually made books infinitely more widely available.

Incredible mnemonic feats still occur today—among Muslims who have memorized (often by early adolescence) the entire Koran, and among certain Jews, whose memory of the entire Talmud is so visually eidetic that they can move back and forth between mentally imaged sections of text as they discuss various issues among themselves. In contemporary nonliterate tribal societies, anthropologists have observed that there is often a division of labor in the memorization of chronicles, stories, legends, mythologies, songs, and so on, such that each sage specializes in the memorization of only part of important traditional lore. This may well have been the way that Homer’s *Iliad and Odyssey* survived during the nonliterate Greek interval between the loss of Mycenaean Linear B and the resurrection of a Greek script in the eighth century B.C.E. Recall, in this light, archaeological support for parts of the *Iliad*—Heinrich Schliemann’s digs at the turn of the twentieth century and subsequent more scientific ones; the Mycenaean-period destruction (ca. thirteenth century B.C.E.) suggests a coastal Turkish city. Many scholars believe this to have been Troy (under the mound of Hissarlik). *It had a prior, millennia-long existence; as evidenced by close to a dozen strata of occupation!* Finally, regarding remarkable present-day memory feats, let us consider London’s cabbies. London covers one of the largest areas of any world metropolis. Its drivers must have cognitive maps of every boulevard to alleyway in greater London, as well as of all the most efficient ways to get between any two points. They undergo an initial, intensive training to learn this geographic information (which also includes monumental, architectural, and landscape landmarks) and to fix it in long-term memory. They must then face grueling paper-and-pencil tests of their memories (i.e., cognitive mapping and mental images) of what they have been taught. And then, if one passes these (and many don’t), one must proceed to actual on-the-road exams. Finally, those admitted to the ranks are not at-quits with their educations. New streets and landmarks are added; old ones are destroyed for new housing or parks; and so forth. To learn these and to refresh their memories of what they have already learned, they periodically undergo additional schooling throughout their careers. We allude to them again, briefly, in the “Epilogue.” To begin with, thanks to the work of the Nobelist Erik Kandel and others, we know that converting short-term to long-term “procedural memory” (and “declarative memory” would also figure, although less so, in cabbies’ unconscious memory-banks) involves the building of actual new neural structure, especially axons, axon terminals, and dendrites. Brain imaging studies of these cabbies have shown that their hippocampuses (which convert short-term to long-term memories) are substantially larger than those of normal controls!

In sum, it is quite likely that a great deal of orally transmitted material—in antique and Medieval periods—was still quite accurate at the time of its transcription to moveable type. Moreover, for many centuries, Islamic scholars and Christian scribal monks had kept alive countless key antique, medieval, and Islamic tracts on every subject under the sun.

P. Thompson, *The Voice of the Past: Oral History* (Oxford: Oxford University Press, 1978). A historiography of oral history and a “how-to” manual.

U. Nesser, *Memory Observed: Remembering in Natural Contexts* (New York: W.H. Freeman, 1982).

J. LeGoff, *History and Memory*, trans. S. Randall (Columbia University Press, 1992).

R. A. Rosenstone, *Visions of the Past: The Challenge of Film to Our Idea of History* (Cambridge, MA: Harvard University Press, 1995). A historiography of documentary film and of Hollywood “historical” movies. An argument and critique.

D. L. Sills, ed., *International Encyclopedia of the Social Sciences*, 17 vols. (New York: Macmillan and the Free Press, 1968). Absolutely indispensable to the serious scholar. Will almost certainly never be repeated—so monumental was the enterprise.

J. H. Randall, Jr., *The Making of the Modern Mind* (Columbia University, 1976). A sociocultural/intellectual history of amazing sweep.

A. Bullock, O. Stallybrass, and S. Trombley, eds., *The Harper Dictionary of Modern Thought*, new rev. ed. (New York: Harper & Row, 1988).

D. Townson, ed., *The New Penguin Dictionary of Modern History, 1789–1945* (New York: Penguin, 1994).

H. Kinder and W. Hilgemann, eds., *The Anchor Atlas of World History*, 2 vols., trans. E. A. Menze (Garden City, NY: Anchor Doubleday, 1974). Excellent colored maps and historical text captions. Inexpensive, high-quality paperback.

L. Thorndike, *A History of Magic and Experimental Science: From the First- Through the Seventeenth-Centuries, C.E.* (New York: Columbia University Press, 1923–1958). Dated in some measure, though still the classic history of the development toward science of such comprehensive sweep. Contains an extraordinary number of references to primary and secondary works. Best used as an encyclopedic reference by topic or period. To read from cover to cover would be a breathtakingly athletic intellectual endeavor.

W. F. Bynum, E. J. Browne, and R. Porter, eds., *Dictionary of the History of Science* (Princeton, NJ: Princeton University Press, 1981).

R. E. McGraw, *Encyclopedia of Medical History* (New York: Macmillan, 1985).

J. Walton, P. B. Beeson, and R. B. Scott, eds., *The Oxford Companion to Medicine*, 2 vols. (New York: Oxford University Press, 1986). Has much historical material, though its primary focus is on contemporary internal medicine. Particularly useful to non-M.D. medical historians.

W. F. Bynum and R. Porter, eds., *Companion Encyclopedia of the History of Medicine*, 2 vols. (New York: Oxford University Press, 1993). Partner to the above. Deals exclusively with medical history.

W. T. Reich, editor-in chief, *Encyclopedia of Bioethics*, rev. ed., 6 vols. (New York: Macmillan Library Reference USA, 1995). A third (revised) edition is now in press.

R. Harré and R. Lamb, eds., *The Encyclopedic Dictionary of Psychology* (Cambridge, MA: MIT Press, 1983).

R. Milner, *The Encyclopedia of Evolution* (New York: Facts on File, 1990). Historical and theoretical entries on this pan-influential set of ideas.

Journals

History and Theory. Now in its fifth decade. The best journal for original articles in the philosophy, theory, and methodology of history. See, for example, G. H. Nadel, ed., *Studies in the Philosophy of History: Selected Essays from ‘History and Theory’* (New York: Harper Torchbooks, 1965).

Journal of the History of Ideas. Articles on intellectual/cultural history and the philosophy and methodology of history, psychology, and the social sciences.

Journal of Interdisciplinary History. Papers on social, political, and economic history; serious contributions to psychohistory and philosophy and methodology of history.

Journal of Psychohistory. Generally more serious and sober entries on the subject.

Journal of Contemporary History: An Annual. See, e.g., W. Laquer and G. L. Mosse, eds., Vol. 4, *The New History: Trends in Historical Research and Writing Since World War II* (New York: Harper, 1966/67).

Daedalus: Journal of the American Academy of the Arts and Sciences. Well over a century old. Highly respected journal that often deals with history and its philosophy and methodology. Examples: (1) *Historical Studies Today* 100 (1971): v–xiv, 1–258; and (2) *The Historian and the World of the Twentieth-Century* 100 (1971): v–xii, 271–532.

The American Scholar. Occasionally treats history and its philosophy and methodology.

- History of the Human Sciences*. Began publication in 1988. Issues are often topical, such as Special Issue: Psychology and Related Topics 1: (1988):147–301, which includes, e.g., R. Smith, “Does the History of Psychology Have a Subject?” 147–177. Very good book reviews and review essays.
- Isis: The Journal of the History of Science*. Covers the history and historiography of the social, as well as the natural, sciences.
- Journal of the History of the Behavioral Sciences*. Frequent articles on the history of psychology, psychiatry, psychoanalysis, as well as philosophical/methodological papers. Excellent book reviews and review essays.
- History of Psychiatry*. Relatively new, but thriving, journal. Treats all aspects of the history of psychiatry and psychoanalysis; includes historiography as the history of history and as its philosophy/methodology.
- Philosophy, Psychiatry, Psychology*. Now in its second decade. Issues are usually topical; including historiography as the history of psychiatry and as its philosophy/methodology. Excellent companion journal to *History of Psychiatry* and *Journal of the History of the Behavioral Sciences*.
- Bulletin of the History of Medicine*. Long-running organ of the American Association of the History of Medicine and the Johns Hopkins University Institute for the History of Medicine. It includes articles on the history of psychiatry and psychoanalysis and occasional philosophical/methodological pieces.
- Journal of the History of Medicine and Allied Sciences*. Similar coverage to the above.
- Journal of Medicine and Philosophy*; usually topical issues. Good companion to the aforementioned two medical historical journals.
- The Journal of Psychoanalytic Anthropology* (began publication as *The Journal of Psychological Anthropology*). Topnotch editorial board comprises general cultural anthropologists, culture-and-personality anthropologists, and psychological and psychoanalytic anthropologists (some with lay analytic training as well as anthropological Ph.D.'s). Occasionally includes articles at the interface of anthropology/psychohistory. Good book reviews.
- Psychoanalysis and the Social Sciences*; later *The Psychoanalytic Study of Society*. A very useful annual to biennial journal with articles by psychoanalytically sophisticated cultural anthropologists and culturally informed psychoanalysts, including a number of Ph.D. cultural anthropologists/lay analysts. Occasionally deals with historical and methodological issues. Unfortunately, ceased publication with Volume 19 (1994). Still readily available in university libraries.

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Edwin R. Wallace, IV, “Toward a Phenomenological and Minimally Theoretical Psychoanalysis,” *The Annual of Psychoanalysis*, XVII (1989): 17–69.
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- St. Augustine, *The City of God*, trans. Henry Bettenson (Middlesex, England: Penguin Books, 1961).
Reinhold Niebuhr, *The Nature and Destiny of Man*, 2 vols. (New York: Scribner's, 1941).
Giambattista Vico, *A Study of the New Science* [1744], trans. Leon Pompa (Cambridge: Cambridge University Press, 1975).
G. Vico, *The Autobiography* [1731], trans. and introductory essays, M. H. Fisch and T. Bergin (Ithaca, NY: Cornell University Press, 1944).
Robert Caponigri, *Time and Idea: The Theory of History in Giambattista Vico* (Notre Dame, IN: University of Notre Dame Press, 1968). There has been a minor renaissance in Vico studies that has continued to date.
For an excellent discussion of J. G. von Herder's *Ideas for the Philosophy of History of Mankind* (originally published in four volumes, 1784–1791), see R. Flint, *The Philosophy of History in France and Germany* (New York: Scribners, 1874).
I. Kant, *On History*, ed. and trans. L. W. Beck (New York: Bobbs-Merrill, 1963).
G. W. F. Hegel, *The Philosophy of History*, trans. J. Sibree (Amherst, NY: Prometheus Books, 1991).
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Karl Marx, *Capital: A Critique of Political Economy*, 3 vols. [1867–1869] (Chicago: C. H. Kerr. Co., 1925–1926).
Friedrich Engels, *The Origin of the Family, Private Property and the State* [1884] (New York: Penguin Books, 1985).

- Oswald Spengler, *The Decline of the West*, 2 vols., trans. C. F. Atkinson (New York: Alfred A. Knopf, 1994).
- Arnold Toynbee, *A Study of History*, 10 vols. (Oxford: Oxford University Press, 1974). A quite competent two-volume abridgement of Toynbee was done by D. C. Somervell, *A Study Of History (Abridgement of Vols. 1–10)*, 2 vols. (Oxford: Oxford University Press, 1974).
- Ronald H. Nash, ed., *Ideas of History*, Vol. I: *Speculative Approaches to History* (New York: Dutton, 1969). A useful anthology of excerpts.
- Karl Löwith, *Meaning in History* (Chicago: University of Chicago Press, 1949). Examines a number of speculative philosophers of history from the Bible, Orosius, and Augustine on to Hegel, Marx, and Burckhardt.
- Arnold Toynbee and D. C. Somervell, *Civilization on Trial and The World and the West* (New York: Meridian Books, 1958). Two of Toynbee's books in one, together with D. C. Somervell's "The Argument of A Study of History," pp. 299–348.
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 6. Carl Becker, *Detachment and the Writing of History*, ed. P. Snyder (Ithaca, NY: Cornell University Press, 1958), 48.
 7. G. Florovsky, "The Study of the Past," in *Ideas of History*, Vol. II: *The Critical Philosophy of History*, ed. Ronald H. Nash (New York: E. P. Dutton, 1969), 351–369; see p. 361.
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 10. Leopold von Ranke, *The Theory and Practice of History*, eds. and trans. G. Iggers and K. von Moltke (New York: Bobbs-Merrill, 1973), 30–31.
 11. S. Langlois and C. Seignebos, *Introduction to the Study of History*, trans. G. Berry (London: Duckworth, 1898), 57–61.
 12. Charles Beard, "The Noble Dream," in *Ideas of History*, Vol. I: *Speculative Approaches to History*, ed. Ronald H. Nash (New York: E. P. Dutton, 1969), 162–176.
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Carl Becker, *Detachment and the Writing of History*, ed. P. Snyder (Ithaca, NY: Cornell University Press, 1958), 48.
See Peter Novick, *That Noble Dream: The "Objectivity Question" and the American Historical Association* (Cambridge: Cambridge University Press, 1988), for a recent revivification of the Beard/Becker argument. He selectively refers to historians and philosophers of history who share his point of view. Where he focuses on otherwise quite competent intersubjectivist historians; he chooses their wartime histories of then-enemy countries—which are precisely the occasions when otherwise serious and rigorously empirical historians can lapse into diatribes. *And yet, by claiming he has correctly read the historiographical "tea-leaves," he invokes the same intersubjectivist criteria for competent historical work that he is explicitly decrying. Again, the epistemological problem of self-reflexivity-asserting the "truth" that there is no intersubjective historical truth (characteristic also of "deconstructionism")—either (1) delivers them over to the hands of their enemies or else (2) commits them to the position, actually adopted by the later Foucault and some other postmodernists, that they are writing propagandist fiction.* And Novick simply brushes over too many of those with opposing viewpoints. For a historicist critique of Novick see Alan B. Spitzer, *Historical Truth and Lies About the Past* (Chapel Hill: University of North Carolina Press, 1996), 5–6.
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Charles Beard, in *Ideas of History*, Vol. I: *Speculative Approaches to History*, ed. Ronald H. Nash (New York: E.P. Dutton, 1969), 162–176; see p. 171.
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Ibid., 53.
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Donald Spence, *Narrative Truth and Historical Truth: Meaning and Interpretation in Psychoanalysis* (New York: Norton, 1982).
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The Freud and Dora case illustrates the (probably, in large measure, unconscious, or at-most preconscious) patriarchal assumptions of Freud; and their disastrous effects on Dora's analysis in 1901. It is also an excellent exemplar of the social and familial determinants of *fin de siècle* women's psychopathology—which also functioned as hindrances to their recovery. In fairness to Freud, this was still in the very-early stages of his development of a theory of psychoanalytic therapeutics. For example the concepts of "transference" and "countertransference"

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- D. Roberts, *Psychotherapy and a Christian View of Man* (New York: Scribner's, 1950). Helped make liberal Protestant pastors receptive to psychoanalysis and psychotherapy. Eventuated in the current pastoral psychotherapy segment of the broader clinical pastoral movement (Christian and Jewish).
- V. White, *Soul and Psyche: An Inquiry Into the Relationship of Psychotherapy and Religion* (New York: Harper, 1950). Written from a Jungian standpoint.
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- W. E. Oates, *The Religious Care of the Psychiatric Patient* (Philadelphia: Westminster Press, 1978). A leader of the early to contemporary generation of the mental health chaplaincy and clinical pastoral movements. A prolific writer of theoretical and practical texts.
- W. E. Oates, *When Religion Gets Sick* (Philadelphia: Westminster Press, 1970).
- C. V. Gherkin, *The Living Human Document: Re-Visioning Pastoral Counseling in a Hermeneutical Mode* (Nashville, TN: Abingdon Press, 1984). The definitive statement by another leader of the mental health chaplaincy and clinical pastoral movement. There have been two organizations within this movement for some time: the American Association of Pastoral Counselors (AAPC) and the American Association of Clinical Pastoral Education (AACPE). The former comprises more-traditional Christian and Jewish clergy, while the latter caters to a somewhat-more-liberal segment. The AACPE is more psychoanalytically oriented and supports pastoral psychotherapy, not just pastoral counseling. Certification as an AACPE supervisor requires theological knowledge and clinical experience, as well as personal analytic psychotherapy of all its candidates. It is important to note, however, that some have a foot in both organizations.
- O. Pfister, "Die Illusion einer Zukunft" ["The illusion of the Future"], *Imago* 14 (1928): 149–184.
- O. Pfister, *Psychoanalyse und Weltanschauung* [Psychoanalysis and World-Views] (Vienna: Internationaler Psychoanalytische Verlag, 1928). Both works are a riposte to Freud's *Future of an Illusion* and his quasi-religious faith in science ("scientism"). Pfister also pointed out that Freud moved from propositions about developmental influences on adult conceptions of God to *metaphysical* propositions (i.e., that the psychological dynamisms *entirely determine* theistic beliefs and that there is no God). Pfister, a Ph.D., as well as a pastor and lay analyst, mounted a much more philosophically and psychoanalytically sophisticated argument than Freud's in *The Future of an Illusion* (much of which comes straight out of Hume and Feuerbach).
- M. Ostow, *Judaism and Psychoanalysis* (New York: Ktav, 1982).
- M. H. Spero, *Judaism and Psychology: Halakhic Perspectives* (New York: Yeshiva University Press, 1980). Focuses on psychoanalysis.
- M. H. Spero, *Religious Objects in Psychotherapy and Judaism* (Chicago: University of Chicago Press, 1992).
- A. M. Rizzuto, *The Birth of the Living God* (Chicago: University of Chicago Press, 1979). Based on object relations theory and Winnicott's "transitional object" approach. Built around a great deal of actual clinical case material.
- W. W. Meissner, *Psychoanalysis and Religious Experience* (New Haven, CT: Yale University Press, 1984). Like Rizzuto, draws heavily on Winnicott's transitional object idea. Chapter 4 (pp. 73–103) is a good discussion of Pfister's response to Freud's *Future of an Illusion* and of the two men's relationship (stable and long-lasting; despite their philosophical/theological differences).
- A. Vergote, *Guilt and Desire: Religious Attitudes and Their Pathological Derivatives*, trans. M. H. Wood (New Haven, CT: Yale University Press, 1988). The recently deceased Antoine Vergote, of the University of Louvain in Belgium, had a double doctorate in theology and philosophy/psychology and was a lay analyst as well. In my opinion, this is the best book in any language on the interface of psychoanalysis and religion.
- E. R. Wallace, IV, "The Psychodynamic Determinants of *Moses and Monotheism*," *Psychiatry* 40 (1977): 79–87. Deals with the psychological roots of Freud's highly problematic stance on the history of Judaism.

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- E. R. Wallace, "A Commentary on the Freud-Jung Letters," *Psychoanalytic Review* 67 (1980): 111–138. These letters often touch on tribal and Western religion.
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- E. R. Wallace, "Freud and Religion: A History and Reappraisal," *The Psychoanalytic Study of Society* 10 (1984): 113–166. Also focuses on Freud's ambivalent and conflicted attitude toward religion, as well as his more positive take on belief in the Deity in childhood, adolescence, and young adulthood. Argues psychoanalysis itself took on quasi-religious overtones for Freud, such that it was in part (contra Rieff, 1966) a "commitment therapy" for him.
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- E. R. Wallace, "Psychiatry and Religion: Toward a Dialogue and Public Philosophy," in *Psychoanalysis and Religion* (Psychiatry and the Humanities, Vol. 11), eds. J. Smith and S. Handelman (Baltimore: Johns Hopkins University Press, 1990), 195–221. Deals with points of contact and conflict between psychiatry/psychoanalysis and religion; reviews the social science research on the subject.
- E. R. Wallace, "Psychoanalytic Perspectives on Religion," *International Review of Psychoanalysis* 18 (1991): 265–278. Deals with pathological and health-promoting versions of religious faith and practice. Points out that the issue of religious truths is a metaphysical—and not psychologically soluble—problem.
- E. R. Wallace, "Psychiatry: The Healing Amphibian," in *Does Psychiatry Need a Public Philosophy?*, eds. S. Browning and I. Evison (Englewood Cliffs, NJ: Prentice-Hall, 1991), 74–120. Takes a pluralistic view of our various psychiatries and their relations to modern culture and religion. Argues that psychiatry needs to do a better job of articulating its relation to religion and other popular aspects of culture (i.e., a public philosophy). Also views psychiatry as "amphibious," with one foot in the sciences and another in the humanities and values-realm generally.
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280. A. O. Lovejoy, *The Great Chain of Being: A Study of the History of an Idea* [1933], (Cambridge, MA: Harvard University Press, 1978). A classic philosophical and historical examination of a long-dominant concept and metaphor.
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- L. Freeman, *The Story of Anna O.: The Woman Who Led Freud to Psychoanalysis* (New York: Walker and Company, 1972). A relatively early (and very sober and insightful) feminist work in the history of psychoanalysis. Reveals Bertha Pappenheim's important role in Breuer and Freud's development of the "talking cure" and analysis of free associations. She later became a gifted social worker and feminist advocate.
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Abram Kardiner, *The Psychological Frontiers of Society* (New York: Columbia University Press, 1945).

H. and R. Ansbacher, eds., *The Individual Psychology of Alfred Adler: The First Systematic Presentation of His Writings* (New York: Basic Books, 1956). Amounts to a systematic exposition of Adler's theory and therapy. The best biographical treatment of Adler is still Ellenberger's (1970) monographic chapter on him in his classic *The Discovery of the Unconscious: The Evolution of Dynamic Psychiatry* (New York: Basic Books, 1970). For a counterbalance to Ellenberger, see Paul Stepansky's rather critical biography, *In Freud's Shadow: Adler in Context* (Hillsdale, NJ: The Analytic Press, 1983). Stepansky argues that much of Adler's psychology was thinly disguised socialist political propaganda.

Jung never published a complete account of his psychology and its applications in psychotherapy. One has to go through his writings to find pieces of it here and there. The closest such text is the terse posthumous *Analytical Psychology: Its Theory and Practice* (New York: Pantheon, 1968, published originally in English). His writings are readily available in *The Collected Works of C. G. Jung*, issued in 20 volumes under the aegis of the Bollingen Foundation from 1957 to 1979, with Vol. 19 being the excellent bibliography and Vol. 20 the general index, to which two supplementary volumes were added in 1983 and 1992. The early volumes were published in New York by Pantheon, with the series later taken over by Princeton University Press. In England the set was issued by Routledge. The English translation corresponds (though not exactly) to the *Gesammelte Werke*, published as 18 volumes in 22 physical books by Rascher Verlag in Zurich, with the last few volumes issued by Walther-Verlag, the successor firm to Rascher. The two best introductory texts on Jung's analytical psychology are (1) (Jung-endorsed) J. Jacobi, *The Psychology of Jung* (New Haven, CT: Yale University Press, 1943, first published in German in 1940) and (2) J. Singer's thorough and eminently readable *Boundaries of the Soul: The Practice of Jung's Psychology* (Garden City, NY: Doubleday, 1975). For a historical overview; see A. Samuels, *Jung and the Post-Jungians* (London: Routledge and Kegan Paul, 1975). Also of course Ellenberger's (1970) fine entry on Jung.

For an overview of Clara Thompson's interpersonal dynamic culturalist approach, as well as that of her followers and colleagues at the revisionist William Alanson White Institute (one of the first to accept non-M.D. psychoanalytic candidates, and heavily influenced by Sullivan), see C. Thompson, M. Mazer, and E. Witenberg, eds., *An Outline of Psychoanalysis*, rev. ed. (New York: Random House, 1955; a revision of her 1950 *Psychoanalysis: Evolution and Development*).

K. Horney, *The Collected Works of Karen Horney*, 2 vols. (New York: W. W. Norton, ca. 1964). Her five published books were here usefully issued together. There is a Horney-influenced Institute of Psychoanalysis in New York, which publishes its own journal, *The American Journal of Psychoanalysis*. The members and trainees of revisionist "neo-Freudian" Institutes formed the American Academy of Psychoanalysis; as opposed to the much older, mainstream American Psychoanalytic Association.

Harry Stack Sullivan, a renegade member of the American Psychoanalytic Association who actively collaborated with cultural anthropologists, increasingly moved toward a more culturally informed interpersonal and proto-object relations psychoanalysis. During his decade in New York he was a regular member of the Zodiac Club (composed of culture and personality anthropologists such as Ruth Benedict, Margaret Mead, Clyde Kluckhohn, and other anthropological luminaries). The culture and personality movement of the 1930s through the early 1960s was the golden age of psychoanalytic influence on anthropology-though it still has an important presence in that discipline [Edwin R. Wallace, IV, *Freud and Anthropology: A History and Reappraisal* (New York: International Universities Press, 1983)]. Sullivan moved to the Baltimore-Washington, D.C. area, working at the "Ivy League" psychoanalytic sanitarium, first at the Sheppard and Enoch Pratt hospital outside Baltimore and then at Chestnut Lodge outside Washington. He pioneered in the use of audiovisual material in resident supervision and in demonstrating interview technique. A troubled man and an alcoholic; he was nevertheless the first home-grown near-genius in American psychiatry (Adolf Meyer, one of his influences, was of course a transplanted Swiss). At Sheppard Pratt, Sullivan organized a pioneering schizophrenia treatment unit, with aides he had personally trained and with a very high staff-to-patient ratio. This was before the antipsychotic medications; and his results seem to have been quite positive. He strongly influenced the great dynamic psychiatrist of both neurotic and psychotic disorders Frieda Fromm-Reichmann

(whose *Principles of Intensive Psychotherapy* [University of Chicago Press, 1950] was the first important and widely used dynamic psychotherapy text for non-analytic psychiatrists), who became clinical director at Chestnut Lodge. Sullivan wrote mostly articles, especially for the journal he helped found in 1938, *Psychiatry: Journal of the Biology and Pathology of Interpersonal Relations*, which is still thriving. After much collegial pressure; he published an addendum volume to the journal *Psychiatry*; which was the first systematic exposition of his approach: *Conceptions of Modern Psychiatry: The First William Alanson White Memorial Lectures* (1945, 147 pages, originally published in the journal in 1940).

The first Sullivan-related book to appear after his death was P. Mullahy, ed., *The Contributions of Harry Stack Sullivan: A Symposium*, (New York: Hermitage House, 1952). It was divided into three sections: (1) "Sullivan's Conceptions," (2) "Sullivan as a Clinician," and (3) "Sullivan and the Social Sciences." The contributors to each section were among the most distinguished in their fields. After Sullivan's death in 1949, his faithful secretary, Helen Swick Perry, edited his seminal articles into half-a-dozen books (all coherently organized by topic and all published by W. W. Norton). In order these were *Conceptions of Modern Psychiatry* (1953), *The Interpersonal Theory of Psychiatry* (1953), *The Psychiatric Interview* (1954), *Clinical Studies in Psychiatry* (1956), *Schizophrenia as a Human Process* (1962), and *The Fusion of Psychiatry and Social Science* (1964). Of these, the most widely influential were the first three. For *Clinical Studies* Perry and Dexter Bullard managed to condense over a million words in 246 lectures and case discussions at Chestnut Lodge, stenographically or audiovisually recorded from 1942 to April 1946. Finally, against the wishes of his friends and colleagues, in 1972 Norton published Sullivan's at times bizarre and very self-revealing *Personal Psychopathology*, originally privately circulated in 1932 to only a small number of people, but circulated again in 1965 in privately printed form by the William Alanson White Foundation. Despite-and in some respects because of-the thinly-veiled discussions of his own traumatic childhood, adolescence, adult psychopathology, and homosexual propensities; this remains a useful book—it certainly is for anyone interested in Sullivan himself. An excellent book on Sullivan, oriented toward the clinician, is A. H. Chapman, *Harry Stack Sullivan: The Man and His Work* (New York: G. P. Putnam's Sons, 1976). Helen Swick Perry capped off her life's work with her marvelous biography, *Psychiatrist of America: The Life of Harry Stack Sullivan* (Cambridge, MA: Belknap Press of Harvard University, 1982). My 1983 psychoanalytic text draws heavily on Sullivan's approach: E. Wallace, *Dynamic Psychiatry in Theory and Practice* (Philadelphia: Lea and Febiger).

On the so-called "neo" or "post" Freudians generally, see P. Mullahy, *Oedipus: Myth and Complex. Freud, Jung, Adler, Rank, Sullivan, Horney, Fromm* (New York: Hermitage Press, 1948), and J. A. C. Brown, *Freud and the Post-Freudians* (New York: Penguin, 1964).

283. H. Kohut, *The Analysis of the Self* (New York: International Universities Press, 1971).

H. Kohut, *The Restoration of the Self* (New York: International Universities Press, 1977). The latter was his mature statement; and much more readable and clinically applicable than his first book, which was a mish-mash of traditional structural and economic concepts with his then still-evolving self psychology. Many writers (previously cited) are forming bridges among traditional psychoanalytic ego psychology, object relations theory, and Kohutian self psychology, with many such syntheses published by The Analytic Press.

284. J. Dollard and N. E. Miller, *Personality and Psychotherapy* (New York: McGraw-Hill, 1950). An early attempt to synthesize psychoanalysis and behaviorist learning theory.

P. L. Wachtel, *Psychoanalysis and Behavior Therapy: Toward an Integration* (New York: Basic Books, 1977).

285. M. Ferguson, *The Aquarian Conspiracy: Personal and Social Transformations in the 1980s* (Los Angeles: J. P. Tarcher, 1980).

L. Rickels, *The Case of California* (Baltimore: Johns Hopkins University Press, 1991). A humorous/serious account of California's myriad popular cultures, including the cult of alternative psychotherapies.

A. Kiev, *Curanderismo: Mexican-American Folk Psychiatry* (New York: Free Press, 1968).

N. Gevitz, ed., *Other Healers: Unorthodox Medicine in America* (Baltimore: Johns Hopkins University Press, 1988).

F. M. Frohock, *Healing Powers: Alternative Medicine, Spiritual Communities, and the State* (Chicago: University of Chicago Press, 1992).

For religious and folk-psychotherapeutic traditions in India, see S. Kakar, *Shamans, Mystics, and Doctors* (Boston: Beacon Press, 1982). As of 1990 the Indian Psychiatric Society had only 1,200 members and the Indian Psychoanalytic Society fewer than 40—for a country of 1.3 billion people! (Vijoy Varma, M.D., several times president of the Indian Psychiatric Society, personal communication, 1990).

286. P. Rieff, *The Triumph of the Therapeutic: Uses of Faith After Freud* (Chicago: University of Chicago Press, 1966).

E. R. Wallace, "Psychiatry: The Healing Amphibian," in *Does Psychiatry Need a Public Philosophy?*, D. Browning and I. Evison, eds. (Chicago: Nelson-Hall, 1992), 74–120.

287. S. Freud, "Postscript," *The Question of Lay Analysis* [*The Standard Edition of the Complete Psychological Works of Sigmund Freud, Vol. 20*] (London: Hogarth Press), 1955, 251–257.
H. Meng and R. Freud, *Psychoanalysis and Faith: The Letters of Sigmund Freud and Oskar Pfister* (New York: Basic, 1963), 21–23.
288. E. R. Wallace, "Psychiatry: The Healing Amphibian," in *Does Psychiatry Need a Public Philosophy?*, D. Browning and I. Evison, eds. (Chicago: Nelson-Hall, 1992), 74–120.
289. R. L. Numbers, *Almost Persuaded: American Physicians and Compulsory Health Insurance, 1912–1920* (Baltimore: Johns Hopkins University Press, 1978).
A. Wear, ed., *Medicine in Society: Historical Essays* (Cambridge: Cambridge University Press, 1992), pp. 1–13.
290. The Continental phenomenological psychiatrists have contributed a great deal to descriptive psychiatry and to the practice of psychiatry, and yet they are mostly unheard of in America. For a classic history of phenomenological and existential psychiatry, see H. Spiegelberg, *Phenomenology in Psychology and Psychiatry* (Evanston, IL: Northwestern University Press, 1972).
291. H. Sigerist, "Introduction," in G. Zilboorg, *The Medical Man and the Witch in the Renaissance* (Baltimore: Johns Hopkins University Press, 1935).
292. A. Deutsch, *The Mentally Ill in America* (New York: Doubleday, 1937).
293. American Psychiatric Association, *One Hundred Years of American Psychiatry* (New York: Columbia University Press, 1944).
294. G. Mora, "The History of Psychiatry: A Cultural and Bibliographical Survey," *Psychoanalytic Review* 52 (1965): 298–315.
G. Mora, "The History of Psychiatry and Its Development," *Journal of the History of the Behavioral Sciences* 1 (1965): 43–64. The paper in which he first-developed his important concept of "presentism".
See also G. Mora, "The History of Psychiatry: Its Relevance for the Psychiatrist," *American Journal of Psychiatry* 126 (1970): 957–967; and O. Marx, "What is the History of Psychiatry," *American Journal of Orthopsychiatry* 40 (1970): 593–605.
295. American Psychiatric Association Committee on History and Library, *The History of American Psychiatry: A Teaching and Research Guide*.
296. E. R. Wallace, IV, and E. McCranie, "Questionnaire on the Teaching of Psychiatry and the Humanities in North American Residency Programs" (unpublished paper, 1989). A study sanctioned by the American Psychiatric Association's Committee on History and Library. Presented at the 1990 Meeting of the A. P. A. McCranie was the statistician. It also included questions on the exposure of Residents to other areas of the humanities, social sciences, ethics/values, popular culture (e.g., films and novels), and religion/theology—as they intersect with psychiatric theory, practice, and investigation. Very few training programs treated any of these issues.
297. See, for example, J. MacIver, *The Frog Pond* (New York: George Braziller, 1961); M. J. Ward, *The Snake Pit* (New York: Random House, 1946); and L. Rhodes and L. Freeman, *Chastise Me With Scorpions: The Story of a Woman's Fight Against Self-Destruction* (New York: G. P. Putnam's Sons, 1964); and literally dozens more before and after.
298. I. Illich, *Medical Nemesis: The Expropriation of Health* (New York: Random House, 1976). Deals with the social, political, and economic powers of medicine in general.
P. Miller and N. Rose, eds., *The Power of Psychiatry* (Cambridge: Polity Press, 1986).
D. Ingleby, *Critical Psychiatry* (New York: Penguin, 1981).
P. Sedgwick, *Psychopolitics* (London: Pluto Press, 1982). Discusses the anti-psychiatry of R. D. Laing, T. Szasz, and E. Goffman.
R. Castel, F. Castel, and A. Lovell, *The Psychiatric Society* (New York: Columbia University Press, 1982).
C. Unsworth, *The Politics of Mental Health Legislation* (Oxford: Oxford University Press, 1986).
N. Kitzie, *The Right to Be Different* (Baltimore: Johns Hopkins University Press, 1971).
T. Szasz, *Law, Liberty, and Psychiatry* (New York: Macmillan, 1973).
E. Goffman, *Asylums* (first issued as a paperback original by Anchor Books in 1961, then the next year in cloth by Aldine in Chicago).
- Many of these books overlook the severe distress and social disability of many mental patients as well as their inability to function outside of a community (an "asylum" in the positive sense of the word). For such patients, the "liberty" and "freedom" of a normal person are tragic jokes. Thanks to one-sidedly antipsychiatric civil libertarians, such "asylum" is no longer available to the non-rehabilitatable, chronic mentally ill. They have been "dumped" on communities unwilling to integrate them—assuming this could be done, were the communities willing. They form a significant percentage of contemporary "street people," while others end up in shabby

boarding houses where the landlords control their disability checks. See, on just one antipsychiatric issue, the lawyer and psychiatrist P. S. Applebaum and T. G. Gutheil, "Rotting With Their Rights on: Constitutional Theory and Clinical Reality in Drug Refusal by Psychiatric Patients," *Bulletin of the American Journal of Psychiatry and the Law* 7 (1979): 306–315.

299. J. Robitscher, *The Powers of Psychiatry* (Boston: Houghton-Mifflin, 1980). A psychiatrist and lawyer.
300. R. Hunter and I. Macalpine, eds., *Three Hundred Years of Psychiatry, 1535–1860: A History Presented in Selected English Texts* (London: Oxford University Press, 1963).
- E. Kraepelin, *Psychiatrie: Ein Lehrbuch für Studierende und Ärzte* (Foundations of Modern Psychiatry and Neuroscience) (Bristol: Thoemmes, 2002). Reprint of the 1909–1915 German edition, which was published as two logical volumes in four physical volumes, here reproduced in five volumes: I: *Lectures on Clinical Psychiatry*. II: *Clinical Psychiatry ... Abstracted and Adapted from the Seventh German Edition of Kraepelin's "Lehrbuch der Psychiatrie" by A. Ross Diefendorf*. III: *General Paresis*. IV: *Dementia Praecox and Paraphrenia*. V: *Manic-Depressive Insanity and Paranoia*. In 1978 I had the pleasure of hearing Oscar Diethelm, then one of Kraepelin's few surviving students, speak at Hopkins. Psychologically, Diethelm described the Master as distanced and hard to get close to. This might well explain the arm's—length style of his *examinations* and *demonstrations* of patients (on which many of his former pupils had commented)—as well as, of course, his psychiatric thinking.
301. American Psychiatric Association Committee on History and Library, *The History of American Psychiatry: A Teaching and Research Guide*.
302. "Supplement to the *American Journal of Psychiatry: Sesquicentennial Anniversary, 1844–1994*," *American Journal of Psychiatry* 151 (1994): 1–280. An extraordinarily interesting selection of key papers over the 150 years of the *Journal's* history, as well as from other journals such as the *Journal of Nervous and Mental Disease*. It spans the Association's name changes: from the Association of Medical Superintendents of American Institutions for the Insane (which eventually included the assistant physicians as well), through the American Medico-Psychological Association, to the present-day American Psychiatric Association.
303. *Philosophy, Psychiatry, Psychology*, a quarterly journal published by the Johns Hopkins University Press, Baltimore; for the Association for the Advancement of Philosophy and Psychiatry.
304. E. R. Wallace, IV, "What Is 'Truth'?": Some Philosophical Contributions to Psychiatric Issues," *American Journal of Psychiatry* 145 (1988): 137–147. See also subsequent Letters to the Editor by readers and Wallace in *American Journal of Psychiatry*, September, October, and November 1988, and January 1989 issues.
- E. R. Wallace, J. Radden, and J. Sadler, "The Philosophy of Psychiatry: Who Needs It?" *Journal of Nervous and Mental Disease* 185 (1997): 67–73.
- Edwin R. Wallace, IV, "Psychiatry and Its Nosology: A Historico-Philosophical Overview," in *Philosophical Perspectives on Psychiatric Diagnostic Classification*, eds. J. Sadler, O. Wiggins, and M. Schwartz (Baltimore: Johns Hopkins University Press, 1994), 16–86; Edwin R. Wallace, IV, "Toward a Phenomenological and Minimally Theoretical Psychoanalysis," *The Annual of Psychoanalysis*, XVII (1989): 17–69; etc.
- For representative recent books on the subject see: J. Sadler, O. Wiggins, and M. Schwartz, eds., *Philosophical Perspectives on Psychiatric Diagnostic Classification* (Baltimore: Johns Hopkins University Press, 1994); M. Spitzer, E. A. Uehlein, and G. Oepen, eds., *Psychopathology and Philosophy* (New York: Springer-Verlag, 1988); and G. Graham and L. Stephens, eds., *Philosophical Psychopathology* (Cambridge, MA: MIT Press, 1994).
- See also H. Spiegelberg's exceptional *Phenomenology in Psychology and Psychiatry* (Evanston, IL: Northwestern University Press, 1972) and his *History of Phenomenology* (Evanston, IL: Northwestern University Press, 1966).
- For an early classic on the philosophy of psychopathology, expanded and revised a number of times, see Karl Jaspers's 1913 *Allgemeine Psychopathologie* and the translation of the fourth German edition by J. Hoenig and M. W. Hamilton as *General Psychopathology* (Chicago: University of Chicago Press, 1963). Even after he turned completely to philosophy, Jaspers kept updating and revising the text. He relied on a number of his clinical psychiatric friends to keep him abreast of developments in the specialty—which he turned from in 1913, to devote full-time to phenomenological philosophy. Unconfirmed (at least to my knowledge) rumors have circulated that his retirement from clinical psychiatry (ca. age 31, with the prospects for a brilliant career before him) may have been due to a psychiatric disorder. In any event, for an eminently readable and informative account of Jaspers's training and practice at the University of Heidelberg in the era of Kraepelinian psychiatry, see his "Philosophical Autobiography" in *The Philosophy of Karl Jaspers* (Library of Living Philosophers), ed. P. A. Schilpp (La Salle, IL, Open Court, 1957); augmented edition, 1981, pp. 5–94.

305. W. Griesinger, *Mental Pathology and Therapeutics* (Library of the New York Academy of Medicine) [1847, 1867] (New York: Hafner, 1965).
E. von Feuchtersleben, *The Principles of Medical Psychology* (London: The Sydenham Society, 1847).
306. A. M. Freedman and H. I. Kaplan, eds., *Comprehensive Textbook of Psychiatry*, 1st ed. (Baltimore: Williams and Wilkins, 1967), 2nd ed. 1975, 3rd ed. 1980, with Kaplan now the first editor.
H. I. Kaplan and B. J. Sadock, eds., *Comprehensive Textbook of Psychiatry/IV* (Baltimore: Williams and Wilkins, 1985); *Comprehensive Textbook of Psychiatry /V* (5th ed.), 1989. The 2000 seventh and 2004 eighth editions, edited by Benjamin and Virginia Sadock, were published by Lippincott Williams & Wilkins, retitled as Kaplan & Sadock's *Comprehensive Textbook of Psychiatry*, the addition of the editors' names indicating the textbook's now canonical status. *When questioned about the reasons for the drastic truncation and derogation in status of the history chapter, Benjamin Sadock told John Gach in the late 1980s that it was because clinicians were not interested in history. A self-fulfilling prophecy, if there ever was one!*
307. G. N. Grob, *The Mad Among Us: A History of the Care of America's Mentally Ill* (Cambridge, MA: Harvard University Press, 1994). Although it has new material, this is a useful abbreviation of Grob's three-volume magnum opus on the community and hospital care of the mentally ill. It also carries the story from 1940 forward to the 1990s. Taken altogether: the abridgement and the original volumes contain an invaluable bibliography of primary and secondary sources in the history of American community and hospital psychiatry. Norman Dain has also contributed to the history of community and hospital psychiatry: *Clifford W. Beers: Advocate for the Insane* (Pittsburgh: University of Pittsburgh Press, 1980) and *Concepts of Insanity in the United States 1789–1865* (New Brunswick, NJ: Rutgers University Press, 1964). In 1949, Albert Deutsch issued a revised and expanded edition of his seminal *The Mentally Ill in America: A History of Their Care and Treatment from Colonial Times* (Garden City, NJ: Doubleday). This essay has already cited others—such as the revisionist histories of Scull and Rothman. The earliest serious comprehensive attempt at a history of North American hospital psychiatry was Johns Hopkins psychiatrist and hospital administrator Henry Hurd's huge four-volume *The Institutional Care of the Insane in the United States and Canada* (Baltimore: Johns Hopkins University Press, 1916, 1917), which was much more a (still-useful) encyclopedic reference work than a narrative history.
308. For excellent examples of the history of general medical education in the United States see: K. M. Ludmerer, *Learning to Heal: The Development of American Medical Education* (Baltimore: Johns Hopkins University Press, 1985); W. G. Rothstein, *American Physicians in the 19th century: From Sects to Science* (Baltimore: Johns Hopkins University Press, 1985); W. G. Rothstein, *American Medical Schools and the Practice of Medicine: A History* (Oxford University Press, 1987); W. P. Norwood, *Medical Education in the United States Before the Civil War* (Philadelphia: University of Pennsylvania Press, 1944); M. Kaufman, *American Medical Education: The Formative Years, 1765–1910* (Westport, CT: Greenwood Press, 1976); and A. McGehee Harvey, *Science at the Bedside: Clinical Research in American Medicine* (Baltimore: Johns Hopkins University Press, 1981). See also: R. H. Shryock, *Medicine in America: Historical Essays* (Baltimore: Johns Hopkins University Press, 1966), with a useful chapter on the “general indifference of 19th century American medical schools to European basic science”; R. H. Shryock, *Medical Licensing in America, 1650–1965* (Baltimore: Johns Hopkins University Press, 1967); R. H. Shryock, *The Unique Influence of the Johns Hopkins University on American Medicine* (Copenhagen: Ejnar Munksgaard, 1953); R. H. Shryock, *The Development of Modern Medicine: An Interpretation of the Social and Scientific Factors Involved*, 2nd ed. (New York: Alfred A. Knopf, 1947); S. Flexner and J. T. Flexner, *William Henry Welch and the Heroic Age of American Medicine* (New York: Viking, 1941); H. Cushing, *The Life of Sir William Osler*, 2 vols. (Oxford: Clarendon Press, 1925); and G. W. Corner, *A History of the Rockefeller Institute, 1901–1953: Origins and Growth* (New York: Rockefeller Institute Press, 1964). Apart from the German/Austrian scientific medical school and residency influence on the founding of the Johns Hopkins Medical School in 1893, the watershed event in the improvement of markedly substandard American medical education was the blockbuster 1910 publication of Abraham Flexner's exposé, *Medical Education in the United States and Canada* (New York: Carnegie Foundation for the Advancement of Teaching). Flexner followed this with a very unfavorable comparison of American and European medical education (especially in the basic sciences and especially when compared to the German-speaking countries), *Medical Education in Europe* (New York: Carnegie Foundation for the Advancement of Teaching, 1912). The two Flexner reports galvanized the American Medical Association into action and led to the closure of the many proprietary, privately owned “medical schools,” as well as the closing or rapid upgrading of many state medical colleges. On the status of European medical education and basic and clinical science see E. Ackerknecht, *Medicine at the Paris Hospital, 1794–1848* (Baltimore: Johns Hopkins University Press,

1967), and E. Lesky, *The Vienna Medical School of the 19th Century*, trans., L. Williams and I. Levy (Baltimore: Johns Hopkins University Press, 1976). Both are classics. The Paris Medical School was oriented toward clinical statistics and the improvement of physical diagnosis, in part through the development of more-sophisticated diagnostic aids (like the stethoscope). Its clinical and statistical studies led to the abandonment of the old “antiphlogistic” methods of bleeding, cupping, purging, and so on. It focused, as well, on clinico-pathological correlation (via Bichat’s pioneering work in tissue pathology). In the first half of the nineteenth century Americans who could afford it went to the Paris School, returning with clinical innovations for the handful of top U.S. medical schools. By contrast, Americans (often with the M.D. already in hand) in the second half of the nineteenth century and the early part of the twentieth century, went to the German-language universities (especially Vienna and Berlin) to study in their basic science institutes and rotate through their hospital specialty residency programs. It was the Germanic science-based clinical medicine that most energized the improvement in American medical education in the later nineteenth century (preeminently at Johns Hopkins, but also at Columbia, Pennsylvania, Harvard, Yale, and Michigan). Johns Hopkins adopted the Germanic institute program of Anatomy/Microanatomy, Physiology, Biochemistry, Pathology, Bacteriology, and eventually even the History of Medicine (1929). On the experience of women and blacks with American medical education, see M. R. Walsh, *Doctors Wanted: Women Need Not Apply: Sexual Barriers in the Medical Profession, 1837–1975* (New Haven, CT: Yale University Press, 1975), and H. M. Morais, *The Negro in Medicine* (Library of Negro Life and History) (New York: Publishers Company, 1967).

309. E. Winters, ed., *The Collected Papers of Adolf Meyer*, 4 vols. (Baltimore: Johns Hopkins University Press, 1950–1952). An essentially complete collection of Meyer’s papers, with volumes devoted to Neurology, Psychiatry, Medical Teaching, and Mental Hygiene, each introduced by a specialist in the particular field. For a judicious selection from Meyer’s papers; see A. Lief, ed., *The Commonsense Psychiatry of Dr. Adolf Meyer: Fifty-Two Selected Papers* (New York: McGraw-Hill, 1948), which includes a biographical narrative. See also R. Leys and R. B. Evans, eds., *Defining American Psychology: The Correspondence Between Adolf Meyer and Edward Bradford Titchener* (Baltimore: Johns Hopkins University Press, 1990). Meyer massively influenced the direction of American psychiatry, training a generation of psychiatrists who became eminent themselves. However, he liked to think one could be more atheoretical than is actually possible. Hence his “psychobiology” never received a genuinely coherent and systematic elaboration—Meyer never wrote a book. He was more a pragmatic and eclectic clinician than a theorist and integrative thinker, and lacked the flashes of brilliance of, say, a Harry Stack Sullivan. Nevertheless, as a vigorous promoter of psychiatry in medicine and medical education, he was peerless. Although his initial training and practice was neuropathological, he became increasingly psychologically oriented as the years went on. Although he was much too eclectic to embrace the synthetic and comprehensive theory of psychoanalysis, he always politically supported it. Indeed, many later-to-be-prominent American psychoanalysts were residents under Meyer at Manhattan State Hospital and at Hopkins. All things considered, and despite his deficiencies, he deserves the appellation of “father of modern American psychiatry.”
310. Gregory Zilboorg, *The Medical Man and the Witch in the Renaissance* (Baltimore: Johns Hopkins University Press, 1935).
 Gregory Zilboorg and George Henry, *A History of Medical Psychology* (Baltimore: Johns Hopkins University Press, 1941).
311. Postmodernism began in art several decades before its birth at the hands of Roland Barthes in literary studies/criticism. Its *ur*-practitioner in the visual arts, and its decades-long central theorist was of course Marcel Duchamp. Its objective was to explode the centuries-old canon of “high art” by deliberately replacing it (*quite-concretely*) with urinals, snow-schools and, indeed, piles of rubbish.
 Likewise Barthes, and his godson Derrida “deconstructed” literary texts in the canon, with quite-intentional obfuscation and mountains of meretricious metaphor-laden and punning prose. They guillotined any notion of an intersubjectively-consensual text, along with any putative authorial intentionality. They also declared all-out war on *clarity*, the *age-old desideratum of the French language* (as protected by the still-extant *Academie francaise*)—the very feature that made French the first *lingua franca* after the latter-17th Century expiration of Latin as the centuries-old scholarly language of Europe. Unfortunately, stylistically Foucault followed them there.
 Apropos postmodern liberties with the text; let us quote psychiatrist Jean Starobinski, Professor of the History of Medicine—and of the History of French Literature—at the University of Geneva.

“Unless the object [that is, the text to be interpreted] is perceived, maintained, and consolidated in its intrinsic difference and reality, the interpretation is likely to be at best the mere unfolding of a fantasy of the interpreter.

[...] This risk may well be accompanied by a temptation of quite a different kind: the charm of inventive and free discourse, as occasionally inspired by something one has read. We may say of such a detached form of discourse that it tends to become literature in its own right, its object being relegated to the status of a mere pretext or incidental quotation. The role of the object is thereby weakened, and the aim of knowledge is usurped by another—that of personal expression, play, propaganda, and so on. Although this does not preclude the possibility of a particular relevant point being touched upon obliquely in passing, such is the exception. As we so often see, if the object has not been properly registered and secured, what is asserted about it will be irrelevant and not amenable to decision. Qualified literary historians [...] pour irony on such essayism and ‘critique of genius,’ and rightly so when this irony is brought to bear against a form of empty chatter which fires off its intuitions at point-blank range, without regard for the patient research which alone would do justice to the object in all its complexity. Where presumption tries to pass for science, a call to order is necessary. For anyone who wishes to know more about a work, nothing is more irritating than to read an essay which speaks in a louder voice than the work itself.” Later he writes: “[...] the text has a right of perusal of what is said about it.” Again: “[...] one need only go back to the text to discover the starting point of the projections, fantasies, and arbitrary manipulations of the reader who abuses it.” [Jean Starobinski in I. Grubrich-Simitis, *Back to Freud's Texts*; Yale, 1996, pp. 6–7].

Like his fellow postmodernists'; Foucault's world is a *Manichean one: of wholly evil, or else angelic*, force-fields of Power/Knowledge. He exchanged the Red Flag of his youthful Communism (which, incidentally, deemed his homosexuality a “decadent bourgeois vice”); for the Black Flag of Anarchism. For example, he seriously lobbied for the abolition of police records and the emptying of prisons. In a published (1971) dialogue with Chomsky; he shocked the latter by supporting the bloodiest violence by the marginalized/oppressed against their alleged victimizers. In short, Foucault was an advocate of the “continuous revolution” propounded by his French predecessor, the sociologist Sorel. The young Marlon Brando (or was it James Dean?), in the film *Rebel Without a Cause*, springs to mind. Getting off his motorbike, at a roadside watering-hole; a man asked him what he did. Brando replied, “I'm a rebel.” “What are you rebelling against?” was the logical next question; to which Marlon queried, “What have you got?.”

For works by Barthes and Derrida, see: (1) S. Sontag, ed., *A Barthes Reader* (New York: Hill and Wang, 1994); and P. Kamuf, ed., *A Derrida Reader: Between the Blinds* (Columbia University, 1991).

Chapter 2

Contextualizing the History of Psychiatry/Psychology and Psychoanalysis

Annotated Bibliography and Essays: Addenda A–F

Edwin R. Wallace, IV

Addendum A. General World History

As part of my aim to contribute to the contextualization of the history of psychiatry, I include the following. Most of these are global (Eastern and Western) histories, with excellent references on national histories, as well as social, cultural/intellectual, military, political, and diplomatic histories, and so on.

G. Barraclough and G. Parker, eds., *The Times Atlas of World History*, 4th ed. (Maplewood, NJ: Hammond, 1993). Excellent specialist commentators on the copious maps. A huge, compendious book.

D. G. Brinkley, ed., *National Geographic Visual History of the World* (Washington, DC: National Geographic, 2005). Delightful, informative work, with excellent pictures and extensive bibliography.

P. K. O'Brien, gen. ed., *Oxford Atlas of World History*, Concise Edition (Oxford, 2005). Superb text by subspecialist authors. *Nonpareil* maps, time-lines, color illustrations, etc.

The Time Chart History of the World: 6000 Years of World History Unfolded, Revised and updated version of the Victorian Original (Third Millennium Trust, 2004). Oversized volume with maps, illustrations, and so forth. Formatted so that it can be used page-by-page; or unfolded to 6 feet of continuous history. Long out-of-print in its original nineteenth century version.

P. Vidal-Naquet, gen. ed., *The Harper Atlas of World History*, rev. ed. (New York: Harper Collins, 1992).

K. Santon and L. McKay, eds., *Atlas of World History: From the Origins of Mankind to the Present Day* (Bath, UK: Parragon, 2006). Also includes beautiful color photos of major international artistic and architectural works.

Rand McNally Atlas of World History, rev. ed. (London: Reed, 1995).

C. Hurdman, gen. ed., *World History Encyclopedia*, Millennium Edition (New York: Barnes and Noble, 1998).

J. R. Porter and P. Bentley, eds., *The Illustrated Guide to the Bible* (New York: Barnes and Noble, 2000). Text by subspecialists and copious maps. Wonderful color photographs. Time Lines and Dynastic Lists. Contextualizes Scriptural development within the history and sacred texts of the ancient Near East. An excellent companion volume to the Chapter One-cited Facts-on-File Cultural Atlases of: *the Bible*; *the Jewish World*; and *Christianity*.

J. Haywood, gen. ed., *Historical Atlas of the Classical World, 500 B.C.–A.D. 600* (New York: Barnes and Noble, 2001). International scope.

C. Scarre, *The Penguin Historical Atlas of Ancient Rome* (New York, 1995). Wonderful maps and color photos of art/architecture.

J. Haywood, *Historical Atlas of the Medieval World, AD 600–1492* (New York: Barnes and Noble, 2001). Truly international.

N. E. Cantor, *The Encyclopedia of the Middle Ages* (New York: Viking, 1999). Well-illustrated.

F. Heer, ed., *The Fires of Faith* (London: G. Weidenfeld and Nicolson, 1973). Illustrated world-history of religions. By the great University of Vienna intellectual/cultural historian and Medievalist.

E. Wright, gen. ed., *The New Illustrated History of the World: Vol. 1 The Awakening of Man, 250,000 B.C.–100 B.C.; Vol. 2 The Triumph of the Greeks, 800 B.C.–321 B.C.; Vol. 3 The Dominance of Rome, 616 B.C.–A.D. 629.* (New York: Paul Hamlyn 1967/1969).

See Facts-on-File *Cultural Atlases* of major periods and regions of world history: cited in Chapter 1.

See also *Time-Life* series, *Lost Civilizations*, D.M. Brown, gen. ed., (Alexandria, VA: Time-Life Books, 1990–96). Illustrated Volumes on: *Egypt; Ramses II; Sumer; the Holy Land; the Aegean Islands; Greece; Rome; Pompeii, the Celts; the Vikings; India; China; Africa; the Maya; the Aztecs; the Incas; the American Mound-Builders and Cliff-Dwellers; and The Search for El Dorado.*

A. Cotterell, ed., *The Penguin Encyclopedia of Ancient Civilizations* (New York: Penguin, 1988). World-wide.

G. Charles-Picard, gen. ed., *Larousse Encyclopedia of Archaeology* (London/New York: Paul Hamlyn, 1983).

H. W. F. Saggs, *Civilization Before Greece and Rome* (Yale, 1989).

S. N. Kramer, *History Begins at Sumer: Thirty-Nine Firsts in Man's Recorded History* (Philadelphia: Univ. of Pennsylvania Press, 1956).

F. Braudel, *A History of Civilizations* (New York: Penguin, 1993). A global history by the French historian of the *longue durée*.

W. H. McNeill, *The Rise of the West: A History of the Human Community* (New York: Mentor, 1963). A global history, despite its title. One of the most popular single-volume world histories ever written.

J. M. Roberts, *The Penguin History of the World*, 3rd ed. (New York: Penguin, 1990). A classic.

J. A. Garraty and P. Gay, eds., *The Columbia History of the World* (New York: Harper and Row, 1972). Forty Columbia University specialists contribute to their areas of expertise.

D. Townson, *The New Penguin Dictionary of Modern History, 1789–1945* (New York: Penguin, 1994).

P. Gay and R. K. Webb, *Modern Europe* (New York: Harper & Row, 1973). A contemporary classic.

J. Revel and L. Hunt, *Histories* (New York: The New Press, 1995). By a variety of French historical contributors.

G. B. Tindall and D. E. Shi, *America*, 3rd ed., 2 vols. (New York: W.W. Norton, 1993). Solid history with good references.

S. E. Morison, *The Oxford History of the American People*, 3 vols. (New York: Mentor, 1972). A literary, as well as historical, classic.

D. C. and W. C. Hine, *The African-American Odyssey* (Upper Saddle River, NJ: Prentice-Hall, 2000). Splendid.

Addendum A1. Military History

M. Howard, *The Lessons of History* (Yale, 1991). One of the two major English-language military historians (the other being J. Keegan, cited below). The impact of wars and battles is too-often ignored by intellectual and cultural historians. Military events have often spurred scientific/technological and even medical/surgical and psychiatric advances (touched-on in the previous chapter—e.g., Grinker and Spiegel, *Men at War*, 1946; and the leg-up for psychiatry provided by its treatment of “battlefront neuroses”). By focusing on major 20th century wars, the events leading up to them, and their impact on every sphere of life; he demonstrates the indispensability of an overall grasp of military history to any scholar or historical subspecialty. Howard also illustrates the lessons to be learned from military history—though he bemoans that they are seldom heeded. In the relationship between states and alliances; he predicts that organized violence will remain the international norm. See also M. Howard’s *War in European History* (Oxford: Oxford Univ. Press, 1977).

For general overviews of world military history; see J. Keegan's: *The Face of Battle* and (with R. Holmes) *Soldiers* (New York: Knopf, 1967 and 1986, respectively). Also M. Earle, *The Makers of Modern Strategy* (Princeton, 1971). The strategy and tactics of great generals is, in an important sense, an aspect of intellectual history: e.g., Clausewitz's 19th century *On War*, which also dealt with its philosophical (including Kantian and Hegelian) context. Consider too the priceless manual of strategy/tactics by the Enlightenment philosopher, and matchless general; Prussia's King Frederick the Great. Both books are readily available in paperback (e.g., Clausewitz's in Penguin).

V. D. Hanson, *The Western Way of War: Infantry Battle in Classical Greece*, with excellent "Introduction" by J. Keegan. Important for its military history of ancient Greece *per se*; and for demonstrating its significance for Western warfare generally. Many of the items under "Addendum A"; integrate military history into their world histories of regions and periods-as do some in later Addenda as well. *In short, the story of warfare, and its antecedents and consequences, is integral to the history of civilization.*

A. Ferrill, *The Origins of War: From the Stone Age to Alexander the Great* (London: Oxford Univ. Press, 1985).

K. Devries, M. Dougherty, I. Dickie, P. Jestice, and C. Jorgensen, *Battles of the Medieval World, 1000–1500: From Hastings to Constantinople* (New York: Barnes and Noble, 2006). I have already mentioned the importance of Constantinople's military decline and 1453 conquest; to the intellectual/cultural development of the Italian Renaissance.

A. Soboul, *A Short History of the French Revolution, 1789–1799*, trans. G. Symcox (Berkeley: University of California Press, 1977). While Parisian revolutionary warfare was important; bloody battles were fought throughout France between the conservatives (often dominating whole cities and provinces) and revolutionary armies. Intellectual/cultural trends (i.e., the Enlightenment) were important long-term causes of the Revolution; and its success had key intellectual/cultural consequences-including of course the birth of psychiatry.

O. Connelly, *Blundering to Glory: Napoleon's Military Campaigns*, rev. ed., (Wilmington, DE: Scholarly Resources, 1999). By one of the foremost-living English-language experts on the French Revolution and the Napoleonic era; as well as a respected general military historian. One of his classic histories treats the Napoleonic kingdoms of Europe. Despite Napoleon's overweening personal ambitions; he brought much-more liberal and democratic constitutions and institutions to the nations he governed (through appointed constitutional monarchs-often his relatives).

J. Keegan, *An Illustrated History of the First World War* (New York: Alfred A. Knopf, 2001). Oversized book. A rare combination of maps, and contemporaneous photographs and other illustrations; and text by the master military historian John Keegan. Also treats the important political/diplomatic and sociocultural antecedents and consequents. An even-bloodier war than the Thirty Years one; due to modern technology and armaments, including air-power. Its military history, with the incredible casualties of its armies; and their complex maneuvers; is in some respects more interesting than that of the even-more depopulating World War II. Its impact on cultural/intellectual history and European experiences and attitudes was profound. It smashed the values and cultural/intellectual trends of the "Long 19th century": 1800–1914; and the Enlightenment Liberalism and Progressivism undergirding it. In sum, a whole civilization (and many of its brightest young minds) was devastated. Too, the unfair Versailles treaty—along with Germany's horrendous 1920s/early 30s economic depression (partly due to the French possession of the Rhineland, a key region of German heavy industry)-ultimately contributed to the rise of Nazism, and the even-bloodier next World War. The World War I/II historian, A. J. P. Taylor; has brilliantly argued the above: for example, *The First World War: An Illustrated History* (London, 1963); and *The Origins of the Second World War* (cited elsewhere). See also Barbara Tuchman's *The Guns of August* (New York: Ballantine, 1994). On the pre-Great War cultural mood; I have referred elsewhere to several books on *fin-de-siècle* Vienna, and B. Tuchman's *The Proud Tower*. See also M. Ekstein, *Rites of Spring* (Boston University, 1989) and R. Wohl's *The Generation of 1914* (Harvard, 1979). Keegan provides many other references on the War's impact on cultural and intellectual life. Also on W.W.I.; see J. Winter and B. Baggett's well-illustrated, oversized *The Great War and the Shaping of the 20th Century* (New York: Penguin, 1996). It embraces a focus on its

general cultural/intellectual aftermath; as well as its important sociocultural and political/diplomatic antecedents. A good bibliography.

R. B. Stolley, ed., *Life's World War 2: History's Greatest Conflict in Pictures* (Boston, Little Brown, 2000). In addition to rare photos; includes scholarly text by leading military historians; such as J. Keegan, G. Weinberg, and R. Herzstein.

See the outstanding *West Point Military History Series*, T. E. Griess, gen. ed. Wayne, NJ: Avery, 1984–1992), e.g., E. C. May, C. P. Stadler, J. F. Votaw, *Ancient and Medieval Warfare* (1984).

Addendum B. European Intellectual and Cultural History

(For Asian see Addendum B1.)

H. E. Barnes, *An Intellectual and Cultural History of the Western World*, 3rd rev. ed., 3 vols. (New York: Dover, 1965). Covers prehistory and nonliterate tribal history; the ancient Near East and Hellenic/Hellenistic Greece, Rome, and the “Migration Period” (including “barbarian” Celtic, German, and Magyar states and conquests); the European Middle Ages and the Byzantine Empire; the Ottoman Turkish and Islamic hegemonies; the Renaissance, Reformation, and Counter-Reformation; the seventeenth century scientific and commercial revolutions; and the Enlightenment through the twentieth century (including the industrial/technological revolution).

Certainly a work of this scope cannot but at times be skewed to the author’s proclivities, but its coverage of all major Western cultural and intellectual areas from the arts and literature and philosophy through history to the natural and social sciences is incredible. Its bibliography is a mine of references to specialized studies. It is also useful as a reference book; though it needs to be balanced by more-recent general and specialized intellectual and cultural histories.

E. Hamilton, *The Greek Way to Western Civilization* (New York: Mentor, 1955).

C. M. Bowra, *The Greek Experience* (New York: Mentor, 1957). Both are irrepressible classics.

E. Hamilton, trans., *The Complete Dialogues of Plato* (Princeton, 1961).

W. K. C. Guthrie, *A History of Greek Philosophy*, 5 vols. (Cambridge: Cambridge University Press, 1980). The best coverage in any language.

P. Hadot, *What Is Ancient Philosophy?* trans. M. Chase (Cambridge, MA: Belknap Press of Harvard University Press, 2002). By one of France’s leading intellectuals and its most broadly based student of ancient philosophy. This terse (300 pages) but thorough work covers philosophy from the Hellenic/Hellenistic period, through the Roman period, into the earlier Christian period. It also treats the place of ancient philosophy in modern philosophical discourse. An excellent primary and secondary source bibliography, set of selected readings, and chronology of major thinkers and schools. When philosophy was still a way to wisdom!

Cicero, *On the Good Life*, trans. M. Grant (Penguin, 1971).

D. Knowles, *The Evolution of Medieval Thought* (New York: Vintage, 1962).

B. B. Price, *Medieval Thought: An Introduction* (Oxford: Blackwell, 1992).

N. F. Cantor, *The Civilization of the Middle Ages*. rev. (New York: Harper Collins, 1993).

J. Huizinga, *The Waning of the Middle Ages* (Garden City, NY: Doubleday Anchor, 1954). A classic on the cusp between the Middle Ages and the inception of the Northern Renaissance.

G. Leff, *Medieval Thought: St. Augustine to Ockham* (Penguin, 1965).

J. H. Plumb, *The Italian Renaissance* (Boston: Houghton Mifflin, 1989).

B. F. Copenhagen and C. B. Schmitt, *Renaissance Philosophy* (Oxford: Oxford University Press, 2002).

E. Cassirer, P. J. Kristeller, and J. H. Randall, Jr., eds., *The Renaissance Philosophy of Man* (Chicago: University of Chicago Press, 1948).

B. Willey, *The Seventeenth-Century Background* (New York: Doubleday Anchor Books, 1953). Particularly strong on the natural science revolution and on the development of what was known as “natural theology.”

B. Willey, *The Eighteenth-Century Background* (Boston: Beacon Press, 1962). Covers the Scottish/French Enlightenment and other areas.

B. Willey, *Nineteenth-Century Studies* (New York: Columbia University Press, 1975). All three give excellent general intellectual background to medical historians, though Willey is at his best on British intellectual issues.

J. Barzun, *From Dawn to Decadence, 1500 to the Present: 500 Years of Western Cultural Life* (New York: Harper Collins, 2000). Written by the then-nonagenarian (originally a French immigrant), who has doubtless been America's most-learned and polymathic twentieth century intellectual/cultural historian. His multiedition (with H. F. Graff) *The Modern Researcher* [5th ed. (New York: Harcourt, Brace, Jovanovich, 1992)] is, hands down, the best English-language treatise on historical methodology. Quite apart from that, reading it is an education in itself. At this point in his life and career; Barzun obviously felt he could stick his most broadly synthetic neck out! *This is grand-scale philosophical history at its best—with all the necessary strengths and weaknesses.*

However, in intellectual/cultural history we periodically need such broad stock takings as much as we do in social, political, diplomatic, military, and economic histories. Moreover, no other living historian could have brought so vast a learning to his task, including pertinent sociopolitical, economic, and military background and context. Has the “West” (i.e., *Western Europe and its North American extension*), *chauvinistically proclaiming itself—for over five centuries—“the pinnacle of human civilization,” begun to spiritually/morally play itself out?* Surely this is something about which, for many reasons, sensitive and educated men and women (Western and otherwise) have wondered. No matter; this intellectual feast will nourish the thinking of any historian, whatever his or her specialty.

R. N. Stromberg, *European Intellectual History Since 1789*, 4th ed. (Englewood Cliffs, NJ: Prentice Hall, 1986). Richly footnoted, with a firm grasp of wide-ranging scope. Top-notch and very thorough bibliography at the end for further reading, covering all areas from the arts/literature, humanities, and social thought through the natural sciences. The reader is encouraged to consult it carefully—as with P. K. Conkin and Stromberg's *Heritage and Challenge: The History and Theory of History* (Arlington Heights, IL: Forum Press, 1989).

F. Heer, *The Intellectual History of Europe*, 2 vols., trans. J. Steinberg (Garden City, NY: Doubleday Anchor). From B.C.E. to 1945. By the long-time Professor of the History of Ideas at the University of Vienna. Packed with so much learning, it almost bursts at the seams. One of the twentieth century's greatest intellectual historians.

C. Brinton, *Ideas and Men: The Story of Western Thought*, 2nd ed. (Englewood Cliffs, NJ: Prentice-Hall, 1963). From Judeo/Christian and Greco-Roman thought through the twentieth century.

O. Chadwick, *The Secularization of the European Mind in the 20th-Century* (Cambridge: Cambridge University Press, 1993). This secularization holds true for much, but hardly all, of the Western European and North American “intellectual elite”—most especially as represented in the larger universities; where atheism (or at least agnosticism) is virtually a shibboleth for being taken seriously. However, this should not cause us to overlook the many serious twentieth century thinkers and writers in the Judeo-Christian tradition: e.g., Abraham Heschel and Martin Buber (see M. Friedman's brilliant three-volume biography of this great Jewish biblical commentator, theologian, and ethicist: *Martin Buber's Life and Works* New York: E. P. Dutton, 1983). See also the Jewish and Christian writers M. Friedlander, Elie Wiesel, Rudolph Otto, Reinhold Niebuhr, Paul Tillich, Karl Barth, and Karl Rahner. And there is the great biblical scholar Geza Vermes and the matchless student of comparative religion, Mircea Eliade.

In addition, Robert Coles, Harvard social psychiatrist and historian/ethnographer of cultures of poverty, shares the vicissitudes of his Christian faith in the ivy-covered walls of his home university: *A Harvard Diary: Reflections on the Sacred and the Secular* (New York: Crossroad, 1988). And a Jewish colleague, Ari Goldman, wrote *The Search for God at Harvard* (New York: Ballantine, 1991). *In short, Judaism and Christianity may be hiding in misplaced embarrassment, but they are not absent in even our most elite universities.* Juxtapose Chadwick's book to C. Dawson's *Religion and the Rise of Western Culture* (New York: Doubleday Image, 1958). See also T. Forester's history and critique, *High-Tech Society: The Story of*

the Information Technology Revolution (Cambridge, MA: MIT Press, 1987), a latter-day version of A. Toffler's uncannily predictive *Future Shock*.

H. Wish, *Society and Thought in Modern America: A Social and Intellectual History of the American People from 1865* (London: Longmans, Green: 1952). Skillfully interweaves social and intellectual history. Still a classic.

V. L. Parrington, *Main Currents in American Thought: An Interpretation of American Literature From the Beginnings to 1920*, 3 vols. in 1 (New York: Harcourt, Brace, 1930). Despite the subtitle, it does not limit itself to poetry and fiction, but deals with intellectual history (including historiography) generally. A magnum opus, which still repays careful reading; an excellent bibliography.

B1. More History of Philosophy and Other Matters (Including Asia)

F. Copleston, *On the History of Philosophy* (London: Search Press, 1979). By 1975 his classic, *A History of Philosophy*, had grown to 9 volumes (New York: Image Books). In the self-reflective 1979 book, Father Copleston pays more attention to externalist factors in philosophy's history. He speaks of a "reciprocal determination" by society and philosophy.

F. Copleston, *Philosophies and Cultures* (Oxford: Oxford University Press, 1980). Tries to balance his emphasis on Western philosophy by asserting the philosophical and historiographical legitimacy of studying, for example, the histories of Indian and Chinese philosophy-however theologically embedded much of the former may be. He includes an extraordinarily good bibliography on histories of non-Western philosophies, and on their primary philosophical texts as well.

J. Res, M. Ayers, and A. Westoby, *Philosophy and Its Past* (Atlantic Highlands, NJ: Humanities Press, 1978).

I wholeheartedly agree with the authors' citation of Lucien LeFebvre in their "Introduction" (pp. III-IV): "Historians of Philosophy? ... Of course of all the people who lay claim to the title of historians ... there are none, I believe, who are not in some way entitled to it, with the exception of those who try to rethink, on their account, systems of thought which may be several centuries old, without taking the slightest trouble to notice their relation to other phenomena of the period which gave rise to them and who therefore end up doing precisely the opposite of what the method of historians requires" [my italics].

It would be pointless to cite more of the best-known twentieth century (or nineteenth century, for the matter, e.g., that by Harald Hoffding) histories of philosophy; for all of them (in addition to being Eurocentric) make the breathtakingly ahistorical errors to which LeFebvre refers. Recent "histories" of philosophy by slates of distinguished contemporary philosophers have failed to grasp LeFebvre's point. At most, they deliberate on the connections that are-or should be, or shouldn't be!-between a purely intellectual history and the "history" of philosophy. See, for example, R. Rorty, J. Schneewind, and Q. Skinner, eds. *Philosophy in History: Essays on the Historiography* [sic] of Philosophy (Cambridge: Cambridge University Press, 1988). They have not even been influenced by the great Copleston's (1979) confession of his failure to historically contextualize the development of philosophy and by his belated attempt to show how this can be done.

"Histories" of non-Western philosophy, even by non-Western scholars, tend to exhibit the same internalist program (partly, no doubt, because of Western educational influences on them as well). Still, cultural/ethnic fairness demands that I mention some of the best "histories" of Indian and Chinese philosophy.

As to the former, we have the neo-Hegelian Oxford professor's (and later president of India) S. Radhakrishnan's two-volume *History of Indian Philosophy* (London: Oxford University Press, 1962).

Earlier, in 1951, Joseph Campbell had edited some of the published and unpublished English-language work of the great German Indologist Heinrich Zimmer into a book entitled *Philosophies of India* (Princeton, NJ: Bollingen Series of Princeton University Press, 1969). It is divided into three sections: (I) The Highest Good (including "The Meeting of East and West"); (II) The Philosophies of Time; and (III) The Philosophies of Eternity (including Jainism, Sankhya, Brahmanism, Buddhism, and Tantrism). Campbell

also edited (through 1955) three other book-length English-language manuscripts by Zimmer (also published in the Bollingen Series): *Myths and Symbols in Indian Art and Civilization*; *The King and the Corpse: Tales of the Soul's Conquest of Evil*; and *The Art of Indian Asia: Its Mythology and Transformations* (two volumes). Of course Zimmer had published several books in German before his untimely death at 53 (in 1943).

Indeed, the first Western scholars to become interested in Indian religio-philosophical thought were German. In the early nineteenth century the brothers Schlegel translated many of the Upanishads, along with other Hindu texts and Vedic lore, from Sanskrit into German. These stimulated many subsequent nineteenth century German scholars, such as the cultural anthropologist and religious comparativist F. Max Muller, to learn Sanskrit and Pali in order to translate other Hindu, as well as Jain and Buddhist, texts into German. The great philosopher Arthur Schopenhauer read and reread such German translations. He was particularly taken by the Upanishads, which, he said, "are my consolation in life, as they will be in my dying." The impact of Advaita (i.e., monistic, not dualistic) Hinduism and the Buddhist *Dhammapada* became progressively apparent from the early nineteenth century to the mid-nineteenth century revised publication of Schopenhauer's philosophical magnum opus, *Die Welt als Wille und Vorstellung* (*The World as Will and Representation*). This book had a profound influence on philosophers as diverse as Kierkegaard, Nietzsche, and Wittgenstein; as well as on the Swiss psychiatrist and student of comparative religion and mythology Carl Jung.

Other useful works on Indian philosophy and religion include A. B. Keith's *Buddhist Philosophy in India and Ceylon* (Oxford: Oxford University Press, 1923) and *Sources of Indian Tradition*, 2nd ed., 2 vols., ed. & rev. A. T. Embree (New York: Columbia University Press, 1988). On the Japanese Zen variant of Buddhism (so different it really deserves to be considered an autonomous way in itself), see the many readily available fine books by D. T. Suzuki. See also: I. Fischer-Schreiber, F.K. Ehrhard, K. Friedrichs, M.S. Diener, *The Encyclopedia of Eastern Philosophy and Religion: Buddhism, Hinduism, Taoism, Zen* (New York: Barnes and Noble, 1999); F.C.S. Northrop, *The Meeting of East and West: An Inquiry Concerning World Understanding* (Woodbridge, CT: Ox Bow Press, 1979 reprint of 1946 original); and A. Huxley, *The Perennial Philosophy: An Interpretation of the Great Mystics, East and West* (New York: Perennial, 2004). T. Serequeberhan, *African Philosophy* (New York: Paragon, 1991).

Even the best Chinese "historians" of their philosophy write their texts in splendid contextual isolation, like their Western and Indian counterparts. This is shameful, given the two-millennia-long distinguished record of, and social/governmental emphasis upon, sound historical scholarship. See, for example, F. Yu-Lan, *A History of Chinese Philosophy*, 2 vols., trans. D. Bodde (Princeton, NJ: Princeton University Press, 1973), and Wing-Tsit Chan, *A Source Book in Chinese Philosophy* (Princeton, NJ: Princeton University Press, 1963). Be all this as it may, a unique characterization of Chinese historiography and philosophizing (as mentioned previously), was its very early secularization and freedom from religious *parti pris*! See Confucius, whose philosophy and ethics exemplified these trends *as early as the fifth century B.C.E.*, e.g., *The Analects*, trans. R. Dawson (Oxford: Oxford University Press, 1993).

A. MacIntyre, *A Short History of Ethics*, 2nd ed. (Notre Dame University, 1998). Excellent overview of Western moral philosophy.

L. Strauss and J. Cropsey, eds., *A History of Political Philosophy*, 2nd ed. (Chicago: University of Chicago Press, 1981). Leo Strauss is one of the twentieth century's greatest political philosophers. By its very nature-its integral relationship to politics, social and economic structures, diplomacy and military history, and general and popular culture-the best histories of political philosophy have tended to be more contextualized than histories of philosophy in general. Still, there is room for improvement here as well.

E. Wilson, *To the Finland Station: A Study in the Writing and Acting of History* (Garden City, NY: Doubleday Anchor, 1953). A prehistory and history of socialism.

H. E. Barnes, *An Introduction to the History of Sociology* (Chicago: University of Chicago Press, 1948). More readable than his other herein-cited books, with some attempt to contextualize.

G. Hawthorn, *Enlightenment and Despair: A History of Sociology* (Cambridge: Cambridge University Press, 1976). The history of sociology (like the history of political philosophy) tends to be contextualized more often than the history of philosophy and more so than the history of psychology and psychiatry. As with

the history of political philosophy, this is partly because of sociology's, as the study of society, much more patent connection to the sociocultural, political-economic surround. *Such sensitivity to context-indeed the attempt to explain that context-is notable in the discipline's very founders: Durkheim and Weber.*

R. Aron, *Main Currents in Sociological Thought*, 2 vols., trans. R. Howard and H. Weaver (Garden City, NY: Anchor Doubleday, 1970). Volume I deals with Montesquieu, Comte, Tocqueville (who uncannily anticipated America's current cultural problems), and Marx; and Volume II with Durkheim, Pareto, and Weber. Good bibliographies of primary and secondary sources. By an *Annales*-school social/economic historian.

J. C. Alexander, *Theoretical Logic in Sociology*, 4 vols. (Berkeley, 1985). Volume One: *Positivism, Presuppositions, and Current Controversies*; Volume Two: *The Antinomies of Classical Thought: Marx and Durkheim*; Volume Three: *The Classical Attempt at Theoretical Synthesis: Max Weber*; and Volume Four: *The Modern Reconstruction of Classical Thought: Talcott Parsons*. Historically informed at every point, philosophically analytical and synthetic, and theoretically and methodologically innovative. *A modern magnum opus.*

R. L. Heilbroner, *The Worldly Philosophers: The Lives, Times and Ideas of the Great Economic Thinkers* (New York: Simon and Schuster, 1953). The history of economic thought too, because of the glaring impact of social-political structures on economic processes, tends to be more sensitive to externalist factors.

M. Harris, *The Rise of Anthropological Theory* (New York: Crowell, 1968). Lively history from a cultural materialist/evolutionist standpoint. Rather relentlessly internalist; like the history of anthropology generally, before the debut of George Stocking, the first historian of anthropology to possess both historical training (Ph.D., University of Pennsylvania) and hands-on ethnographic/ethnological training (University of Chicago). Still, Harris's history is insightful and provocative, and his easy-going style delights the eyes.

M. Harris, *Cultural Materialism: The Struggle for a Science of Culture* (New York: Vintage, 1980). A modified form of Marx's dialectical materialism is taken as fundamental. Modes of production and energy transformation determine social structure, and social structure determines cultural paraphernalia, which in turn condition modes of experience or consciousness. While aspects of Harris's materialistic etiology of culture are doubtless heuristically fruitful, the dangers in his approach are quite apparent. For example, he explicitly privileges the materialist's theoretical take on his subjects (the "etic" approach) over the "emic" vantage point, which emphasizes the culturalist's phenomenology and modes of group and self understanding as empathetically and accurately as possible. In the book edited by the psychoanalytic anthropologists R. A. Schweder and Robert A. Le Vine, *Culture Theory: Essays on Mind, Self, and Emotion* (Cambridge University, 1984), the contributors begin with their tribalists' phenomenologies and world-views, rather than with their own theoretical preconceptions about them. Other useful texts on psychological anthropology and its insistence on leading with the emic approach-which itself furnishes the experience-near raw material for the scholar's subsequent psychological or psychoanalytic inferences and the testing of them-are P. K. Bock's *Rethinking Psychological Anthropology* (Prospect Heights, IL: Waveland Press, 1999) and G. D. Spindler's comprehensive edited *The Making of Psychological Anthropology* (Berkeley: University of California Press, 1980).

G. W. Stocking, Jr., ed., *History of Anthropology*, 4 vols. (Madison: University of Wisconsin Press, 1983-1987). The ranking historian of anthropology in twentieth century America. Excellent bibliographies of primary and secondary sources. In a rare case of scholarly "serendipity," in 1965 (as previously referenced) the then-premier historian of psychiatry, George Mora, and the still-ranking historian of anthropology, George Stocking; provide independently published articles castigating their colleagues for writing "presentistic" intellectual history in total obliviousness to the wider (sociocultural, political-economic, etc.) matrices in which they developed (*op. cit.*). Both were describing "anachronism" and "internalism" in both psychiatric and anthropological history. Stocking's four volumes are paradigmatic for including an "externalist" and non-presentistic approach in the history of academic disciplines.

E. H. Gombrich, *The Story of Art*, 16th ed. rev. expanded (New York: Phaidon, 1995). A classic shorter overview. Probably the most coherent "read" on the history of Western art from antiquity to the present.

M. Stokstad, *Art History*, rev. 2nd ed. (Upper Saddle River, NJ: Pearson Education, 2005). One of the most comprehensive (1200 pages with hundreds of illustrations) histories of non-Western as well as Western art. Art history, long too internalist, like the history of philosophy, has recently been doing a somewhat better job of contextualizing its subject, though there is still room for a great deal of improvement. Furthermore, art historians often become so entranced with general and detailed stylistic analysis and comparison that they overlook pertinent archival data on their subjects and traditions. This has been the case, for instance, with knee-jerk or reflexive Anglo-American Renaissance historians' paring-down of Giotto's corpus to only a handful of items. Rather than laundry-listing dozens of period art histories, I simply refer the reader to Stokstad's gargantuan bibliography on art/architecture worldwide.

However, it is key to note that until relatively recently, the major comprehensive art histories (such as the multiple editions of Janson's standard text on Western art) practiced virtually total exclusion of women artists from the canon of high art—often even when the historians were women themselves. For a terse (but thorough) historical and historiographical account of the emergence of women artists into the canon—both in textbooks and detailed monographs; see W. Slatkin, *Women Artists in History: From Antiquity to the Present*, 3rd ed. (Upper Saddle River, NJ: Prentice Hall, 1997). Also treats a variety of philosophically and socioculturally pertinent issues.

A. Hauser, *The Philosophy of Art History* (Northwestern University, 1985).

A. Hauser, *The Social History of Art*, 2 vols., trans. S. Godman (New York: Vintage, 1957).

A. Hauser, *The Sociology of Art*, trans. K. J. Northcott (University of Chicago, 1979). Art historians are only *very gradually* catching up with Hauser's sociology and social history of art.

T. Eagleton, *Literary Theory: An Introduction* (Minneapolis: University of Minnesota Press, 1983). A fair-minded (despite the author's socialist leanings) account of the history, theory, and criticism of literature. See also his companion book, *Ideology: An Introduction* (New York: Verso, 1991), in which he traces the impact of personal ideologies, from socialist to conservative, on thinkers on politics, literature, and other matters through the postmodernists. He is virulently anti-deconstructionist.

R. Weirmann, *Structure and Society in Literary History: Studies in the History and Theory of Historical Criticism*, expanded ed. (Baltimore: Johns Hopkins University Press, 1984). An historiography and critique of theories and histories of literature, including structuralism and deconstructionism. Levi-Strauss's "structuralism" was much more empirically (i.e., ethnographically and linguistically) based than the deconstructionist reactions against him. Levi-Strauss theorized (based on "primitive" kinship and exogamy structures, as well as language) that there are deep mental structures that lead to various polarities in social structure and culture. In this he was influenced by Freud as well as by his own cross-cultural ethnographic experiences. Unfortunately, his ideas were not sufficiently entertained by American literary and historical scholars before the notorious Derrida's anti-structuralist "postmodernism" made its thunderous debut among literary theorists at the 1966 Annual Meeting of the Modern Language Association at Johns Hopkins.

Parenthetically, I might add, that recently historians of literature have been jettisoning postmodernism, with its denial of historical truth and banishment of the idea of an intersubjectively real text (and of any authorial intentionality—that is, "it's all up to the reader"!). This new breed call themselves, aptly enough, the "new historicists." Among other things, they are rediscovering the importance of primary sources in literary history and biography—and of a notion of degrees of intersubjective truth.

Addendum C. Philosophy of Science and Technology

Some items on the philosophy of science have, of course, been touched on in Chapter 1. Here are some additional important ones.

H. Frankfort, H. A. Frankfort, J. A. Wilson, and T. Jacobsen, *Before Philosophy: The Intellectual Adventure of Ancient Man. An Essay on Speculative Thought in the Ancient Near East* (Baltimore: Penguin, 1949). Covers Egypt and Mesopotamia. Egyptian entries cover cosmology/mythology, the function of the state, and the values of life. Similarly for the discussion of Mesopotamia, which in

addition has a chapter on the cosmos as state. The final chapter treats the gradual emancipation of thought from myth.

W. Whewell, *The Philosophy of the Inductive Sciences*, 2nd ed., 2 vols. (London: John V. Parker, 1847). See also references to his history of science in Addendum B. One of the first, serious and sustained, analytical philosophies of science.

A. F. Chalmers, *What Is This Thing Called Science? An Assessment of the Nature and Status of Science and Its Methods*, 2nd ed. (St. Lucia, Australia: University of Queensland Press, 1982). The best brief introduction to the philosophy of science—including, for example, objectivism/realism versus subjectivism/relativism. Excellent bibliography.

R. Harre, *The Philosophies of Science: An Introductory Survey*, new ed. (Oxford: Oxford University Press, 1986).

S. Korner, ed., *Explanation* (New Haven, CT: Yale University Press, 1975). Deals with explanations in a variety of disciplines, including the natural and social sciences, psychology, and history and the humanities. It also reconsiders the place of teleology and ideology in explanatory endeavors. It is carried by four major essays, with two commentaries and the essayist's reply following each one. The result is thought-provoking dialogue—including concurrence and disagreement.

F. Grinnell, *The Scientific Attitude* (Boulder, CO: Westview Press, 1987). Very readable introduction to important issues in scientific theory, practice, and application; the sociology and politics of scientific education and research collectivities; and the relation of science to other arenas—especially religion and politics.

A. J. Ayer, ed., *Logical Positivism* (New York: Free Press, 1959). Historically and philosophically significant collection of writings by the original Vienna Circle of logical positivists and by their philosophical and scientific successors. Also treats the impact of Bertrand Russell's "logical atomism" on their theory of metaphysics, meaning, and science. Ayer became a latter-day key player in this movement and a philosopher of language.

R. Carnap, *An Introduction to the Philosophy of Science*, ed. M. Gardner [from audio-taped lectures] (New York: Dover, 1995). One of the original logical positivists. Originally presented as Carnap's philosophy of physics. Interesting discussions of non-observables in theoretical, as opposed to empirical, laws, and of determinism, indeterminacy, and many other items. Makes important distinctions between the aims and discourses of philosophers of physics and physicists themselves.

P. Unger, *Philosophical Relativity* (Minneapolis: University of Minnesota Press, 1984). Takes questions of meaning to be relative and indeterminate in the sense that two incompatible accounts are equally good. His relentless philosophical relativity takes off from there.

P. Feyerabend, *Killing Time: An Autobiography* (Chicago: University of Chicago Press, 1995). Posthumously published. Swan song of this self-professed philosophical, scientific, and ethical relativist and irrationalist.

J. E. Harris, *Against Relativism: A Philosophical Defense of Method* (LaSalle, IL: Open Court, 1992).

L. Fleck, *The Genesis and Development of a Scientific Fact* [1935], trans. F. Bradley and T. J. Tenn; ed. T. J. Tenn and R. K. Merton (Chicago: University of Chicago Press, 1979). Rediscovered after this English language translation from the original German-language text. Fleck was Polish. This M. D. bacteriologist adumbrated Kuhn in many respects (without being radically relativist). Essentially, he showed how the concept, and diagnoses of, syphilis changed with the various laboratory methods (varying titres, etc., of varying tests) used to detect it and its degree of activity. Instead of "paradigms" Fleck spoke of "thought collectives." In the third edition of *The Structure of Scientific Revolutions*, Kuhn much-belatedly acknowledged Fleck's "anticipation" of much of Kuhn's own argument.

M. Merleau-Ponty, *Phenomenology of Perception*, trans. C. Smith (London: Routledge and Kegan Paul, 1962). A classic example of the very best Continental phenomenology of the perceiving body.

Hans Jonas, *The Phenomenon of Life: Toward a Philosophical Biology* (University of Chicago, 1966).

B. Hoffman, *The Strange Story of the Quantum* (New York: Dover, 1959). One of the most accessible and widely read accounts of the history and philosophy of quantum mechanics.

K. Popper, *Objective Knowledge: An Evolutionary Approach*, rev. ed. (Oxford: Oxford University Press, 1979).

K. Popper, *Realism and the Aims of Science* (Totawa, NJ: Rowman and Littlefield, 1983). Probably the twentieth century's greatest philosopher of science. A fallibilist and critical realist.

W. V. Quine, *Quiddities: An Intermittently Philosophical Dictionary* (Cambridge, MA: Belknap Press of Harvard University Press, 1987). Entries on key concepts in philosophy. Willard Van Quine is probably the best American philosopher of the second half of the twentieth century. Quine also has a clear and felicitous—indeed at times humorous—style. Moreover, he is thorough and yet wonderfully succinct, his books seldom surpassing 150 pages. As he is quite pertinent to both the philosophy of science and the philosophy of mind, I include the following works as exemplary of his philosophizing: *Word and Object* (Cambridge, MA: MIT Press, 1960); *Ontological Relativity* (New York: Columbia University, 1969); *The Ways of Paradox and Other Essays*, rev. ed. (Cambridge, MA: Harvard University Press, 1976); *The Web of Belief*, rev. ed., with J. S. Ullian (New York: Random House, 1978); and (5) *Pursuit of Truth*, rev. ed. (Cambridge, MA: Harvard University Press, 1992). His concept of “qualia” is pertinent to mind-body.

D. Kelley, *The Evidence of the Senses: A Realist Theory of Perception* (Baton Rouge: Louisiana State University Press, 1986).

D. Papineau, ed., *The Philosophy of Science* (Oxford: Oxford University Press, 1996). Important recent writers representing a variety of standpoints.

E. D. Klemke, R. Hollinger, and A. D. Kline, *Introductory Readings in the Philosophy of Science*, rev. ed. (Buffalo, NY: Prometheus Books, 1988). Extracts from twenty-eight of the most noted philosophers of science (including realists and relativists).

G. Radnitzky and W. W. Bartlett, III, eds. *Evolutionary Epistemology, Rationality, and Sociology of Knowledge* (LaSalle, IL: Open Court, 1987). Evolutionism has become an all-embracing philosophy or world-view for many—including an evolutionary psychiatry/psychology and ethics. See remarks in Addendum F.

R. Rorty, *Philosophy and the Mirror of Nature* (Princeton, NJ: Princeton University Press, 1979). The doyen of American deconstructionists. Radically epistemologically relativist and anti-representational—in philosophy as well as in science and history. And yet, paradoxically, it espouses a radically mechanistically reductive philosophy of mind! As important as Kuhn's text. Rorty's professed aim is simply “to keep the conversation going”—even though it seems to be heading nowhere in particular.

R. Bhaskar, *Reclaiming Reality: A Critical Introduction to Contemporary Philosophy*. A socialist, realist philosopher debates postmodern epistemologists and philosophers of social and natural science. He also—correctly, in my view—takes postmodernist deconstructionism to be socially, politico-economically, and ethically pernicious.

L. BonJour, *The Structure of Empirical Knowledge* (Cambridge, MA: Harvard University Press, 1985). The author develops an anti-foundationalist epistemology. In the first part; he systematically elaborates on foundationalist views and formulates an argument to the effect that no version of foundationalism provides an acceptable account of empirical justification. In the second part; he explores a coherence theory of empirical knowledge and maintains that a defensible theory must incorporate an adequate concept of observation. He concludes with an account of the correspondence theory of empirical truth and contends that systems of empirical belief which satisfy the coherentist criteria are also likely to be true.

I. Scheffler, *Science and Subjectivity*, 2nd ed. (Indianapolis, IN: Hackett, 1985). Examines recent criticisms of objectivism in science and attempts to develop the epistemological bases for a viable scientific objectivism.

D. N. Robinson, *Philosophy of Psychology* (New York: Columbia University Press, 1985). Interesting text which centers around five topics: (1) the armchair and the laboratory; (2) “hard” and “soft” determinism; (3) models, metaphors, and similes in reductionism; (4) explanations; and (5) ethics and psychological inquiry.

D. S. Browning, *Pluralism and Personality: William James and Some Contemporary Cultures of Psychology* (Lewisburg, PA: Bucknell University Press, 1980). Browning contends that some of the more

popular psychologies actually constitute rudimentary cultures—more or less total interpretations of human nature, society, and the general direction of modern civilizations. He uses the psychology, philosophy, and ethics of William James to interpret and “critique” three major cultures of contemporary psychology: the culture of detachment (best exemplified by psychoanalysis); the culture of joy (the humanistic psychologists such as Rogers, Marlow, and Perls); and the culture of care (Erikson, Fromm, and May).

C. G. Prado, *The Limits of Pragmatism* (Atlantic Highlands, NJ: Humanities Press International, 1987). A balanced critical appraisal of Rorty’s “neo-Pragmatism.” Compares key areas of his work with that of Donald Davidson, Hans-Georg Gadamer, and Stanley Cavell, with a view to reassessing Rorty’s “post-philosophical philosophy.”

J. Leplin, ed., *Scientific Realism* (Berkeley: University of California Press, 1984). Diverse positions by a distinguished group of contributors.

S. Blackburn, *Truth: A Guide* (Oxford, 2005).

W. T. Anderson, ed., *The Truth About the Truth: De-Confusing and Re-Constructing the Postmodern World* (New York: G.P. Putnam’s Sons, 1995). Anthology of postmodernists from a variety of disciplines.

L. K. Schmidt, ed., *The Specter of Relativism: Dialogue and Phronesis in Philosophical Hermeneutics* (Northwestern University, 1995).

D. L. Hull and M. Ruse, eds., *The Philosophy of Biology* (Oxford: Oxford University Press, 1998). An excellent set of essays on evolutionism, sociobiology, genetics, molecular biology, function, developmental biology, and creation science.

L. Laudan, *Science and Values: The Aims of Science and Their Role in Scientific Debate* (Berkeley: University of California Press, 1982). Discusses mostly epistemic values. Argues that debates between competing theories can be resolved rationally (contra Kuhn, Rorty, and Feyerabend).

F. Suppe, ed., *The Structure of Scientific Theories*, 2nd ed. (Chicago: University of Illinois Press, 1977). Fifteen philosophers of science, as well as Suppe, elaborate various vantages in the philosophy of science.

L. Cahoone, ed., *From Modernism to Postmodernism: An Anthology* (Oxford: Blackwell, 1996). Presents a patchwork of modernist, postmodernist, and traditional anti-modernist positions in excerpts from forty-two significant thinkers from Descartes, Condorcet, Rousseau, Burke, and Kant; through Nietzsche, Weber, Freud, and Wittgenstein; through Derrida, Foucault, and Baudrillard; to Habermas, Daniel Bell, and Alasdair MacIntyre.

John Hospers, *An Introduction to Philosophical Analysis*, 2nd ed. (Englewood Cliffs, NJ: Prentice-Hall, 1967). Still the classic exposition of the fundamentals of analytical philosophy. Essential for any student of the philosophy of science.

A. Rosenberg, *Philosophy of Social Science*, 2nd ed. (New York: Harper Collins, 1995).

J. Habermas, *Knowledge and Human Interests* (Boston: Beacon Press, 1971). Undertakes a historically oriented attempt to reconstruct the history of positivism with the intention of analyzing the connections between knowledge and human interests. The analysis of this connection should support the assertion that a radical critique of knowledge is possible only as a social theory. This idea is implicit in Marx’s theory of society, even though it cannot be gathered from the self-understanding of Marx on Marxism. Habermas would like to arrive at a social theory through the self-reflection of science. Here he takes the first steps in that direction, which he claims to be no more than a prolegomenon. In this framework psychoanalysis occupies an important place for him as exemplary of the self-reflection of a science. He was a staunch enemy of Foucault.

W. Heisenberg, *Physics and Philosophy: The Revolution in Modern Science* (New York: Harper & Row, 1958).

M. Sachs, *Einstein versus Bohr: The Continuing Controversies in Physics* (LaSalle, IL: Open Court, 1991). Gives a problem-oriented account of modern physics, which concentrates on underlying concepts and debates. He moves from classical and nineteenth century physics through such important ideas as the Einstein photon box experiment; the Einstein-Podolsky-Rosen paradox, and the Schrödinger’s cat paradox. He suggests how the contradictions between quantum and relativity theory might be resolvable.

In an Epilogue, he makes suggestions with reference to religious notions, Taoism, and Buber's theory of I-Thou for generalizing Einstein's approach beyond physics—not strange given that genius' profoundly theistic/spiritual sense.

A Wittgenstein Interlude

See also Ray Monk's excellent life and times, and intellectual, biography of the man many deem the twentieth century's greatest philosopher, *Ludwig Wittgenstein: The Duty of Genius* (New York: Penguin, 1990). Like William James (whom he admired) Wittgenstein was one of the few great philosophers who was also a great man. Also like James, he knew the depths of human suffering, for he was almost certainly what we would now call a "bipolar," untreated, even though his favorite student, Drury, was a psychiatrist at Dublin's Trinity University's affiliated mental hospital. Wittgenstein often visited him there; and Drury let him talk with patients. Of one schizophrenic gentleman, Wittgenstein said, "He's smarter than any of the doctors"! In fact, Wittgenstein came to view himself as a therapist of sick or misused language—which he considered a good deal of "professional" philosophy to be. He never earned a degree; but was awarded the Cambridge D.Phil. for his slim first book (the only one he published in life, though he constantly wrote) so they could give him a professorship. He was a very spiritual man, and yet everyone in the Cambridge Moral Sciences Club—including Bertrand Russell—was afraid of his razor-sharp analytical mind.

His first book, *Tractatus Logico-Philosophicus*, was a 78-page masterpiece. His former mentor, Bertrand Russell, wrote the Introduction. This small treatise is difficult to summarize, and indeed it is like two books. The first 74 1/2 pages consist of terse propositions, numbered and almost geometrically deduced one from the other. It puts forward a representational model of perception, thought, and language; which emphasizes mental images and pictorial communications (to bowdlerize something actually much more profound and complex). The last 3 1/2 pages jar the reader of the first 74 1/2. They are spiritual, moral, almost mystical. This is the part the Vienna Circle of Logical Positivists either never read or at least never understood. They repressed it and invited Wittgenstein to a meeting, even implying that Moritz Schlick might pass him his crown. The great, and then very young, philosopher left in disgust and never returned!

Just a few snippets to give a sense of the ending: 6.4 "All propositions [i.e., what he had talked about in the first 90-odd percent of the tract] are of equal value." 6.41 "The sense of the world must lie outside the world. In the world everything is as it is and happens as it does happen. In it there is no value. *If there is a value which is of value, it must lie outside all happening and being-so*" [my italics]. "For all happening and being-so is accidental. What makes it non-accidental cannot lie in the world, for otherwise this would again be accidental. *It must lie outside the world*" [my italics]." 6.421 "It is clear that ethics cannot be expressed. *Ethics is transcendental ...*" [my italics]. Finally, in what appears to be Hume-like self-raillery, but is not, he tells us, serious and straight-faced: 6.54 "My propositions are elucidatory in this way: he who understands me finally recognizes them as senseless [quite an uppercut to the logical positivists!], when he has climbed out through them, on them, over them. He must surmount these propositions; then he sees the world rightly. *Whereof one cannot speak, thereof one must be silent*" [my italics].

Wittgenstein was raised Catholic by a family that was part-Jewish. We get hints of the transcendent Hebrew God, hints of Christian mysticism, and an almost Zen-like final flourish in the last pages of the *Tractatus*. After finishing the book he felt he had nothing more to say, so he withdrew to the Vienna woods for six years as a grammar school master. In the summers he gardened at the local monastery, lived like the monks, and worshipped with them. He even applied for a novitiate toward lay-brotherhood, but the sharp eyed abbot discerned he was a troubled man still seeking himself.

Russell, who wrote the Introduction to the *Tractatus* and still considered himself his benevolent *pater familias*, pulled Wittgenstein back to Cambridge for his D.Phil. and professorship. And yet Wittgenstein pulled no punches with his former teacher. At some point, Wittgenstein truthfully, but snidely, said, "Russell's [and Alfred North Whitehead's] *Principia Mathematica* [a brilliant but failed attempt to reduce all arithmetic to logic] should be bound in red and everyone should read it. The rest of his books should be

bound in black and no one should read them.” Russell’s narcissism was such that he believed he could write literally on everything under the sun, and with equally superior authority. And he wrote one or two books a year. When he turned to historical and political-science subjects, as in *On Power*, he had little original to say, and made incredibly gauche errors in English history even, for example, misattributing James I’s most famous *obiter dictum*, “No Bishop; no King,” to his ill-fated and lackluster son, Charles I. In addition, books such as *On Happiness* were embarrassingly shallow and trite, just like his tracts against Christianity. Even so, those who knew Russell depicted an approachable and avuncular man.

In any event, Wittgenstein became a very popular lecturer among Cambridge philosophy students. Rather than canned notes, they saw something they had never seen before: a slim, modestly dressed man, seated in a straight-back chair before them actually philosophizing, treating them to how it could be done. About ten years ago, I talked to the husband of Gay Robins, the Egyptologist at Emory University. He was a retired English M.D. molecular biologist who did his B.A. in Philosophy at Cambridge because of Wittgenstein. He described how he writhed strenuously in his chair and screwed-in his face as he fought with himself over his own ideas (personal communication, 1995).

This whole-body philosophizing has been described by others as well. He forbade his students to take notes, but fortunately he usually looked up or had his eyes closed, so that we have published notes by his best students, of whom there were many. He was such a perfectionist that he could never finish his long contemplated second book. It was put together posthumously by his friends [*Philosophical Investigations*, ed. G. E. M. Anscombe and R. Rhees (London: Blackwell, 1953)]. Reams of philosophizing were found in the safe of his monkishly simple Cambridge apartments. He also wrote a good deal on the philosophy of psychology. Indeed, he prevailed upon Dr. Drury to get him an audience with Trinity Medical’s dean to discuss taking his medical degree in order to train in psychiatry. The dean, confronted with this middle-aged holder of a distinguished professorship at Cambridge, was not very encouraging.

This is indicative, again, of how Wittgenstein conceived of himself as trying to heal the linguistic mental cramps of philosophers. *Philosophical Investigations* (most of which Wittgenstein had pretty much cut and pasted before his death) is a very different book from his first one. It is, in my opinion, much richer and more interesting. Just a few angles can be mentioned. First of all he focused on the variety of “language-games,” whether among academicians, cricket-players, or barflies. I see shades of Kant, in his *Critique of Pure Reason* and his *Critique of Practical Reason*. By the *à priori* categories of the former, man is subject to causal explanation; but in matters of morality (“practical reason”) he is deemed to have free will. The scientific discourses constituted one set of language games, literary criticism another, and theology or ethics still others. Language games were part of what constituted different “forms of life.” Apropos psychiatry, he vigorously denied the possibility of a “private language.” Language was, by its very nature, capable of being communicated to others. Perhaps talking with Trinity mental patients challenged him to decode the meaning encoded in their madness. In any event, he came to view himself as the psychiatrist or therapist of the misused language which he felt constituted most philosophizing.

Despite his scintillating intellect; there are serious problems with aspects of his work. *To begin with*, he was much-stronger at critical dissections—of his own and others’ positions—than at extended syntheses. This lent much of his philosophy a rather aphoristic flavor. This may have been partly influenced by the aphoristic tendencies of Schopenhauer, whom we know that he read. He may also have read Nietzsche; who was enamored of Schopenhauer, who became a much-greater aphorist, and who—after all—had trained in philology. I suspect that this was indeed the case; though it is hard to know, as Wittgenstein was strikingly secretive about whom he had read: preferring the mystique of total self-creation. *Second*, his reductive diagnoses of philosophical problems as grammatical/syntactic diseases; threatened to collapse all metaphysical, epistemological, and ethical issues and stances into just so much linguistic pathology. *Third*, the explosive efflorescence of his “language games”/“forms of life” put future timbers under postmodernism’s radical relativism/deconstructionism—a position Wittgenstein almost certainly would have deplored.

C. Mitcham and R. Mackey, *Philosophy and Technology: Readings in the Philosophical Problems of Technology* (New York: Free Press, 1983). Leading philosophers address conceptual, political/ethical, metaphysical, religious, and existential issues.

David S. Landes, *The Unbound Prometheus: Technological and Industrial Development in Western Europe From 1750 to the Present* (Cambridge: Cambridge University Press, 1969). A history of technology and industrialism in their social, political, economic, and ethical contexts. Also contains philosophical/ethical vantage points. Very thought provoking.

A. P. Iannone, ed., *Contemporary Moral Controversies in Technology* (Oxford: Oxford University Press, 1987). Broad treatment of topics by authorities in their fields. A good introductory textbook on the issues.

T. Forester, *High-Tech Society: The Story of the Information Technology Revolution* (Cambridge, MA: MIT Press, 1987). Looks at the moral, socioeconomic, interpersonal, scientific, philosophical, and practical pluses and minuses of the computer revolution.

B. Schwartz, *The Battle for Human Nature: Science, Morality and Modern Life* (New York: W.W. Norton, 1986).

Addendum D. History of Science and Technology

M. Clagett, *Greek Science in Antiquity* (New York: Collier, 1963). A history of Greek science and its legacy in subsequent civilizations. Begins with science and mathematics in ancient Egypt and Mesopotamia, then moves through Hellenic and Hellenistic science to Roman science and patristic literature to Latin science in late antiquity and the early Middle Ages and finally to Greek science in the Byzantium of Justinian. Important appendices on mathematics and geometry.

B. Farrington, *Greek Science: Its Meaning for Us* (New York: Penguin, 1963). Originally published in 1943; still eminently useful.

B. Snell, *The Discovery of the Mind in Greek Philosophy and Literature* (New York: Dover, 1988).

J. E. Annas, *Hellenistic Philosophy of Mind* (Berkeley: University of California Press, 1992).

G. de Santillana, *The Origins of Scientific Thought: From Anaximander to Proclus; 600 B.C. to A.D. 500* (New York: New American Library, 1970). A classic.

G. E. R. Lloyd, *Early Greek Science: Thales to Aristotle* (New York: W.W. Norton, 1970).

G. E. R. Lloyd, *Greek Science After Aristotle* (New York: W.W. Norton, 1973). Goes through the decline of science in the early Middle Ages and Byzantine Empire; but not before treating its heyday in Hellenistic and early Roman Alexandria.

G. McCain and E. M. Segal, *The Game of Science*, 5th ed. (Pacific Grove, California: 1988). Popular, illustrated and fun to read, and yet treats the very real aspects and attitudes of scientific researchers.

H. Collins and T. Pinch, *The Golem: What Everyone Should Know about Science* (Cambridge: Cambridge University Press, 1993). Argues that science gives us both nuclear accidents and medical cures. Likens science to the Golem, from Jewish mythology; powerful yet potentially dangerous—a gentle, helpful creature that may run amok at any moment. Through a series of case studies of famous and less well known scientific episodes; they assert that scientific “certainty” comes from interpreting ambiguous results within an order imposed by scientists themselves.

C. P. Snow, *The Two Cultures and the Scientific Revolution* (Cambridge: Cambridge University Press, 1961). In this famous short book, the literary C. P. Snow argues that his science colleagues are more abreast of the humanities than vice versa. Given the rampant scientism and technologism today, and the predominant sub-specialization; one wonders whether he could still say the same of contemporary Anglo American science—or philosophy for that matter.

G. Holton, *Science and Culture* (Boston: Beacon, 1965).

G. Gamow, *Thirty Years that Shook Physics: The Story of Quantum Theory* (New York: Doubleday Anchor, 1966). By a distinguished theoretical and atomic physicist.

S. J. Gould, *Ontogeny and Phylogeny* (Cambridge, MA: Belknap Press of Harvard University Press, 1977). Perhaps his best work.

S. F. Mason, *A History of the Sciences* (New York: Collier/Macmillan, 1956). Still widely used. By a chemist and science historian.

P. Winch, *The Idea of a Social Science and its Relation to Philosophy*, 2nd ed. (London: Routledge, 1990). A terse classic.

J. Losee, *Philosophy of Science and Historical Inquiry* (Oxford: Clarendon Press, 1987). Brilliant discussion of the proper epistemological relationship between philosophy of science and history of science.

G. Sarton, *A History of Science*, 2 vols. (Cambridge, MA: Harvard University Press, 1955, 1959). Unfortunately, Sarton was only able to cover the history of ancient science before his death. Also deals with the history of history. One of the twentieth century's greatest historians of science (on a par with, and age mate of, the great medical historian Henry Sigerist).

G. Sarton, *The History of Science and the New Humanism* (Oxford: Transaction Books, 1988). Posthumously published. His integration of science and humanism. With recollections and reflections by his student, the great sociologist of science R. K. Merton.

R. C. Olby, G. N. Cantor, J. R. R. Christie, and M. J. S. Hodge, eds., *Companion to the History of Modern Science* (London: Routledge, 1989). Bibliographically invaluable.

W. G. Dampier, *A History of Science and its Relations with Philosophy and Religion* (Cambridge: Cambridge University Press, 1971). Broad scope. Covers major areas of science and their relations to metaphysics, religion, and ethics. Has become a standard resource.

E. Grant, *Physical Science in the Middle Ages* (Cambridge University, 1973).

C. Singer, *From Magic to Science* (New York: Dover, 1958). Brilliantly written on different issues and topics in the history of science (and medicine). Especially historically interesting is the brief biographical sketch of Singer's teacher, Karl Sudhoff, the first great European professional historian of medicine. An M.D. with a thorough knowledge of classical and modern European languages; Sudhoff was a prolific writer on a plethora of medical historical topics and periods. He was the founding director of the great University of Leipzig Institute of the History of Medicine as well as founding editor of the still-foremost German *Journal of the History of Medicine*—also known as *Sudhoff's Archive*. Again, Sudhoff taught the first great American medical historians, the M.D.'s Henry Sigerist and Oswei Temkin of the Johns Hopkins Institute for the History of Medicine, as well as the Englishman Charles Singer.

C. Singer, *A Short History of Anatomy and Physiology From the Greeks to Harvey* (New York: Dover, 1957).

A. d'Abro, *The Evolution of Scientific Thought: From Newton to Einstein*, 2nd ed. (New York: Dover, 1950).

B. L. Silver, *The Ascent of Science* (Oxford: Oxford University Press, 1998). One of the best recent overviews of the history of the sciences. Good bibliography. Excellent on philosophical, ethical, and religious implications of the physical and biological sciences. By a physical chemist and science historian.

E. J. Dyksterhuis, *The Mechanization of the World Picture: Pythagoras to Newton*, trans. C. Dikshoorn; "Foreword" by D. J. Struick (Princeton, NJ: Princeton University Press, 1986). One of the very best histories of mathematics and physical science. A very influential book. Has affected philosophy of science (and general intellectual history) as much as the history of science.

R. Westfall, *The Construction of Modern Science: Mechanisms and Mechanics, 1650–1800* (Cambridge University, 1975).

H. Butterfield, *The Origins of Modern Science, 1300–1800* (New York: Free Press, 1965). Excellent but, like too much history of science, a bit "whiggish." Begins with late-medieval post-Aristotelian theories of motion; an important bridge to Galileo and Newton.

A. R. Hall, *The Scientific Revolution, 1500–1800: The Formation of the Modern Scientific Attitude*, 2nd ed. (Boston: Beacon, 1966). Very coherent presentation of mathematics and of the physical and biological sciences.

T. Hankins, *Science and the Enlightenment* (Cambridge University, 1985).

A. N. Whitehead, *Science and the Modern World* (New York: Free Press, 1967). A philosophically sensitive history of the rise of modern science, with Whitehead's (one of the most brilliant twentieth century

mathematicians and mathematical/scientific philosophers) personal reflections. Impact on society/culture and religion examined as well.

S. Drake, trans. and commentator, *Discoveries and Opinions of Galileo* (Garden City, NJ: Doubleday Anchor, 1957). Galileo's key texts.

I. B. Cohen, *Revolution in Science* (Cambridge, MA: Belknap Press of Harvard University Press, 1985). A compendious survey from Copernicus through the twentieth century. Deals with psychology and the social sciences, and even the historiography of science as well. Cohen is one of the twentieth century's greatest historians of science—and teacher, from his seat at Harvard, of many of America's best subsequent generations of scholars on the subject (including medical and psychiatric historians). This is a magnum opus, with copious references to primary and secondary sources. It is also a joy to read, with a clear and elegant style.

G. Holton, *Thematic Origins of Scientific Thought: Kepler to Einstein*, rev. ed. (Cambridge, MA: Harvard University Press, 1988). Exemplifies his concept of “themata,” with special attention to Einstein's work. Goes from Kepler through quantum physics.

B. Jaffe, *Michelson and the Speed of Light: Biography of a Scientist* (Garden City, NY: Doubleday Anchor, 1960).

R. Harre, *Great Scientific Experiments* (Oxford: Oxford University Press, 1981). Paradigmatic experiments in the physical and life sciences, from Aristotle to Otto Stern on the wave aspect of matter. Harre is a distinguished British philosopher and historian of science who has also worked in the philosophy of psychiatry/psychology.

R. V. Bruce, *The Launching of Modern American Science: 1846–1876* (Ithaca, NY: Cornell University Press, 1988). Wonderfully written story of the formative years of American science and the role of European education in American scientists' dawning professionalism. Captures the evangelical fervor of this first generation of European-trained Ph.D. and M.D. American scientific investigators (something the earlier science and medical historian Charles Rosenberg first characterized).

W. Whewell, *Selected Writings on the History of Science*, ed. with Introduction X. Elkana (Chicago: University of Chicago Press, 1984). Historiographically very interesting since Whewell, also a philosopher and scientist, was active from the 1820s through the mid-1860s. His histories and philosophy of science comprise numerous volumes-cited previously.

C. G. Gillispie, *The Edge of Objectivity: An Essay in the History of Scientific Ideas* (Princeton: 1960/1990). From Galileo through evolutionism and relativity; portrays the history of modern science as progressive refinements in objectivity. However philosophically correct; this is certainly the way the vast majority of scientists view their work.

R. C. Bannister, *Sociology and Scientism: The American Quest for Objectivity, 1880–1940* (Chapel Hill: University of North Carolina Press, 1987).

L. Eisely, *Darwin's Century: Evolution and the Men Who Discovered It* (Garden City, NY: Anchor Doubleday, 1961). Goes into the scientific and religious background of evolutionary theory through Darwin and his epigones (e.g., Huxley) and of course Alfred Russell Wallace. Factually well grounded and very readable popular history, with good list of Suggested Reading.

J. C. Greene, *The Death of Adam: Evolution and its Impact on Western Thought* (New York: Mentor, 1961). Top-notch and extremely well written.

J. C. Greene, *Science, Ideology, and World View: Essays in the History of Evolutionary Ideas* (Berkeley: University of California Press, 1981).

D. Kohn, ed., *Darwinian Heritage* (Princeton, NJ: Princeton University Press, 1985). Useful anthology of historical, philosophical, and theoretical/methodological vantage points.

T. H. Huxley, *Evolution and Ethics (1893); With Essays by J. Paradis and G. C. Williams on Its Victorian and Its 20th Century Sociobiological Contexts* (Princeton, 1989). As mentioned elsewhere, Huxley was opposed to the notion that evolutionism could yield a viable ethic for humanity.

W. Coleman, *Biology in the Nineteenth-Century: Problems of Form, Function, and Transformation* (Cambridge: Cambridge University Press, 1977). One of the very best expositions of its subject. By a

Ph.D. historian of biology and medicine who also wrote a brilliant biography of Cuvier, the great French comparative anatomist and early paleontologist. Unfortunately, Coleman died tragically young of cancer. He had been on the faculty in both the history of science and the history of medicine at Johns Hopkins.

G. Allen, *Life Science in the Twentieth Century* (Cambridge University, 1978).

K. D. Knorr-Cetina, *The Manufacture of Knowledge: An Essay on the Constructivist and Contextual Nature of Science* (New York: Pergamon, 1981). A provocative text in the vein of Merton's, and Berger and Luckman's, sociologies of science (for reference information, see Chapter 1).

H. Dorn, *The Geography of Science* (Hopkins, 1991). Looks at the relationship between the development of science/technology on one hand, and demographic and physical geographic factors on the other. From the ancient Near East through modern times.

J. Grant, *Discarded Science: Ideas That Seemed Good at the Time ...* (Wisley, UK: Artists and Photographers Press, Ltd., 2006). A delightful and informative "read."

R. Kanigel, *Apprentice to Genius: The Making of a Scientific Dynasty* (Hopkins, 1993). Traces a brilliant 40-year legacy of Nobel prizewinners based at the National Institutes of Health and Johns Hopkins University. Looks at the sociality and deeply-human aspects of the practice of science.

J. Piaget and R. Garcia, *Psychogenesis and the History of Science*, trans. H. Feider (Columbia University Press, 1989). Demonstrates that the fundamental laws of cognitive development operate in all forms of acquiring knowledge, from the first mental constructions to the most advanced modes of modern science. A most provocative thesis; though not without its controversial features (including the extent to which Piaget's theories of cognitive development are well evidenced and, even given this; the degree to which they are trans-culturally/historically universal).

R. K. Merton, *The Sociology of Science: Theoretical and Empirical Investigations* (University of Chicago, 1973). Previously discussed. *One of the most important texts in twentieth century science studies.*

D. Cardwell, *The Norton History of Technology* (New York: W.W. Norton, 1994). Part of the Norton History of Science series edited by R. Porter. From Greek technology through Roman engineering, and the seventeenth century Scientific Revolution till today. The last chapter is "Toward a Philosophy of Technology." Also includes a chapter on technology and medicine. Very scholarly and well written. Often looks at sociocultural, military, political, and economic factors and consequences.

J. G. Landels, *Engineering in the Ancient World* (Berkeley: University of California Press, 1978).

D. Hill, *A History of Engineering in Classical and Medieval Times: Important Technological Achievements 600 B.C. to A.D. 1450* (New York: Barnes and Noble, 1984). H. Hodge, *Technology in the Ancient World* (New York: Barnes and Noble, 1970). The initial five chapters deal with ancient Mesopotamia and, especially, ancient Egypt. Chapter 6 treats the Hellenic Greeks, Chapter 7 the Hellenistic Greek and, later, Roman engineers; and Chapter 8 takes the story through northern Europe, India, China, and the indigenous literate civilizations of the New World.

A. P. Usher, *A History of Mechanical Inventions* (Boston: Beacon, 1954). An old but worthwhile classic.

I. E. S. Edwards, *The Pyramids* (Hammondsworth, UK: Penguin, 1967).

K. W. Butzer, *Early Hydraulic Civilization in Egypt: A Study in Cultural Ecology* (Chicago: University of Chicago Press, 1976). Focuses especially on agricultural engineering and its impact on the physical and sociocultural environment. An Egyptologist and physical/human geographer.

K. Wittfogel, *Oriental Despotism: A Comparative Study of Total Power* (New Haven, CT: Yale University Press, 1957). A much-cited, though rather controversial, (556-page) classic by a quasi-Marxist scholar. Argues that the centralized administration necessary to organize the population in the creation of vast irrigation networks and monumental civilian, religious, and military building and engineering projects led to the despotic Egyptian and Mesopotamian political/social structures, with a horde of disenfranchised peasants at its foundation. Cultural anthropologists and prehistoric archeologists have generally argued that ancient and present-day hunter/gatherer societies were/are characterized by greater political and social equality, with social/political stratification gradually increasing from the relatively more-open nomadic pastoralist to the progressively organized and walled Neolithic agricultural towns,

such as Jericho and Jarma. With the huge agricultural and architectural projects of the Archaic/Old Kingdom Pharaonic empire and those of the large Sumerian city-states (then later the successive Mesopotamian empires), the complexity and rigidly hierarchical nature of social structure/culture took a quantum leap. These states formed important historical models for later despotisms elsewhere. Wittfogel focuses pre-eminently on ancient Egypt, though there are comparative references not only to ancient Mesopotamia, but to medieval and eighteenth century Egypt and to later developments in places as distinct from one another as Senegal and East Africa. In his zeal to depict Pharaonic Egypt as a despotic slave-state through and through; Wittfogel overlooked several important factors. First of all, irrigational repairs and building projects occurred during the agricultural off-season. Peasants were fed and clothed through this off-season labor; and were in no wise treated as slaves. In fact, we know of several successful peasant work-strikes! Captured enemies were the slave-labor base; used in the most onerous and dangerous enterprises—such as mining and moving large blocks of stone in the Eastern Desert. Thus peasant irrigational and architectural labor was an employment-based “*redistributive system*.”

S. N. Kramer, *History Begins at Sumer* (New York: Macmillan, 1959). The great University of Chicago Sumerologist mentions dozens of historical firsts in Sumer, from written language and technologies to other cultural “firsts.”

R. J. Gillings, *Mathematics in the Time of the Pharaohs* (New York: Dover, 1982). See his Bibliography for references to the best-studied extant ancient Egyptian mathematical papyri, including the famous Rhind Papyrus, as well as for key secondary sources on Egyptian mathematics, astronomy, applied science. [See the pertinent chapters in both editions of *The Legacy of Egypt* (1943, 1971) cited in Addendum F.]

O. Neugebauer, *The Exact Sciences in Antiquity* (New York: Dover, 1968). He was also a brilliant medical historian.

O. Neugebauer, *A History of Ancient Mathematical Astronomy*, three volumes of Egyptian mathematical texts; Neugebauer and A. J. Sachs edited three volumes of ancient Mesopotamian cuneiform mathematical texts (Brown University, 1953–1960). On references to these and many other primary and secondary sources on mathematics and the sciences from the ancient Near East through the Greek, Hellenistic, and Roman periods, see the extensive bibliography in O. A. W. Dike, *Mathematics and Measurement* (London: British Museum, 1987). The University of Chicago’s great Egyptologist J. H. Breasted also compiled five translated volumes of Egyptian texts on everything from medicine, science, mathematics, and magic to history and literature: *Ancient Records* (Cambridge: Cambridge University Press, 1927).

J. D. Bernal, *The Emergence of Science*, 3rd ed. (Hammondsworth, UK: Penguin, 1965).

M. Johnson, *Art and Science: Historical Studies Toward a Modern Revision of their Antagonism* (Columbia University, 1949).

E. Strosberg, *Art and Science*. A history of their interaction from ancient Greece through the 20th century. Oversized book with beautiful illustrations (New York: Abbeville, 2001).

J. Farndon, *The Great Scientists: From Euclid to Hawking* (New York: Barnes and Noble, 2005). An artistic, as well as textual, story. Some painters, such as the eighteenth century Joseph Wright of Derbyshire, specialized in paintings of scientific and mechanical demonstrations to the public.

A. Standen, *Science is a Sacred Cow* (New York: E.P. Dutton, 1950). A professional scientist comically punches metaphysical and epistemological holes in some of our most revered scientific theories.

B. Evans, *The Natural History of Nonsense* (New York: Vintage, 1958). Similar to the above.

D1. Metaphors in Science

In recent decades there has been a burgeoning historical and philosophical literature on the crucial role of metaphors in scientific explanation—not merely as an early (much less “primitive”) phase in the development of scientific theories in general, or of any scientific theory in particular, but as the core or even substance of much scientific explanation. Consider, for instance, the role of informational/communicational descriptive and explanatory language in molecular genetics and neuroscience; when many of the actual

events—e.g., RNA transcription or amino acid/protein formation, and synaptic neurotransmission, are matters of stereochemistry and a variety of intermolecular forces and force fields. The metaphorical aspect of mathematics itself—*as applied* in the explanation of physical science data (or inferred phenomena) has also been much considered. Mary Hesse’s *Models and Analogies in Science* (Notre Dame University Press, 1966/1970) is the groundbreaking text in all of this.

For a neuroscientifically and psychologically grounded philosophy of mind that stresses the sensory-motor mechanism of “concept” development (which it views as body-world interactionally based metaphors); see G. Lakoff and M. Johnson’s (authors of *Metaphors We Live By*) fascinating *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought* (New York: Basic, 1999). They take up cudgels against the Cartesian notion of “reason” as a separate and epistemically-privileged faculty of mind: an *epistemological dualism* which has dominated Western—especially Anglo-American—analytical philosophy and philosophy of science, even where Descartes’ *mind-body dualism* is rejected. Their notion of “embodied realism” is itself embedded in a notion of what I have termed “intersectional causation.” This “embodied realism” is compatible with a broadly evolutionary/adaptational epistemology.

Recall Freud’s honest admission of the importance of metaphor, model, and analogy in descriptive and explanatory psychology. In this he is still far-ahead of most academic and clinical psychologists/psychiatrists; whereas the physical sciences—far more mathematical and exact than psychology can even hope to become—have acknowledged the place of metaphor, model, imagery, etc. in their theories. See also the following serious studies on metaphor in science.

R. S. Jones, *Physics as Metaphor* (Minneapolis: University of Minnesota Press, 1982).

M. Gerhart and A. Russell, *Metaphoric Process: The Creation of Scientific and Religious Understanding* (Ft. Worth: Texas Christian University Press, 1984).

M. Laudau, *Narratives of Human Evolution* (Yale, 1991).

S. Sontag, *Aids and Its Metaphors* (New York: Farrar, Straus, and Giroux, 1989).

C. M. Turbayne, *Metaphors for the Mind: The Creative Mind and Its Origins* (Columbia: University of South Carolina Press, 1991).

R. J. Sternberg, *Metaphors of Mind: Conceptions of the Nature of Intelligence* (Cambridge University, 1990). He begins by tracing the history of visions and definitions of intelligence; and then examines seven theories of intelligence and their foundational metaphors: (1) geographical, (2) computational, (3) biological, (4) epistemological, (5) anthropological, (6) sociological, and (7) the systems model.

In my opinion, the universalization of Newtonian (and Cartesian) mechanism has led sciences like biology generally—and neuroscience particularly—seriously astray. The latter twentieth/early twenty-first century computational models of mind/brain; with their concretizing talk of brain “hardware” and “software,” and their penchant for modular neuroscience theories of overall brain functioning; totally ignore the burgeoning scientific and clinical evidence for neuroplasticity. It is historically comprehensible, but philosophically unfathomable, that very-intelligent eighteenth through twenty-first century philosophers and life scientists have been unable to distinguish organisms (including primates and man) from machines; though they are qualitatively different along a number of structural/functional parameters: organismic growth and development, to take only one example.

Addendum E. History of Medicine

Many items have already been referenced in Chapter 1 and its notes, and I will not reiterate them here. Only a select bibliography is possible (as with the history of science), for the literature is vast beyond imagination.

For excellent bibliographies and suggested readings by topic or period on the history of medicine as well as excellent introductory texts on the history of medicine itself, see the following six books: (1) C. Singer and E. A. Underwood, *A Short History of Medicine*, rev. enl. (Oxford: Oxford University Press, 1962). Singer was the British equivalent of the great German-American Henry Sigerist. (2) E. H. Ackerknecht, *A Short History of Medicine*, rev. ed. (Baltimore: Johns Hopkins University, 1982).

Undoubtedly the best short introductory overview in the English language. Ackerknecht, now deceased, was one of the greatest twentieth century Continental medical historians. (3) O. Temkin, *The Double Face of Janus and Other Essays in the History of Medicine* (Baltimore: Johns Hopkins University Press, 1977). The introductory essay and Part II are (often eyewitness) accounts of the twentieth century rise of the history of medicine. At the time of his death past age 100, Temkin was the greatest living medical historian. (4) J. H. Cassedy, *Medicine in America: A Short History* (Baltimore: Johns Hopkins University Press, 1991). One of the best short histories of American medicine. (5) A. Castiglioni, *A History of Medicine*, trans. E. B. Krumbhaar (New York: Jason Aronson, 1969). Extraordinarily comprehensive survey (1,200 pages, covering Eastern and Western medicine). Translated into many languages. (6) G. Rosen, *The History of Public Health*, expanded ed., Introduction by E. Fee, Biographical Essay and New Bibliography by E. T. Morman (Baltimore: Johns Hopkins University Press, 1993). Also see: (7) *Bibliography of the History of Medicine* (Bethesda, MD: National Library of Medicine, 1965). An annual with five-year cumulations. (8A) *Current Work in the History of Medicine: An International Bibliography* (London: Wellcome Institute for the History of Medicine, 1954). (8B) Wellcome Institute for the History of Medicine, *Subject Catalogue of the History of Medicine*, 18 vols. (Munich: Krays International, 1980). A cumulation of Wellcome's *Current Work* and most secondary literature of the twentieth century. Material since 1977 is on card file and computer in the Wellcome Library. R. Porter and W. F. Bynum have helped oversee much of the more recent gathering of this material. Like item 7, it includes works in the history of psychiatry. (9) P. Corsi and P. Weindling, eds., *Information Sources in the History of Science and Medicine* (London: Butterworth Science, 1983). Bibliographic essays by a number of contributors on salient topics, including social history. (10) L. T. Morton, *A Medical Bibliography* (Garrison and Morton): An Annotated Checklist of Texts Illustrating the History of Medicine, 4th ed. (Aldershot, UK: Gower, 1983).

J. W. Estes, *The Medical Skills of Ancient Egypt* (Canton, MA: Science History Publications, 1989). For a short disquisition on Egyptian (and Mesopotamian) medicine, "mummyology," and psychiatrically, psychologically, and socially relevant primary sources with references, see Addendum F.

I. Veith, trans. and intro. Study, *The Yellow Emperor's Classic of Internal Medicine* (Berkeley: University of California Press, 1965).

O. Temkin, *The Falling Sickness*, rev. ed. (Baltimore: Johns Hopkins University Press, 1971). A classic (the first edition appeared 1945) in the history of neuropsychiatric disorders.

O. Temkin, *Hippocrates in a World of Pagans and Christians* (Baltimore: Johns Hopkins University Press, 1964).

L. Edelstein, *Ancient Medicine*, trans. C. L. Temkin (Baltimore: Johns Hopkins University Press, 1967). Best volume on Hellenic and Hellenistic medicine. A universally acknowledged classic. Fascinating history of the Hippocratic oath.

A. Longrigg, *Greek Rational Medicine: Philosophy and Medicine from Alemaeon to the Alexandrians* (London: Routledge, 1993).

N. Arikha, *Passions and Tempers: A History of the Humours* (New York: Harper Collins, 2007).

R. Jackson, *Doctors and Diseases in the Roman Empire* (London: British Museum Publications, 1988).

O. Temkin, *Galenism: Rise and Decline of a Medical Philosophy* (Ithaca, NY: Cornell University Press, 1973). The history of the dominant theorist in European medicine from the second century to the seventeenth century. A classic. Includes a description of what may be the first psychoanalytic diagnosis of hysteria, based on experimental psychic causality, and the first brief psychoanalytic treatment of the disorder.

R. M. Green, trans., intro. by H. E. Sigerist, *A Translation of Galen's "Hygiene"* (Springfield, IL: Charles C. Thomas, 1950).

M. Ullmann, *Islamic Medicine* (Edinburgh: Edinburgh University Press, 1978).

T. S. Miller, *The Birth of the Hospital in the Byzantine Empire* (Baltimore: Johns Hopkins University Press, 1997).

N. G. Siraisi, *Medieval and Early Renaissance Medicine: An Introduction to Knowledge and Practice* (Chicago: University of Chicago Press, 1990).

L. Clendenning, ed., *Source Book of Medical History* (New York: Dover, 1942). Selections from important medical writers from Hippocrates to the twentieth century.

H. Sigerist, *A History of Medicine*, 2 vols. (Oxford: Oxford University Press, 1951, 1961). The great Sigerist died early in the process of writing what was to be a complete history of world (Eastern and Western) medicine. Volume I covers medicine and disease in antiquity, contemporary “primitive” medicine, and the ancient Near East. Volume II deals with early Greek, Hindu, and Persian medicine.

S. J. Reiser, *Medicine and the Reign of Technology* (Cambridge: Cambridge University Press, 1978). A great book. Deals with the benefits of the nineteenth and twentieth centuries’ increase in instrumental methods of physical and laboratory diagnosis and with the probable costs to the intimacy and quality of the doctor-patient relationship. The latter aspect could have well been called “the medicine we have lost.”

M. Altschule, *Essays on the Rise and Decline of Bedside Medicine* (Philadelphia: Lea and Febiger, 1989). *Ditto*.

J. Duffy, *The Healers: A History of American Medicine* (Chicago: University of Illinois Press, 1977). Good overview; with excellent bibliographic essay.

H. Morais, *The History of the Negro in Medicine* (International Library of Negro Life and History) (New York: Publishers Co., 1970). A good history of Afro-Americans in medicine from slavery, through “Jim Crow,” to the early Civil Rights movement.

R. E. Denney, *Civil War Medicine: Care and Comfort of the Wounded* (New York: Sterling, 1994). Many medical/psychiatric advances (i.e., treatment of traumatic psychosocial stress in World II, which eventually led to the community mental health center approach; the rise of neurology, surgery, and wound care) occurred during wars. This adds military history as an important “externalist” subdiscipline for the medical/psychiatric historian.

G. Schwartz, ed., *A Woman Doctor’s Civil War: Esther Hill Hawks’ Diary* (Columbia: University of South Carolina Press, 1984).

R. M. Morantz-Sanchez, *Sympathy and Science: Women Physicians in American Medicine* (Oxford: Oxford University Press, 1985). Excellent overview.

S. B. Nuland, *Doctors: The Biography of Medicine* (New York: Vintage, 1988). Biographies of great doctors from Hippocrates through Halsted, including Helen Taussig on pediatric cardiac surgery. An American equivalent of Sigerist’s (1933) *Great Doctors*. Has the strengths and limitations of a biographical approach. Still, a good book for the student.

E. Shorter, *The Health Century* (New York: Doubleday, 1987). Well-written and expansive coverage of the most significant medical achievements from 1887 to 1987. Excellent illustrations and photographs. By a social and intellectual historian of medicine at the University of Toronto.

J. I. Waring, *A History of Medicine in South Carolina: 1670–1900*, 2 vols. (Columbia, SC: R.L. Bryan, 1964/1970).

H. R. Brown, *Rockefeller Medicine Men: Medicine and Capitalism in America* (Berkeley: University of California Press, 1987). One of the most provocative and controversial books in the recent history of medicine. The following passage is an exemplary light shaft into his argument (p. 8):

Hospitals, insurance companies, and medical schools all have a relatively greater interest than doctors in promoting capital-intensive, *rationalized* [my italics; in the Weberian “bureaucratic” sense] medical care. While expanding medical technology helped doctors increase their status and incomes, it has been the *raison d’être* of hospitals, medical schools, and even insurance companies. Medical technology’s demands for heavy capital investment also encourage [again, Weberian] “*rationalization*” [my quotes and italics] of medical resources-centralization and coordination of capital, facilities, expenditures, income, and personnel.

Of course, technology is not intrinsically opposed to good medical care. Far from it. However, there seems to have developed a de-emphasis on interviewing and history-taking skills and “old-fashioned” physical diagnosis in favor of scattergun ordering of expensive laboratory and “high-tech” diagnostic tests (including radiological imaging). These are in fact worrisome problems. Health care costs are edging

progressively closer to 20% of the U.S. gross domestic product—and that with tens of millions of un- (or under-) insured! Something must give somewhere.

D. Nelkin and L. Tancredi, *Dangerous Diagnostics: The Social Power of Biological Information* (New York: Basic, 1989). According to the authors, this book is intended “to generate discussion and debate about the potential uses and abuses of the biological tests that are emerging from research in genetics and the neurosciences. Frequently, technologies that are closely tied to important scientific advances are developed and implemented without adequate public debate. *Deeply rooted beliefs about the moral and political neutrality of science tend to preclude debate about the interests served by scientific developments* [my italics]. Hence, the questions of power and social control, intrinsically associated with contemporary scientific advances, are only weakly articulated” [p. ix].

Examples are DNA, genetic, or blood tests of potential employees to see if they are cancer-prone, diabetes-prone, Alzheimer’s-prone, HIV-positive, and so forth.

J. Hollingsworth and A. Rogers, *A Political Economy of Medicine: Great Britain and the United States* (Baltimore: Johns Hopkins University Press, 1986). A contextualizing and comparative work.

M. J. Delvecchio-Good, P. E. Brodwin, B. J. Good and A. Kleinman, eds., *Pain as Human Experience: An Anthropological Perspective* (Berkeley: University of California Press, 1994). Excellent sociocultural contextual study of the phenomenologies and patient self-attributions of pain as well as the impact of physician attitudes. Edited by four of the leaders in medical/psychiatric anthropology. Includes some historical vantage points.

B. S. Turner, *The Body and Society: Explorations in Social Theory* (Oxford: Basil Blackwell, 1984). An attempt at a “sociology of the body.”

H. Spiro, M. G. Mccrea Curnen, E. Peschel, and D. St. James, eds. *Empathy and the Practice of Medicine* (New Haven, CT: Yale University Press, 1993). A variety of interesting approaches. Some historical considerations too.

L. P. King, *The Medical World of the 18th Century* (Chicago: University of Chicago Press, 1958). Still the classic on this “great age of systems” (i.e., competing medical “schools” of thought and practice).

L. Rosner, *Medical Education in the Age of Improvement: Edinburgh Students and Apprentices, 1760–1826* (Edinburgh University Press, 1991).

W. Moore, *The Knife Man: Blood, Body Snatching, and the Birth of Modern Surgery* (New York: Random House, 2005). A life and times biography of John Hunter, the great Scots anatomist and surgeon.

E. R. Long, *A History of Pathology*, enlarged ed. (New York: Dover, 1965). From antiquity to the 1960’s. Written by an M.D., Ph.D. pathologist/medical historian. Dated; but the first significant English language coverage of the topic. Relentlessly internalist, as would be expected in 1965.

G. Williams, *The Age of Agony: The Art of Healing, ca. 1700–1800* (Chicago: Academy Chicago Publishers, 1996). A somewhat different take on the subject than King’s.

The following two books were written by 1920s through 1950s era clinicians. They are constituted by series of snippet biographies of important doctors. They are useful in seeing how far American history of medicine has advanced as a discipline from their “cut-and-paste,” “great man” approach. Still, they are useful dictionary-type references; with good bibliographies: (1) F. Garrison, *An Introduction to the History of Medicine* (Philadelphia: W.B. Saunders, 1929). Also wrote on the history of neurology. (2) R. H. Major, *A History of Medicine*, 2 vols. (Springfield, IL: Charles C. Thomas, 1954).

L. R. Murphy, *Enter the Physician: The Transformation of Domestic Medicine, 1760–1860* (Tuscaloosa: University of Alabama Press, 1991). Because there was a very small number of university trained M.D.’s (and even apprenticed ones), Americans resorted to a plethora of home health care books. Although M.D.’s wrote many or most of these, as their numbers increased in the early nineteenth century they became conscious of their perilous cultural authority. This led to their growing professionalization and organization (the American Medical Association in 1847) and to a variety of efforts designed to increase their share in the healing enterprise.

J. C. Burnham, *Bad Habits: Drinking, Smoking, Taking Drugs, Gambling, Sexual Misbehavior, and Swearing in American History* (New York: New York University Press, 1993). History of the nineteenth and

twentieth century “medicalization” of what were previously viewed as simply “bad habits.” Compare with Musto’s *The American Disease: Origins of Narcotic Control*, rev. ed. (New Haven, CT: Harvard, 1999).

C. E. Rosenberg and J. Golden, eds., *Framing Disease: Studies in Cultural History* (New Brunswick, NJ: Rutgers University Press, 1992). Cultural factors in what counts as disease and how it is conceptualized and explained.

L. Payer, *Medicine and Culture* (New York: Henry Holt, 1988). Engrossing account of the differences among the medicines of different countries, including what is deemed “disease”; the extent to which various medical and surgical interventions are used; and the varieties of doctor-patient relationships. On the last-named issue, recall Pedro Lain Entralgo, *Doctor and Patient* (New York: McGraw-Hill, 1969), and Simon’s chapter in this book.

B. J. Good, *Medicine, Rationality, and Experience: An Anthropological Perspective* (Cambridge: Cambridge University Press, 1994).

C. E. Rosenberg, *Explaining Epidemics and Other Studies in the History of Medicine* (Cambridge: Cambridge University Press, 1992). A variety of essays on the history of ideas, institutions, and medical care (including private-practice patterns) and on the usefulness of medical history to current issues. Excellent range of essays by America’s greatest social historian of medicine. Most of these chapters are exemplary unifications of externalist/internalist approaches.

M. Konner, *Medicine at the Crossroads: The Crisis in Health Care* (New York: Vintage Books, 1994). Medical, sociocultural, political-economic, and bioethical critique of the distribution of health care resources in America. By an M.D., Ph.D. anthropologist who also did an ethnography of his medical student experience: *Becoming a Doctor: A Journey of Initiation in Medical School* (New York: Viking, 1987).

D. E. Long and J. Golden, eds., *The American General Hospital: Communities and Social Contexts* (Ithaca, NY: Cornell University Press, 1989).

C. Zimmer, *Evolution: The Triumph of an Idea* (New York: Harper Collins, 2001). Chapter 9 deals with evolutionism in medicine. Contains a useful set of references to books on evolutionary medicine and psychiatry. Also a grand overview of Darwin and evolution in general. See R. J. Richards’ history of evolutionary psychology cited in Addendum F.

C. E. Rosenberg, *The Care of Strangers: The Rise of America’s Hospital System* (New York: Basic, 1987). Addresses a variety of pertinent issues (including nineteenth century educational standards for American doctors—very poor by European criteria). Social history with internalist sophistication and an excellent bibliographic essay at the end.

W. G. Rothstein, ed., *Readings in American Health Care: Current Issues in Socio-Historical Perspective* (University of Wisconsin, 1995).

J. C. Mohr, *Doctors and the Law: Medical Jurisprudence in Nineteenth-Century America* (Oxford: Oxford University Press, 1993).

E. H. Beardsley, *A History of Neglect: Health Care for Blacks and Mill Workers in the Twentieth Century South* (Knoxville: University of Tennessee Press, 1987). Powerfully written and illustrated. By a former student of Rosenberg and Professor Emeritus of American History and of the History of Science and Medicine, University of South Carolina.

R. H. Shryock, *The History of Nursing: An Interpretation of the Social and Medical Factors Involved* (Philadelphia: W.B. Saunders, 1959). Dated, but still the best.

J. H. Young, *The Medical Messiahs: A Social History of Health Quackery in Twentieth-Century America* (Princeton, NJ: Princeton University Press, 1967).

N. Gevitz, ed., *Other Healers: Unorthodox Medicine in America* (Baltimore: Johns Hopkins University Press, 1988). Excellent writers on homeopathy, osteopathy, home-remedy medicine, chiropractic, and so on. Deals with their battles with American Medical Association-sanctioned medicine as well, looking at various sides of the issues. The following are also crucial to the historian: (1) E. Pellegrino and D. C. Thomasma, *A Philosophical Basis of Medical Practice* (Oxford: Oxford University Press, 1981). A classic on medical philosophy and ethics. (2) H. T. Engelhardt, Jr., *The Foundations of Bioethics*, 2nd ed. (Oxford: Oxford University Press, 1996). The standard in the field. Incorporates a historical perspective. (3) C. M. Culver and B. Gert, *Philosophy in Medicine: Conceptual and Ethical Issues in Medicine and Psychiatry*

(Oxford: Oxford University Press, 1982). Deals with psychiatry much more than do Pellegrino and Thomasma, who are mainly oriented toward internal medicine. (4) E. D. Pellegrino and D. C. Thomasma, *For the Patient's Good: The Restoration of Beneficence in Health Care* (Oxford, 1988). (5) M. Rosenbaum, ed., *Ethics and Values in Psychotherapy: A Guidebook* (New York: Free Press, 1982). (6) M. T. H. Chi, R. Glaser, M. J. Farr, *The Nature of Expertise* (Hillsdale, N.J.: Lawrence Erlbaum Associates, 1988). (7) J. Katz, *The Silent World of Doctor and Patient* (New York: Free Press, 1984); (8) S. B. Sarason, *Caring and Compassion in Clinical Practice* (San Francisco: Jossey-Bass, 1985). (9) E. J. Cassell, *Talking with Patients*, 2 vols. (M.I.T. Press, 1985). (10) E. J. Cassell, *The Healer's Art* (M.I.T., 1985). (10) E. J. Cassell, *The Nature of Suffering and the Goals of Medicine* (Oxford, 1991). (11) A. Kleinman, *The Illness Narratives: Suffering, Healing, and the Human Condition* (New York: Basic, 1988). (12) F. Gros, *The Gene Civilization*, trans. L. F. Scanlon (New York: McGraw-Hill, 1992). Bioethical and larger issues in genetic technologies and gene-based procedures; (13) K.L. White, ed., *The Task of Medicine: Dialogue at Wickenburg* (Menlo Park, CA: Henry J. Kaiser, 1988); and (14) S. Buchanan, *The Doctrine of Signatures: A Defense of Theory in Medicine*, 2nd ed. (Chicago: University of IL Press, 1991).

R. Herrlinger, *History of Medical Illustration*, trans. V. C. F. Callebach (New York: Editions Medicina Rara, 1970). Beautifully illustrated history of medical illustration. From the Middle Ages, through Vesalius, to circa 1600. By an M.D., Ph.D. physician art historian. Excellent depictions and text. All the following are beautifully illustrated popular histories of medicine. Many of the depictions are from great contemporary artists. Two of the books (e.g., Downie, and Carmichael and Ratzan) deal with what the history of visual representation of doctors tells us about the vicissitudes of their social status, wealth, public attitudes toward them, methods of diagnosis and treatment, and so forth. Some contain medical caricatures by artists as famous as Rowlandson and Hogarth. All of them have good "starter" bibliographies or suggested readings. They are a joy to read systematically, to scan, or simply to pick chapters at random. There is definitely a place for more of this kind of medical history, which includes literary representations of doctors and patients. Moreover, such works are more likely to reach a wider lay audience.

S. B. Nuland, *Medicine: The Art of Healing* (New York: Macmillan, 1992). Oversized book. Text topics and periods are interspersed with beautiful one-page color plates of art from the Middle Ages through the twentieth century.

R. Porter, ed., *Medicine: Cambridge Illustrated History* (Cambridge: Cambridge University Press, 1996). Excellent essays—most by Roy Porter, the distinguished British medical/psychiatric historian—and beautiful painterly and photographic illustrations. Also has a useful chronology of key medical events (mostly European), pp. 374–377. The American chronology in Addendum E1 complements it.

A. Lyons and J. Petrucelli, II, eds., *Medicine: An Illustrated History* (New York: Harry N. Abrams, 1987). Coffee table book. Great fun to leaf through. Many of the essays are written by subspecialist medical historians. The text is a reliable first encounter for the student or layperson as well. Very good chapters on ancient medicine and surgery: Egyptian, Mesopotamian, Indian, Chinese, Hellenic, Hellenistic, and Roman. Deals with medieval and later Islamic medicine too.

J. Sutcliffe and N. Dain, *A History of Medicine: From Prehistory to the Year 2020 [!]* (London: Morgan Samuel, 1992). Excellent illustrations and space boxes for essential information. An easy and enjoyable read and gaze.

J. C. Sournia, *The Illustrated History of Medicine* (London: Harold Starke, 1992). Fine visual representations.

R. S. Downie, ed., *The Healing Arts: An Oxford Illustrated Anthology* (Oxford: Oxford University Press, 1994). Depictions of medicine by artists and writers from the various periods of medical history. Gives an excellent idea of the vicissitudes of public images of medicine over the years. As much an art and literary history as a medical one.

S. Gilman, *Disease and Representations: From Madness to AIDS* (Ithaca, NY: Cornell University Press, 1988). Broader companion volume to his earlier book on images of the mad, *Images of Madness* (Ithaca, NY: Cornell University Press, 1982). Images of medical and psychiatric patients. By the broadly based writer of this book's history of concepts of schizophrenia.

S. Gilman, *Picturing Health and Illness: Images of Identity and Difference* (Hopkins, 1995).

A. G. Carmichael and R. M. Ratzan, *Medicine: A Treasury of Art and Literature* (New York: Hugh Lauter Levin Associates, 1991). Similar to the above; but larger format, with more reproductions of contemporaneous paintings of medicine, doctors, and patients. A combination of medical historical essays and contemporaneous lay literature. [Note to print collectors: Eighteenth and nineteenth century medical caricatures (original lithographs and engravings, often in hand-touched or printed color) are still “sleepers” (i.e., very reasonably priced), as are legal caricatures. C. G. Boerner’s in London handles them—many are English.]

M. E. Ring, *Dentistry: An Illustrated History* (New York: Harry N. Abrams, 1985). The history of dentistry cannot be separated from the history of surgery, with which it was long interlinked. It is also intertwined with the history of anesthesiology—and indeed medicine generally. Dentistry, and the closely related development of anesthesia, were the two nineteenth century areas of medicine/surgery in which the United States would come to lead the world. Part of the following section relies on Ring’s excellent history, but also on a number of medical/surgical histories cited in the references in this chapter.

Snippet on the History of Medicine as Centering-Round Surgery/Dentistry and Anesthesia

My intent here is to provide a rough-and-ready general medical historical background and context for psychiatry’s history. See “Egyptian Interlude” for a bit on ancient Near Eastern medicine.

The first thing to note about the history of medicine; from the ancient Greek schools of Cos (the Hippocratics, who stressed prognosis, lifestyle management, and nature’s own healing powers) and Cnidos (which accented diagnosis and aggressive treatments); is that *physicians treated only a minority of sufferers*. This was because: of the high fees they even then commanded; there were far-too few of them to go around; and many of the ill favored Asklepien temples and other magico-religious modes of cure (see Simon’s Chapter Three).

From doctors’ respectable presence in several of the Platonic dialogues, as well as in other Greco-Roman literature; we know that they were considered part of the educated socioeconomic elite. Herodotus gave instances of their handsome incomes; and in the Middle Ages and Renaissance, M.D.’s received special exemptions from the “sumptuary laws,” which controlled how lavishly even the wealthy could dress and spend. Still, *apropos* problems of the “soul” rather than the body (perhaps akin to what used to be called the “character neuroses” or what *DSM-IV* deems “dysthymia,” and the “anxiety” and “personality” disorders); Greco-Roman philosophers adamantly-asserted that they themselves were their rightful “physicians.” Doctors, by contrast, were limited to the madnesses of the body: melancholia, mania or furioso, phrenitis, and hysteria—caused by humoral imbalances, fevers, “wandering” uterus, or whatever. And in later Medieval Europe, when University M.D.’s emerged; clerics, like the philosophers before them, claimed what we would call the minor mental disorders—“*accedia*” (roughly akin to “dysthymia,” or to Beard’s “neurasthenia”) being a major pastorally diagnosed and treated soul-disturbance (see Jackson’s chapter).

After the fall of the Western (i.e., “Latin”) Roman Empire in the 5th century C.E.; medical education fell into an abyss; though monk-copyists kept some of the ancient medical texts alive. In the Eastern Roman, or “Greek” Empire; medical education remained intact and the world’s first hospitals arose. Meanwhile, in Western Europe monasteries/convents, monks and nuns offered respite and care to the sick, aged, poor, and infirm. Such Galenic, Hippocratic, and pharmaceutical lore as remained in Latin Europe was in their hands; the secular doctor having totally disappeared.

Hoary tradition holds that the first post-antique medical school in Latin Christendom opened at Salerno in 987. Because of its location; it had remained part of the Byzantine Empire longer than most of the rest of Italy. Moreover, it was more exposed to the Arabs’ medical influence. The latter had kept alive the ancient medical texts; and produced a number of great doctors (many of them Jewish), who wrote commentaries upon them. Too, Salerno retained some of the Latin medical texts missing elsewhere. Medical influences from all these sources contributed to Salerno’s pride of place. Like all proto- and early-European Universities; it was initially associated with a Cathedral or monastery—in its case probably the nearby

Benedictine one. These scribal monks kept alive, as mentioned, some of the Latin texts; and translated others—the Greek ones (including Hippocrates and Aristotle), and much of Galen too—from Arabic into Latin. It is easy to forget that throughout most of the Middle Ages, the clergy comprised the only educated class. Hence it is understandable that they controlled the first full-fledged Universities—from the eleventh through the early-fourteenth centuries; during which time they began to get secular Charters (though priests and monks continued to make up many of the faculty for quite some time). And some societies of nuns became nursing orders; and their convents the first (all-purpose) Latin hospitals.

Until the late-eighteenth/early-nineteenth centuries, European Universities offered only five degrees. These were the B.A. degree, prerequisite for any subsequent ones; the M.A. in Philosophy (including some natural philosophy); and three doctorates: Theology, Medicine, and Jurisprudence. The baccalaureate education centered around the “trivium” and “quadrivium.” The former comprised logic, grammar, and rhetoric (this last being the art of persuasive speech); and the latter mathematics, geometry, astronomy, and music. Lectures and texts were in Latin (the scholarly *lingua franca*, a universal that we have of course lost today); which presupposed private or clerical tutoring before matriculation.

Most natural philosophy (or natural “science”, as the mineralogist- historian/philosopher of science W. H. Whewell baptized it in the earlier- nineteenth century) was done by M.D.s—such as Copernicus, who held doctorates both in medicine and theology; although clerics contributed as well (e.g., Abelard of Bath, William of Ockham, and Roger Bacon). Ph.D.s in the sciences were not inaugurated until the earlier-to mid-nineteenth century, in the Germanic Universities. This was around the same time, incidentally, that they began giving Ph.D.s in philosophy; which included “psychology”—which did not break free of philosophy in Europe and in the U.S., which adopted the Germanic “Ph.D.” system, until the 1910s/30s. As mentioned in Chapter 1, the first Ph.D.’s, offered in the latter-eighteenth/early-nineteenth centuries; were in philology and history.

Until the latter-eighteenth/early-nineteenth centuries (with a few notable exceptions, such as Boerhaave in Leyden and the Edinburgh and Vienna schools); medical education remained nearly as bookish and theoretical as it was in the Middle Ages. Galenism, humoralism, and their “antiphlogistic” therapies (i.e., leeching, cupping, blistering, purging, etc.) remained common; despite the 18th-century advances in morbid anatomy—e.g., Morgagni; and despite the earlier iatrophysical and iatrochemical theories of Paracelsus, Van Helmont, and others. It took Bichat’s late-eighteenth-century tissue pathology, and the subsequent clinical pathological correlation of the early-nineteenth century Paris School; including its instrumental innovations in physical diagnosis (such as Laennec’s stethoscope) and the clinical statistics of Pierre Louis; to deal the death blows to humoralism and its noxious antiphlogistic therapies. (Benjamin Rush was one of many holdouts to the end, bleeding mental patients based on his pathogenic theory of cerebral hyperemia). Indeed reactions against the old theories were so severe; that it simultaneously slowed the acceptance of Dr. Carl Rokitansky’s brilliant 1860s/70s discoveries in endocrinological pathology—*his University of Vienna colleagues fearing it the ghost of the humoral theory, from which they had only recently escaped!*

Because of the paucity of trained physicians from antiquity to the early-nineteenth century; subordinate classes of healers arose: “leeches” in antiquity; and “apothecaries” from the Medieval/Renaissance era through the earlier-nineteenth century. Their training and certification were usually overseen by physicians. They not only compounded doctors’ prescriptions, but served as the “poor person’s” “G.P.” as well. The great English poet John Keats was an apothecary; who died horribly-young from contracting “T.B.” while nursing his dying brother. Probably no more than 10% of the European population (i.e., the upper and upper-middle classes) were treated by M.D.s before the early-19th century. Too, until the latter-eighteenth/earlier-nineteenth centuries, most M.D.s were not also surgeons/dentists—which latter, who served lay apprenticeships, treated patients with superficial surgical wounds, fractures, and dental problems.

Since the American colonies had to import M.D.s (King’s College Medical School opened in New York in 1768 and Pennsylvania a year later); only an infinitesimal segment of the population could have been treated by them; mostly in the largest “cities”: Philadelphia, New York, Boston, and Charleston. Otherwise, families relied on home health manuals; the treatment usually administered by the wife and mother. Many villages had their experienced “doctor ladies.”

In fact, until the early twentieth century; Americans who could afford it sent their sons to European medical schools. Where they went, at any given time, was a barometer of the best medical school in Europe. In the first-half of the eighteenth-century it was the University of Leyden, where the great Herman Boerhaave inaugurated bedside-teaching. In the second-half of that century it was Edinburgh, with many innovative theorists (e.g., Cullen), therapists, excellent anatomists, and the world's first formal University-training in surgery/dentistry. In the first-half of the nineteenth century it was the Paris School; and from 1850 to 1920 German scientific medicine (especially Vienna and Berlin). By 1900 schools such as Hopkins, Harvard, Yale, Pennsylvania, Syracuse, and Michigan had modelled themselves on the Germanic schools; such that many only went to the latter for post-M.D. clinical or research training.

Hopkins' great medical historian, Oswei Temkin, wrote a gem of a short essay on the role of surgery in the history of medicine (in his previously-cited 1977 book, *The Double Face of Janus and Other Essays in the History of Medicine*). There he reminded us of the many dark centuries in which M.D.'s could do nothing for their patients except, at best, cultivate a positive professional relationship and stand aside before the hopefully healing powers of nature. At worst, far-too-often; they bled and purged patients half to death, and crammed them with toxic heavy metals and other "anodynes"—based on ancient, mostly nonempirical, simplistically-reductive theories. During this long night, the only observationally-based and empirically-reinforced therapies were those of the surgeon/dentist/bonesetters—lowly non-M.D.'s. This observational/empirical grounding was, Temkin believed, surgery's greatest contribution to medicine—when the former was eventually, very tardily, incorporated into the latter. Hence we are pursuing this issue here; by way of turning the clock back, before again moving forward.

As early as the sixteenth century, profiting from a century of developments in printing, treatises on the teeth began being written in German and were widely circulated. They were aimed at the barbers (who were eventually split-off from the surgeons) or the surgeons who treated the mouth rather than the Latin-fluent university M.D.'s, who ignored the teeth. They dealt, among other things, with drilling carious teeth and using gold fillings, extractions, and dental hygiene. The greatest French "Master Barber Surgeon," Ambroise Paré, demonstrated, among other things, the grossly deleterious effects of cauterizing gunshot wounds with boiling oil (it probably put many patients in "shock"). In 1563 he published his seminal *Ten Books of Surgery* in French, showing his superior assessment of his fellow-tradesmen (for Paré knew Latin) over and against the Latin-reading, theory-rich and practice-poor M.D.'s. He had learned a great deal of anatomy and despised the begowned M.D.'s, "who know nothing else but how to chatter." Paré also had an extensive dental practice. He replanted teeth that had been avulsed, wiring them to good teeth. He restored missing front teeth with artificial ones of bone or ivory, gold-wiring the bridge to the neighboring canines. The palatal obturator was his greatest contribution to oral surgery. This closed the palatal lesions of syphilis with a curved sheet of gold conforming to the roof of the mouth.

Although Henry VIII granted a charter to the barber-surgeons in 1540, permitting their extraction of teeth, dentistry in the British Isles lagged behind that on the Continent. In any event, the same men practiced dentistry and surgery for quite some centuries such that it is impossible to separate the history of the two—even, in some measure today, when some dentists not only specialize in oral surgery; but also pursue residencies in ear, nose, and throat, which comprise the full gamut of head-and-neck surgery, in full equality to M.D.'s. At first, there were the apprenticed barber surgeons/dentists; then, from the earliest eighteenth century through the mid-nineteenth century some medical schools, such as Edinburgh initially, began training surgeon/dentists and gave them university certificates upon completion of their course of study. Most M.D.'s there also elected to train for these certificates; helping to heal the age-old fracture between medicine and surgery. Some prestigious English hospital-based schools followed Edinburgh's example. By the mid-nineteenth century, most British surgeons were also M.D.'s (or, rather, M.B./Ch.B's in England). However, in a form of reverse snobbery, since the public began to idolize surgeons over other doctors; British surgeons insisted on being called "Mr." or, now, "Miss" or "Mrs."!

M.D.'s such as Vesalius, whose experience as a public prosecutor included the conduct of countless autopsies, to go along with his dissections at the University of Padua; replaced reliance on erroneous Galenic texts with scientific observation of the human body. His great anatomical text, *De humani corpora*

fabrica, ranks with Copernicus's treatise of the same year (1543). Later M.D. William Harvey (1628), Professor at the University of Padua (then Europe's finest medical school), simultaneously described the circulation of the blood and founded the science of experimental physiology. Dr. Edward Tyson of Cambridge hammered out the *ur*-science of comparative anatomy in the 1680s and 1690s. And a group of M.D. physiologists was active at Oxford in the 17th century. Dr. Marcello Malpighi was the first histologist (1660s to 1690s), and Dr. Giovanni Battista Morgagni founded morbid anatomy (i.e., pathology) in the early eighteenth century. His book, however, dealt exclusively with organs and organ systems. It remained for the young Parisian M.D. Marie Francois-Xavier Bichat (dead of overwork at age 31) to develop tissue pathology in the 1790s. The great Prussian founder of social medicine, Dr. Rudolph Virchow, launched cellular pathology in the 1840s–1860s.

Meanwhile, in Italy, in the mid- to latter eighteenth century, Drs. Luigi Galvani and Alessandro Volta began their studies of the natural electrical conductivity of nerves. With his batteries, Volta electrified audiences by making freshly dead humans move limbs and assume postures! For the amusement of rulers, he would make files of soldiers or monks jump virtually simultaneously from the passage of voltage through them. Such work relied on the great M.D. anatomist/physiologist Albrecht von Haller's eighteenth century dissection and experimentation—that led him to the rich and detailed concepts of “sensibility” and “irritability,” the former applying to nervous tissue and the latter to muscular. In fact, Temkin's last, and recent, multivolume *magnum opus* traced the history of these concepts from antiquity to the present. The great Hellenistic Alexandrian physician-anatomists and physiologists (including of brain and neuromuscular tissue) Herophilus and Erasistratus were given living criminals by the Pharaoh for their physiological studies, which the Roman compendious medical writer Celsus ethically deplored! (In Addendum F, I discuss electrotherapy by neurologists in the treatment of outpatient “functional” disorders: hysteria, neurasthenia, and so forth.)

Most unfortunately, full-fledged patient-informed consent for invasive diagnostic, therapeutic, and research/investigative interventions; would not be implemented until the 1970s; and this largely because of external duress. Prior to that, apart from the Hippocratic oath (if taken at all, and progressively it was not); “medical ethics” was pretty-much “medical etiquette”—*not* “stealing” another doctor's patients, disparaging his or her competence, witnessing for the prosecution in a malpractice suit, going against one's county medical association in fee-for-service hikes, being pro-national health insurance, and so forth.

As mentioned, from the mid-eighteenth through the early nineteenth century, public or home demonstrations by “natural philosophers” of awe-inspiring and mechanically complex, often-moving scientific models and instruments with accompanying explanations and lectures, became an incredibly popular form of “entertainment” for the educated classes—particularly in France and Britain. There were several English painters who specialized in representing these *soirées*, their audiences, and the mechanical devices and their “professors” at the center. Such events, and their immortalization in art, document the dawn of public worship of science, scientists, and their applied technologies. This would gradually become a secular quasi-religion (now called “scientism”/“technologism”), which had an unshakeable Enlightenment/nineteenth century optimistic/progressivist faith that science and its applications would solve all human problems—not only medical and technical, but social, political, and economic as well—and make life a heaven-on-earth.

As implied earlier, the average M.D. clinician was ignorant of his colleagues' scientific advances, often resorted to a bizarre *materia medica*, and practiced age-old (humorally based) antiphlogistic therapies. This became worse before it became better, eighteenth century medicine being aptly termed “the great age of systems,” characterized by a variety of competing *a priori* reductive organ and organ-system theories and therapies of all human ailments—not wholly dissimilar to the persistence of “school-bound” psychiatries/clinical psychologies today.

The latter seventeenth century lessons of Thomas Sydenham M.D. were all-important—for doctors who would listen to him, that is, who mostly came much later, so taken were his contemporaries by their dozen or so competing omniscient medical theories—metaphysical ones really. Sydenham (who was a cavalry officer before taking the M.D. in his mid-30s—he always extolled the hygienic virtues of riding!)

was the philosopher John Locke M.D.'s medical partner, and he argued that, in medicine's then-state of knowledge, etiologically based diagnoses were much premature. Consequently, he advocated careful clinical description of *syndromes: constellations of major signs, symptoms, and their typical courses of development in patients with similar complaints*. This included meticulous physical examinations and histories of their lifestyles, typical intake of foods and alcohol, customary types and levels of activity, any patterns in the precipitation of relapses and remissions, any therapies tried and their results, and so forth.

With the expected advances in medical science, he believed that these syndromes would eventually become correlatable with pathogenic processes—and, ultimately, with specific treatments (not only medications, but nutritional and lifestyle management). Often, patient histories would allow him to make inferences about predisposing factors and precipitants of relapse or relief. His descriptive codification of the typical course and manifestations of gout (along with many other syndromes) is a classic in the medical literature. He also observed that it tended to be an affliction of the more-accomplished and wealthy members of the upper-middle and upper classes, who customarily consumed large quantities of beef and organ meats (such as liver, kidneys, and chicken gizzards), washed down with copious amounts of dark ales or red wine. Much later, with the development of clinical chemistry, it was found that this diet contained considerable quantities of urates, whose crystals, deposited in the joints of sufferers, caused them severe pain and functional disability. Interestingly, some studies have shown that there is a slight correlation between intelligence or levels of accomplishment and serum urate levels—even in many who never become symptomatic. Probably, much of the cause of this enhanced achievement is environmental, related to social class (the wealth to afford red meat and beef liver), and concomitant educational advantages and environmental stimuli (family travel, home libraries, etc.). In any event, today's usual treatment involves not only drugs (which lower blood urates) and anti-inflammatories, but also the sorts of dietary changes recommended by Sydenham.

Gradually some Royal College M.D.'s began to do surgery (since the college was no longer enforcing its ejection of any who did so). Locke himself repaired an aristocrat's gastric fistula. On every social occasion, this man was fond of showing the scar left by the great empiricist philosopher!

But long before these scientific empirical and medical advances (and they took advantage of them as they occurred), it was the hitherto-despised barber-surgeons who relied on a careful empiricism and who practiced visibly effective surgical, orthopedic, and dental interventions. In 1686, the successful surgical treatment of Louis XIV's anal fistula, when all the royal physicians had failed, gave French surgeons a great boost in prestige, which would increase throughout the eighteenth century. Louis gave the surgeon, C. F. Felix, 15,000 *Louis d'or* and ennobled him. In 1725 surgeons of the *College de St. Côme* asserted their independence from the M.D.'s (and barbers), and lobbied for legislative regulations of the practice of surgery (and dentistry). The French parliament had already passed a law stipulating that dentists be examined by a committee of surgeons before being permitted to practice in *L'Isle de France* (i.e., Paris and its immediately surrounding provinces). Similar regulations were passed in Prussia. However, we have only to look at the English, French, and German caricatures of dentists on into the nineteenth century to see that dental quackery was not well controlled.

Modern dentistry owes a great debt to five eighteenth century M.D. surgeons and dentists: the Drs. Monro, Edinburgh surgeon/anatomists; Pierre Fauchard in France; and the great Scottish Drs. John Hunter and his older surgeon brother, William Hunter, who gradually moved from general surgery/dentistry into "midwifery," soon baptized "obstetrics" (also of Edinburgh). John Hunter also brought serious pathological post-mortem examination to Britain; and did pioneering experimental work on inflammation. In France, Britain, Germany, and Italy surgical *accouchers* later had their Chamberlain and Sims's forceps for difficult deliveries, and other instruments. Both Fauchard and John Hunter wrote compendious treatises on dentistry, which they continued to practice along with surgery. Truly John Hunter was one of the most important founders of modern surgery.

The story now moves to the United States, whose two really significant nineteenth century contributions to international medicine were in the areas of dentistry and anesthesiology. In the early nineteenth century, dental care was provided by four different types of practitioners, with considerable variation in quality. (1) This was still the age of "home physic" for many, based on any of a plethora of

family-health manuals. For example, the 1833 *Family Physician and Guide to Health* promised that anyone following its directions could self-perform extractions as competently as any dentist! (2) Most people still probably turned to their physicians, who had at least one extraction key and one forceps, which they learned to use by trial and error. (3) Then there were dental specialists. Some had apprenticed under established dentists and then gone off on their own. Others were graduate-physicians who often spent some time with experienced dentists who had themselves either been trained by apprenticeship or else possessed M.D.'s. (4) Until the mid-nineteenth century most prominent dentists were medical doctors who chose dentistry as their vocation. And of course there were the itinerant quacks.

On March 6, 1840, the Baltimore College of Dental Surgery was chartered by the state of Maryland; it was the first dental school in the world. There was a faculty of four: two dentists, Horace H. Hayden and Chapin A. Harris; and two M.D.'s, Thomas E. Bond and H. Willis Baxley. The requirements for the new D.D.S. were as high as, if not higher than, those for the M.D. In the same year, the American Society of Dental Surgeons was established. This was the first national organization of dentists in the world and the first American medical specialty organization. By 1852 there were three American dental colleges.

Such specialty colleges were a mixed blessing for D.D.S.'s and M.D.'s. They led to a class of doctors of dental surgery that was increasingly sequestered from M.D. medicine. The Germanic medical schools, by contrast, had dental surgery residencies. Hence many dentists were M.D.'s; and Dentistry a full-fledged Department in the University Medical School, and a legitimate medical/surgical specialty. They often had considerable E.N.T. surgical training in dental residencies. This made them more broadly-based than American doctoral dentistry; and also exposed general surgeons to dental techniques. Hence there were mutual enrichments. Many of Freud's attendings, during his 33 surgical and prosthetic procedures (1923–1939), were trained in both E.N.T. and dental surgery; and in the oral appliances and prostheses that were the *forte* of dental surgeons.

The development of anesthesia, the other area in which nineteenth century American medicine led the world, was closely associated with the development of dentistry—and also of course with general surgery. Priority in this area was hotly debated from the outset (1840s) and continues to be a bone of historical contention.

The story began as early as 1800, when the brilliant 22-year-old English chemist Humphrey Davy published a compendious treatise on nitrous oxide (“laughing gas”). Although he never followed up on it, he suggested that its analgesic properties might one day prove advantageous in surgical procedures. However, like so many, he seems to have been more taken by its euphoriant effects. Indeed, medical students in the 1830s and 1840s held nitrous oxide “frolics.” It was also used in sideshow entertainments.

It was while attending such a sideshow in late 1844 conducted by “Professor” Colton; that the young Connecticut dentist, Horace Wells, noted that a volunteer from the audience had severely injured his shin with total unawareness that he had been hurt. Colton brought him a supply of gas the next morning, and becoming his own guinea pig, Wells subjected himself to an extraction by a colleague. Wells felt no pain, and used nitrous oxide on a few of his patients, with similar beneficent results. He petitioned Massachusetts General Hospital for a public opportunity to exhibit his findings. In January 1845 Wells presented himself before the class of the preeminent surgeon Dr. John Collins Warren and extracted a molar from one of his students. Unfortunately, Wells withdrew the gas while the patient was still in the excitement phase, and the student howled in apparent pain. Even though the student insisted he felt no pain, Wells was hooted from the room. He quietly withdrew to his practice, and continued using the gas for fillings and extractions.

Later he discussed his work with a Boston colleague, William J. D. Morton. Morton was augmenting his prior dental education by taking medical courses in Boston. He spoke to his chemistry professor, Dr. Charles Jackson, about Wells's nitrous oxide. Jackson, who was apparently addicted to inhaling ether, suggested that Morton try ether on his patients instead of nitrous oxide. Morton experimented with the drug on small animals and on himself. On September 30, 1846, a patient presented with great pain, needing the extraction of a severely abscessed bicuspid. The ether anesthesia was a resounding success. As did Wells before him, he applied to Dr. Warren to demonstrate his “new” drug. Concerned about priority, he called it “Letheon.” Morton administered the ether, after which Dr. Warren excised a tumor from the neck of a

young man. In a particularly dramatic moment of medical history; Warren turned to the rapt audience and exclaimed, “Gentlemen, this is no humbug!” News spread rapidly across the Atlantic. In barely two months, the preeminent English surgeon Dr. Robert Liston performed an amputation on a man he had etherized. In another histrionic medical historical moment, he turned to the on-looking physicians and said, “This Yankee dodge, gentlemen, beats mesmerism all hollow!”

We cannot end this complex jockeying over priorities without reference to an obscure general practitioner from rural Jefferson, Georgia: Dr. Crawford Long. When Congress voted to award a 10,000 dollar honorarium to the discoverer of anesthesia, Long claimed that he had used ether anesthesia for surgery, and produced several affidavits from patients. William Henry Welch, the Johns Hopkins Medical School founder, later disposed of Long’s priority with unerring historiographical perspicacity: “We cannot assign to him *any influence upon the historical development of our knowledge of surgical anesthesia or any share in its introduction to the world at large*” [my italics]. Indeed, a letter written by Long to his friend Robert Goodman, suggests neither a sustained and serious scientific and clinical attitude toward ether anesthesia nor a full-bodied appreciation of its applicability. In fact, the letter tells us more about Long’s recreational use of the drug, his embarrassingly questionable motives in sharing it with the “girls,” and his adolescent impatience to get it as soon as possible [M. E. Ring, *Dentistry: An Illustrated History* (New York: Harry N. Abrams, 1985), 234]:

I am under the necessity of troubling you a little. I am entirely out of ether and wish some *by tomorrow night ...* . We have some girls in Jefferson who are anxious to see it taken, and you know nothing would afford more pleasure than to take it in their presence and to get a few sweet kisses If you cannot send it by the stage on Weds’day, *I can persuade the girls to stay until Wednesday night, but would prefer receiving the ether sooner.* [My italics.]

The state of Georgia, despite prevalent historical opinion and the best available evidence, erected a statue of Crawford Long in Washington, D.C.’s Capitol Rotunda emblazoned with “Discoverer of Anesthesia.” Furthermore, Emory University’s largest affiliated hospital is the Crawford Long in Atlanta.

Given the outcome of Congress’ inability to decide who had earned the award, Long’s story is one of comic relief compared to the rest. Wells committed suicide; Jackson became insane and remained institutionalized; and Morton died a pauper from his protracted legal battles.

Be all that as it is; American dental surgery and anesthesia continued their progress. And general surgery, which in the U.S. had always been done by M.D.’s, had scored signal advances by the early 1850s: e.g., Dr. Ephraim McDowell (M.D.’ed at Glasgow) performed the world’s first ovariectomy, for a tumor, in 1809; and Charleston’s Professor J. Marion Sims (who patented the Sims’ obstetric forceps), performed the first reliable vesico-vaginal fistula repairs—as well as the first cholecystectomy two decades later. American surgeons were profiting from the abdominal/colon surgeries emanating from Vienna (e.g., Professor Theodor Billroth); and Hopkins Chief of Surgery, Dr. William Halsted pioneered in many surgeries—including much enhanced hernia reductions and radical mastectomies. Soon Europe built on American anesthetics to elaborate her own: Edinburgh’s Professor Sir James Simpson inaugurating chlorophorm anesthesia. Lord Lister greatly reduced the risk of (often lethal) post-surgical infections; with his antiseptic sprays, chemicals, and sterile surgical technique. Local anesthesia began to develop in the 1880’s. Once again Halsted was a major player; devising conduction anesthesia in 1885.

Meanwhile in therapeutics, medicine lagged sadly behind general and dental surgery. The former had made great strides in uncovering pathophysiological processes and etiologies. This was especially true in infectious disease/bacteriology, though effective antimicrobials were decades away. Vaccines were, however, discovered; and sophisticated laboratory tests for the *Treponema pallidum* of syphilis—treated with arsenicals/mercurials. But latter nineteenth/earlier-twentieth-century medicine remained therapeutically-impotent *in any etiological sense*, and didn’t always do well in merely managerial matters. Hence American internists’—like their European counterparts’—“therapeutic nihilism.” This was, for example, the stance of Hopkins Chief of Internal Medicine, Sir William Osler. But at least doctors were finally abstaining from medicine’s many prior noxious “treatments.” And they were assiduously cultivating the doctor–patient relationship for all the clout it could carry. In fine, it is no accident that surgery, by than practiced solely by

M.D.'s, quickly surpassed internal medicine in public prestige; a position it has enjoyed ever since. Even today, as mentioned earlier, internists manage much more than they cure—*just like psychiatrists*.

Addendum E1. Important Dates and Events in American Medicine

Designed to complement Roy Porter's aforementioned international (mostly European) chronology.

- 1677 Rev. Thomas Thacher of Boston publishes the first medical treatise by an American, on small pox.
- 1721 Rev. Cotton Mather and Dr. Zabdiel Boylston introduce small pox inoculation in Boston.
- 1724 First general medical treatise by an American, Mather's *Angel of Bethesda*.
- 1736 Charity Hospital founded in New Orleans (almshouse/hospital).
- 1751 Pennsylvania Hospital founded in Philadelphia.
- 1765 First American medical school founded in Philadelphia at the impetus of Dr. Thomas Morgan; opens in 1768.
- 1767 Kings College Medical School opens in New York (later Columbia University), a year before the Philadelphia school actually opened.
- 1773 Virginia Asylum founded in Williamsburg. Nation's oldest.
- 1783 Harvard Medical School opens.
- 1786 Philadelphia "Dispensary" opens. Purveyed prescription medications, as well as "outpatient" clinical care.
- 1788 "Doctors Riot" in New York City over alleged medical student grave robbing. Throughout the nineteenth century, American medical schools could never get enough ante-mortem donated cadavers; and the unclaimed deceased from state hospitals, public general hospitals, and almshouses did not suffice. Consequently, they paid so-called "resurrection men" for fresh cemetery corpses.
- 1793 Philadelphia yellow fever epidemic and controversies between contagionists and "miasmaticists." Unfortunately, Dr. Rush and other "antiphlogistic" physicians bled infected patients copiously.
- 1799 U.S. Marine Hospital Service organizes (becomes U.S. Public Health Service in 1902 to 1912).
- 1809 First ovariectomy by American Ephraim McDowell, a Glasgow-trained M.D.
- 1812 Dr. Benjamin Rush's *Medical Inquiries and Observations Upon the Diseases of the Mind*. Capped his career and international renown. Nevertheless, compared to the contemporaneous treatises by Europeans such as Crichton, Pinel, and Tuke; it was rather weak tea (see D. B. Weiner, this book).
- 1824 South Carolina State Hospital, one of the South's earliest public asylums, founded in Columbia, the capital. Its first building is renovated and still standing. It has a cupola on top and two beautifully spiraling marble entry staircases with wrought-iron banisters, and was designed in a modified "Greek Revival" manner. It was planned and implemented by the South Carolinian Robert Mills; America's first internationally recognized architect (responsible for many of the earlier monuments and buildings in the nation's capital). The semicircular, four-story building housed 300 patients, with accommodations for the medical superintendent and his family, as well as for staff—the "moral treatment" ideal of one large "therapeutic family." The latest in central heating and summer ventilation was also designed by Mills. Each room accommodated one or two patients. It has been used as a state office building for some time. As is characteristic of most states, the hospital (eventually comprising 187 live-oak and magnolia-covered acres, with many buildings) with a peak census of 2,300 in 1960, was closed completely in 2004. At that time there were still 300 chronic, non-socially rehabilitable patients, who desperately needed the

- “asylum.” They were “dumped” on the streets. There are no long-term hospitals for such patients. At most they get two to three weeks of crisis inpatient hospitalization before discharge. This has led to the “revolving door syndrome.” See Grob’s books cited in Chapter 1 and his chapter in this book.
- 1826 The founding of the Medical College of South Carolina in Charleston, one of the two oldest still open in the South. The Medical College of Georgia (Augusta) was founded a few years later, and is the only Southern medical school that has stayed open continuously. The rest closed during the Civil War, such that the Medical College of Georgia was a crucial supplier of M.D. physicians and surgeons to the entire Confederate army.
- 1830 Dr. John Gunn’s *Domestic Medicine, or Poor Man’s Friend*; sixty-eight printings to 1920 (in the spirit of Rev. John Wesley’s and Dr. William Buchan’s eighteenth century British works).
- 1833 Dr. William Beaumont’s gastrophysiological studies bring him international fame.
- 1837 First known American black M.D., James McCune Smith (Glasgow trained); first black medical school (Howard University) not opened until 1867.
- 1820s–1840s Thomsonian, or botanic, medicine takes root in Jacksonian America; becomes known as the “eclectic” sect.
- 1840 American Society of Dental Surgeons; first national medical organization; dentistry, along with the related anesthesia, is nineteenth century America’s one area of international preeminence. Throughout the middle nineteenth century many dentists were MD’s, though dental colleges began operation in the 1840s.
- 1842–1846 Anesthesia, America’s greatest (besides dentistry) nineteenth century contribution to medicine, develops amid widespread contemporaneous (and subsequent historical) controversy-as described in the essay at the end of Addendum E. First public demonstration of etherized surgery, 1846 at Boston’s Massachusetts General Hospital. The “etherist” was dentist Thomas Morton and the surgeon was Harvard’s famous Dr. Charles Warren. It spread rapidly to England, where Dr. Liston (one of the United Kingdom’s most renowned surgeons) performed a painless amputation with it.
- 1844 American Institute of Homeopathy; along with the Thomsonians or “eclectics,” homeopaths would become the largest group of nineteenth century “irregular” physicians.
- 1844 Association of Medical Superintendents of American Institutions for the Insane (later the American Psychiatric Association); the first American medical specialty organization (after the dental one). Assistant asylum M.D.’s were eventually allowed to join.
- 1847 American Medical Association founded. It was concerned to promote reinstatement of previously repealed state licensure laws, combat sectarianism, and raise the educational, social, and economic status of the profession. It exerted little clout with the public, state legislatures, or the profession as a whole until the late nineteenth century on. Contra the American Medical Association, and when state medical licensure issues peaked in the 1870s until the 1890s, the American M.D. physiologist, psychologist (who opened his Harvard experimental psychology laboratory before Wundt’s in Germany), and philosopher William James opposed licensure, believing rather that the free market should be allowed to operate untrammelled.
- 1849 Elizabeth Blackwell, first American woman physician; in 1850 the Female Medical College of Pennsylvania opened; in 1855 all “eclectic” schools opened their doors to women. Most allopathic hospitals refused privileges to women until the late nineteenth century. With the exception of Harvard, Johns Hopkins, and a few others; most schools continued to exclude women until the end of the nineteenth century, and blacks were discriminated against even longer.
- 1840s Surgeon J. Marion Sims M.D. (from Lancaster, South Carolina), Professor of Obstetrics/Gynecology at the Charleston school, develops the vesico-vaginal repair

(“Sims’s forceps” and “Sims’s position”). Publication of his results in the 1850s would bring him international fame. His forceps would be used for years in complicated deliveries.

- 1850 Mr. Lemuel Shattuck’s pioneering public health work (*Report of the Sanitary Commission of Massachusetts*), contemporaneous with the work of Mr. (later “Sir”) Edwin Chadwick in England. Collaborations among laymen and socially minded doctors improved urban sanitation considerably and contributed to substantial decline of morbidity and mortality from infectious disease by the late nineteenth century. This was long before the advent of antimicrobials, though latter nineteenth century bacteriological discoveries and sanitary applications contributed force to this impetus as well—the introduction of pasteurization, and so on.
- 1850–1854 Dr. Daniel Drake’s medical geographic and climatological treatise *Diseases of the Interior Valley of North America*.
- 1871 Dr. Henry M. Bowditch opens an experimental physiology lab at Harvard.
- 1873 Hospital nursing schools founded in New York, Boston, and New Haven. There were 400 such schools by 1900(!), spurred on by Clara Barton and others following the Civil War. Nurses remain the backbone of ongoing hospital treatment—and, at times, clinic-frontline care. Present-day M.D.’s can learn something from nurse–patient relations. An important segment has become M.S.N. clinicians in most of the major medical specialties. They often function rather independently with periodic M.D. supervision. Some are in hospital or nursing-home administration. Their schools emphasized nursing-care ethics before most medical schools inaugurated courses in what is now called “bioethics,” *including the especially significant, genuinely informed (in language they can understand), patient treatment and research consent*.
- 1870s Under pressure from President Elliot, Harvard Medical School upgrades and reorganizes. It goes to a three-year curriculum, with eight months per year and more intensified basic science and clinical instruction. A baccalaureate degree is required for admission. Pennsylvania, Syracuse, and Michigan do likewise. Not so long before, most American medical schools offered two-year curricula, with only four to six months of instruction per year. For the rest of each year, students were encouraged to work with extramural practitioners—though most schools did not follow up closely upon this. Most such institutions mandated only secondary education for admission.
- 1880s Dorothea Dix completes a 40-year career of successful private and political advocacy for general and mental hospital construction and reform.
- 1870s–1910 An increasingly successful American Medical Association drive for state licensing. It succeeded partly because of a measure of rapprochement among regulars, osteopaths, homeopaths, and eclectics. Alternative healers remained: water cure, Christian Science, physical and nutritional culture, naturopaths, herbalists, chiropractors, and so forth. Whatever the cogency of their theories and the non-placebo effectiveness of their therapies (which at least were often less toxic than the allopaths’), they emphasized hygiene and preventive medicine decades before M.D.’s. Regarding the noxious effects of “antiphlogistic” M.D. techniques (e.g., bleeding, cupping, blistering), of heavy-metal drugging, and even of some botanicals, medicine’s most helpful, least-harmful period began with the so-called “therapeutic nihilism” of the great nineteenth century European academic doctors (and in some American medical schools as well—for example, Osler at Johns Hopkins). These comments on allopathy versus other medical orientations are as good a place as any to briefly recapitulate how M.D. medicine came to shed its harmful “remedies” by clinically statistically identifying them and pulling back from then-premature therapeutics to research the pathological and etiological processes of syndromes and diseases.

All this started in Paris in the 1820s and 1830s, where the focus was on (1) physical diagnosis and its improvement through instrumental extensions (e.g., Laennec's stethoscope and its subsequent modifications), (2) clinical statistics (begun by Pierre Louis), which rigorously tested the results of a number of time-hallowed medical therapies, finding many of them to be either inert or noxious (e.g., antiphlogistic methods and heroic heavy-metal dosing), (3) clinical-pathological correlation, which began to give physicians the pathoanatomic/physiologic and etiologic underpinnings of clinical syndromes, and (4) the beginnings of basic and applied bacteriology. In short many clinically important contributions came out of earlier 19th century France—Foucault's totalistic animadversions notwithstanding (e.g., *Birth of the Clinic*).

In addition, I need barely reiterate all the basic science and clinical etiologic studies coming out of the mid- to latter nineteenth century and early twentieth century German-language universities (*which, Porter estimated, gave post-M.D. scientific and clinical training to 15,000 American doctors*). Sydenham's emphasis had finally been vindicated—the etiologies and pathological processes of many syndromes (now become "diseases") had been elucidated. Scientifically trained doctors knew that their much enhanced pathological understandings would gradually yield etiologically based preventives and treatments, but that they must, in the meantime, cultivate the powerful healing aspects of a committed, empathic doctor–patient relationship.

The bacteriologically based vaccines and antimicrobials gave infectious disease and tropical medicine the first "leg up." From the 1870s through the 1980s, it would remain medicine's most causally efficacious therapeutic specialty (besides surgery). Germanic basic science institutes and bedside investigation of clinical manifestations and processes were making tremendous contributions to bacteriology/parasitology and infectious disease. In addition, other German-language university-influenced medical schools (e.g., Johns Hopkins, Columbia, Yale, Harvard, Pennsylvania, and Michigan) would eventually as well. Recall that W. H. Welch, Johns Hopkins' founding father and long-time dean, was a German-trained bacteriologist (who discovered the pathogen for gas gangrene, *Clostridium welchii*).

Next to infectious disease, surgery had of course the strongest claim to be etiologically, or at least pathoanatomically, efficacious—although it was (and still is) often symptomatic or palliative. Obstetrics and gynecologic and pediatric infectious disease and surgery also moved forward.

Internal medicine, neurology, and psychiatry were the last specialties to acquire scientifically-based therapeutics—though many of these were more symptomatic and long-term managerial than decisively etiologic once-and-for all. Their diagnostic technology improved greatly. Radiology has made incredibly-rapid strides. Molecular biology and genetics hold out the hope for causally based cures in these specialties too. But for the time being, they must be content to optimally manage and ameliorate with medications and with the therapeutic elements inherent in a properly practiced doctor-patient relationship (which medicine will never outgrow its need for).

- 1880 and 1881 George M. Beard's treatises *Neurasthenia* and *American Nervousness* make him the best-known latter-nineteenth century American physician. Beard thought that the high pressure and fast pace of the most industrial/technological and capitalistic countries were important causes of this neuropsychiatric/functional disease, along with predisposing hereditary "nervous weakness." Because of this, national psychiatries vied to claim the highest rates of the disorder—which would, of course, suggest that one or the other was the most-modernized nation!
- 1880s Lister's antiseptic and aseptic practices adopted in American surgery; abdominal surgery increasingly attempted.
- 1893 The Johns Hopkins medical school opens; as does the Army Medical School. Dr. George M. Sternberg is appointed Surgeon General; and Dr. John Shaw Billings develops the National Library of Medicine. The New York City Department of Health opens its diagnostic laboratory.
- 1890s Osteopathy (Andrew D. Still) and chiropractic (Daniel D. Palmer) are inaugurated; there are 16,000 chiropractors by 1930 and 8,000 osteopaths by 1940. Osteopathic theories and therapies were closer to those of M.D.'s than were any of the other "irregular" medicines.

Before long, the earlier twentieth century American Medical Association made it known that it was not opposed to D.O.'s who wished to join. Some did, but many declined, out of fear that their professional identities would become swallowed up in M.D. medicine. Moreover, they were committed to a primary care, general practice mode as opposed to the specialists that most M.D.'s looked up to and, over the decades, increasingly became. Moreover, despite laboratory technology; D.O.'s have also accented interviewing, history gathering, physical diagnosis, and certain therapeutic massage techniques. (Today, many American M.D.'s seem almost afraid to touch patients, allowing their nurses or M.S.N. nurse clinicians to do most of the physical examination, as well as the interviewing and history taking.) For the last several decades, many osteopathic physicians have pursued specialty residencies in M.D. hospitals and medical centers. Psychiatric medicine has been attractive to a significant minority. Even so, at a time when 80% of M.D.'s still become specialists (down from a peak of almost 90%, before family medicine training became progressively popular over the last 25 years), the majority of D.O.'s remain in family practice. *We do not need more doctors. Rather, we need more generalists, with a wider demographic distribution. We do not need more specialists, but we need more of the ones we do have in small and medium-sized towns and hospitals with surrounding rural catchment areas.* Chiropractors, for their part, gained Medicare/Medicaid and other forms of third party reimbursement despite a strong American Medical Association battle against it. However, they do not have prescribing or hospital privileges. They are divided into two subgroups: those who practice massage and "spinal manipulation" therapies only ("the straights") and those who include vitamins and natural remedies as well ("the mixers"). Unless things have changed, many chiropractic colleges do not require full baccalaureate degrees. Despite mutual antipathy between many M.D.'s and D.C.'s, U.S. patients often patronize both.

- 1890s/
early 1900s Important basic science contributions by Americans begin: George Sternberg, William Welch, and Theobald Smith in bacteriology and Thomas Hunt Morgan in genetics and experimental embryology.
- 1901 The Rockefeller Institute for Medical Research, the site of many important bacteriological and tropical disease studies, founded. It is followed rapidly by the formation of other large private endowments: Carnegie, McCormack, and so on. In addition, the private pharmaceutical industry begins to expand its research significantly. However, federally sponsored medical research did not surpass that from the private sector until World War II.
- 1901 The American Medical Association is reorganized on a more centralized and socially/economically powerful basis, with increased support from state and local medical societies (which are growing in membership). Membership in all three soon became prerequisite for hospital privileges, which themselves had become more important with the increased technical and surgical sophistication of medicine.
- 1900–1902 Identification of yellow fever vector and inauguration of eradication programs (Drs. Walter Reed, Wardell Stiles, and William Gorgas).
- 1902 onward Public Health and Marine Hospital Services expand their demographic purview ("Marine Hospital" title dropped in 1912).
- 1904 American Medical Association forms its Council on Medical Education; advocates four-year medical curriculum and internship (which Johns Hopkins and some schools had already moved toward). It is important to appreciate that this was six years before the Flexner report.
- 1906 Pure Food and Drug Act.
- 1910 Mental Hygiene Association founded by former mental patient Clifford Beers, psychiatrist E. E. Southard, and physician-philosopher-psychologist William James. It aimed to reform America's huge public mental hospitals, though it ultimately gave rise to an emphasis on acute inpatient and outpatient care, leaving hospitals unimproved.

- 1909–1915 Rockefeller Sanitary Commission for the Elimination of Hookworm Disease; educational and therapeutic program in nine southern states.
- 1910 Abraham Flexner’s report published by the Carnegie Foundation. It reflected academic physicians’ and the American Medical Association’s concern to enhance the quality of medical education and to reduce the competition among what they saw as an oversupply of American physicians. Of the 148 schools operating in 1910, only 76 were still open in 1930.
- 1912 The Progressive Party proposes national health insurance. For a time the A.M.A. was almost persuaded! This was probably, in significant measure; due to the fact that the graduates of proprietary schools (“diploma mills” mostly) had glutted the medical marketplace. It would take considerable time for the post-Flexner Report closings of these schools to have a significant impact on M.D.-overpopulation. Many University degree-holders had to supplement their incomes with farming, storekeeping, and even preaching! Hence national health insurance would have proved attractive to many such doctors. Germany, partly under the influence of the great M.D. cellular pathologist, public health expert, and sometime parliamentarian Rudolph Virchow had instituted national health care quite some time before.
- 1912–1915 Dr. Joseph Goldberger’s demonstration of the nutritional (versus infectious) nature of pellagra. Important aspects of his work were done at the aforementioned South Carolina State Hospital, where an international conference was held. Pellagra and beriberi were the two major nutritional-deficiency causes of neuropsychiatric disorders in the South. The former was later found to be caused by niacin deficiency and the latter by thiamine deficiency. As part of his demonstration of the non-infectious nature of pellagra, Dr. Goldberger actually consumed several boluses of bread that had previously been masticated by pellagrous patients-in full view of the medical and scientific participants!
- 1921 Sheppard-Towner Act (for maternal and child health care); repealed in 1929, partly because of American Medical Association antipathy.
- 1924 Veterans Hospitals established (over American Medical Association protest!).
- 1929–1930 Opening of the Johns Hopkins Institute for the History of Medicine.
National Institute of Health (would gradually comprise a number of institutes-on cancer, heart, mental health, etc.).
- 1933–1938 American Medical Association’s successful fight to exclude health insurance from the Social Security Act. Between the mid-nineteenth century and 1940 diverse modes of health care delivery operated alongside the primary mode of solo private practice: dispensary physicians, company physicians, union or fraternal organization physicians, and proto HMOs in California and Oregon. The physician- and hospital-sponsored Blue Cross and Blue Shield plans were started in the 1930s. This was partly in response to fears of a compulsory national health insurance or health service, Great Britain having instituted the former in 1911 and the latter in 1946 to 1949.
- 1946 Hill-Burton Act (federal funds for regional and local hospital construction).
- 1949 National Institute of Mental Health; included research and training grants. It was formed in response to the high rates of: selective service rejections for neuropsychiatric reasons and battlefield psychiatric casualties. The community mental health center movement of the 1960s and 1970s would follow in the wake of fairly successful Army wartime experience treating such acute battlefield casualties. The treatment of both “battlefield neuroses” and acute mental health center cases was guided by the famous “P.I.E.” acronym: proximity (to the battlefield, or patient’s neighborhood); immediacy of psychiatric intervention (in civilian, as in military, patients); and expectancy, on the clinician’s part, conveyed to the patient by subtle suggestion and “positive transferential” clout, that he or she would improve sufficiently from brief treatment to resume his or her ordinary activities on the battlefield or in the community. Every attempt was made to treat the person on an outpatient basis-to avoid the regression-promoting effects and secondary gain accompanying

hospitalization. Meanwhile, the deinstitutionalization movement of the 1960s and 1970's would empty state hospitals (from an occupied bed peak of 550,000 in 1955!). The psychiatric proponents of community mental health centers (such as the early Harvard- and Yale-based inner-city ones) hoped to reverse illness before it became severe and chronic, leading to long-term institutionalization, and wanted to follow up discharged inpatients to facilitate their re-entry and prevent revolving-door hospitalizations. However, they surely recognized that some patients would need longer periods of hospitalization—and some nonrehabilitatable ones even chronic “asylum.” It was other forces—federal and state legislative funding cutbacks, and the misguided efforts of civil rights organizations—that coopted the mental health centers to their own agendas.

- 1930s–1960s Decades of controversy over occupational diseases such as silicosis, asbestosis, and byssinosis gradually improve factory conditions and lead to increased interest in occupational or industrial medicine as well as, eventually, to state workers' compensation and law suits against negligent corporations.
- 1965 Medicare and Medicaid.
- 1960s–1970s Major federal funding contributes to the founding of a number of state medical schools and the enlargement of already existing ones (doubling the number of medical graduates per year between 1965 and 1995). However, this did not address the problem of doctor practice patterns and demographic/geographic distribution. Moreover, a great deal of state and local politics was involved in the eventual location of these schools. Probably we should turn to a system like Mexico's, where there is full student funding at public medical schools. After an internship they must practice in underserved village/rural areas for several years to pay back their educations and before getting full-licensure. After this, Mexican M.D.'s are free to practice where they wish or to pursue specialty training. Surprisingly, a good percentage remain generalists—and in underserved areas (out of a sort of vocational nobility). This would also cut down on postresidency M.D.'s trying to make as much as quickly as possible to pay back their loans (which can, if only unconsciously, lead to lucrative but unnecessary procedures).

Addendum F. History of Psychiatry, Psychology, and Psychoanalysis

Many books and articles on the history of psychiatry, psychology, and psychoanalysis were cited in Chapter 1, such as H. Spiegelberg's crucial *Phenomenology in Psychology and Psychiatry* and H. Ellenberger's *Discovery of the Unconscious*, which is as important for its plethora of references on the history and prehistory of the dynamic psychiatries as for the brilliant text itself. Some items have been “referenced” in the text of Chapter 1, such as Sulloway's masterful *Freud: Biologist of the Mind*; but will be touched on tersely here as well. Other significant pieces, having previously been discussed enough, do not appear. Many of the chapters in our *History* cite French, German, Italian, and Spanish language sources—both general or national psychiatric histories and circumscribed scholarly monographs. These are not duplicated here. See also J. G. Howell's chrestomathy of national psychiatric histories—item 8: below. Finally, references to histories of Freudian and neo-Freudian psychiatry may seem top-heavy, but it is simply the case that the dynamic psychiatries have attracted many more historians than any other area of psychiatric history. Freud biographies alone comprise many hundreds. Fortunately, we have been witnessing a counterbalance to this trend for some time now.

The following books also have extensive bibliographies of key primary and secondary sources in the history of psychiatry, psychology, and psychoanalysis and in its historiography as well.

1. D. Halperin, J. J. Winkler, and F. I. Zeitlin, eds., *Before Sexuality: The Construction of Erotic Experience in the Ancient Greek World* (Princeton, NJ: Princeton University Press, 1990). Ancient

Greece has bequeathed us abundant evidence for a radically different set of sexual standards and behaviors from those of the modern world. These fifteen essays explore the iconography, politics, ethics, poetry, and medical practices of ancient Greece. They discuss not only sex; but also how norms, practices, and even the very definitions of what counts as sexual activity have changed significantly over time. See E. C. Keuls, *The Reign of the Phallus: Sexual Politics in Ancient Athens* (New York: Harper & Row, 1985). Three hundred and forty-six marvelous Greek vase paintings document the author's points. Draws together all the elements that constitute the "phallic reign": the blatant male claim to general dominance; its codification in law; the myths of rape and conquest of women; and the final result—the reduction of sex to a game of dominance and submission, both of women by men and of men by men. She also uncovers an intense countermovement that found expression on the stage, in public debate, and on the streets. Nevertheless, male homosexuality in the Athenian elite and educated classes—especially that between teacher/mentor and pupil—was hardly unregulated, in terms of protecting the boy from misuse. Nor can one generalize about sexual practices from Athens to all of Greece. Again, as an interesting aside, Foucault's 3-volume *History of Sexuality* has virtually nothing on women!

2. M. S. Micale and R. Porter, eds., *Discovering the History of Psychiatry* (Oxford: Oxford University Press, 1994). The contributors read like a hall of fame of the history of psychiatry. There are historiographical essays as well, such as R. Porter and M. Micale's long introductory essay "Psychiatry and Its Histories"; O. Marx's "Psychiatric Historiography in Nineteenth-Century Germany"; and G. Mora's "Early American Historians of Psychiatry." Essays also cover topics as diverse as N. Tomes, "Feminist Histories of Psychiatry" and N. Dain's "Psychiatry and Anti-Psychiatry in the United States." *The bibliographic material is so compendious that a serious student would have a fairly complete coverage in this one book alone.* W. F. Bynum, R. Porter, and M. Shepherd, eds., *The Anatomy of Madness: Essays in the History of Psychiatry*, 2 vols. (London: Tavistock, 1985). Two dozen historical and historiographical essays by solid scholars. R. Hunter and I. Macalpine, *Three Hundred Years of Psychiatry, 1535–1860* (Oxford Press, 1963). Superb combination of history, verbatim renditions, and bibliographic work. This couple has written—or effected the republication of—a plethora of books and articles. R. Porter, ed., *The Faber Book of Madness* (London: Faber and Faber, 1991).
3. E. Ackerknecht, *A Short History of Psychiatry*, trans. S. Wolff (New York: Ronald Press, 1968). Still the best for a rapid overview of the history of Western psychiatry. Useful reference section. Written with a distinctly neuropsychiatric bias. Anti-romanticist animus as well.
4. C. Goshen, ed., *Documentary History of Psychiatry* (New York: Philosophical Library, 1967). Excellent range of excerpts from primary sources over a considerable chronological expanse. R. Thomson, *The Pelican History of Psychology* (Baltimore: Penguin, 1974).
5. R. J. Herrnstein and E. G. Boring, *A Source Book in the History of Psychology* (Cambridge, MA: Harvard University Press, 1965). Excerpts from Aristotle on past Pavlov and Freud. It also includes the philosophical psychological literature that influenced psychiatry quite as much as psychology. E. Heidbreder, *Seven Psychologies* (Englewood Cliffs, NJ: Prentice-Hall, 1961). M. Hunt, *The Story of Psychology* (New York: Random House, 1993). T. S. Krawiec, ed., *The Psychologists*, 2 vols. (Oxford, 1974). Deserves re-citing for its historical and bibliographic perspectives on a plethora of psychological schools and subspecialties. E. Herman, *The Romance of American Psychology: Political Culture in the Age of Experts* (Berkeley: University of CA, 1995). The two following books provide useful information about (pre-1960's) Soviet perspectives on psychoanalysis and psychology/psychiatry respectfully: (1) V. N. Volosinov, *Freudianism: A Marxist Critique* (New York: Academic Press, 1976), trans. I. R. Titunik—very-much opposed, as a Marxian environmental (i.e., economic/social structural) determinist, to Freud's "instinctual"/biological side; (2) R. B. Winn, ed., *Soviet Psychology: A Symposium* (New York: Philosophical Library, 1961)—different aspects of Soviet psychology (including its history) discussed by mostly Russian psychologists of the caliber of A. N. Leontiev, for example.
6. R. S. Peters, ed., Brett's *History of Psychology* (Cambridge, MA: MIT Press, 1962). Abridged to 800 pages from its original early-1920s three volumes. Begins with the pre-Socratics and goes through the

Enlightenment and nineteenth century philosophical psychological traditions. Covers physiological, behaviorist, and psychoanalytic psychologies. B. R. Hergenhahn, *An Introduction to the History of Psychology*, 3rd ed. (Pacific Grove, CA: Brooks/Cole, 1997). K. Danziger, *Constructing the Subject: Historical Origins of Psychological Research* (Cambridge: Cambridge University Press, 1994). Examines the impact of experimental psychological and other modes of psychological investigation on the sort of data obtained. Very thought-provoking because so many psychological research paradigms are totally non-naturalistic. Take, for example, Ebbinghaus's studies on memory and forgetting. They are totally unlike the more-naturalistic word association tests, of which there are a variety of different types, capturing everything from remembering and forgetting "neutral" words and phrases to recalling and forgetting emotionally charged ones (in which case one may be dealing with "repression"). By contrast, Ebbinghaus examined the times required to memorize nonsensical phrases and the rates of forgetting. Many behaviorist "experiments" would fall into the same, not only non-naturalistic, but scientifically grossly incomplete (i.e., erroneous) conceptual as well as methodological paradigms. Let me explain; classical learning theory and its applications are attractive to many because of their simplistic view—it would be true to say S-R (Stimulus-Response) rather than the S-O-R (Stimulus-Organism-Response) they often claim to be using since their "brain/mind" is an empty and inactive "black box." Skinner's dictum, "there is no inner man," is another way of stating this. In short, for Skinnerians, external "stimuli" do not impinge on idiosyncratic historically/constitutionally determined modes of apperception/interpretation (perhaps influenced by affective or motivational states)—that is, "persons." Hence, everything becomes so easy—they would say "scientifically parsimonious"!—because external stimulus "X" is precisely the same for subjects A through Z.

7. J. Ehrenwald, ed., *The History of Psychotherapy: From Healing Magic to Encounter* (New York: Jason Aronson, 1977). Compendious anthology of excerpts from primary sources: from ancient Near Eastern and ancient Greek texts, through nonliterate tribal healing, on through Judeo-Christian sources to psychoanalysis, existential therapies, and California-style encounter groups.

Egyptian Interlude: Medicine/Psychology

Would that we had space to delve more than superficially into ancient Egyptian medicine, which profoundly influenced Greco-Roman and Medieval/Renaissance medicine, including its emphasis on balance/imbalance—part of *Maat*—and its theory of internal heart-centered channels [*metu*], whose fluid flow could become blocked—requiring emetics, purgatives, enemas, or even bloodletting. We have a number of virtually intact or fragmented papyri (on internal medicine, surgery, gastroenterology, gynecology, and ophthalmology) and records of a large pharmacopoeia that, again, influenced subsequent European ones. The first physician we know by name was the Old Kingdom (ca. 2650 B.C.E.) doctor Imhotep, also prime minister and architect to Pharaoh Djoser. He designed and supervised the building of the latter's stepped pyramid, the first such structure, which predated and influenced the smooth-faced ones. Imhotep also wrote "wisdom literature." As the centuries rolled on, he became the Egyptian god of medicine—and the Ur-type for the Greek Asklepios, the Roman Aesculapius, and the temples' "incubation sleep" and diagnostic/therapeutic dream interpretation. The staff with the intertwined serpent, medicine's hoary symbol, comes from ancient Egypt as well. Egyptian doctors were well-educated, high-status professionals who had completed the full scribal-school primary and secondary educations before starting medical school (where they learned to read and write the pictographic/ideographic hieroglyphs and both forms of phonetic cursive, hieratic and demotic, in which latter many medical/surgical/pharmaceutical texts were written). Their anatomical texts list over 100 internal organs and organ systems, and they doubtlessly profited from the knowledge of embalmers too. The centralized and provincial medical schools were all regularly inspected for educational quality assurance. Egypt's doctors were the most sought after by other nations throughout antiquity. (There also was a nationwide public health system staffed by state doctors and their subordinate, apprentice-trained "leeches" or "barefoot doctors" who could set minor fractures, treat superficial wounds, etc.).

Apart from some of the surgery, medical education was mostly bookish and theoretical—as in medieval and Renaissance Europe. While there were magical rites which often accompanied treatment, Egyptian medicine/surgery (and the two were not separated as in Europe—though an Egyptian doctor might later choose to specialize in surgery) was much more rational/empirical than the ancient Near East's other major medicine, Mesopotamian. The “scientific” doctors of the latter based their diagnoses, prognoses, and therapeutic plans entirely on the results of magical divination: hepatoscopy (inspection of sheep livers and their comparison to canonical terra cotta prototypes) and astrological readings. Sin was supposed to cause disease and required sacrifice to the offended god. As in Egypt, there was an inferior caste of “leeches.” Nevertheless, the Mesopotamian pharmacopoeia was large, and forty-eight of the hundreds of cuneiform clay tablets in King Ashurbanipal's library are medical or medical magical.

Before turning to sources for the study of Egyptian psychology and even psychiatry, I first mention the important subspecialty of “medical Egyptology,” the radiological and anatomic/clinical pathological study of mummies. There are ten thousand to twenty thousand extant, and more are uncovered every week. We have already learned much about ancient Egyptian disease, infectious disorders, and nutritional deficiencies. Much more medical manpower, however, is needed. M.D.'s who wish to collaborate with Egyptologists in the further study of ancient medical texts would be much in demand since most scholars and archaeologists of Egypt know little medicine or medical history (most of these texts have been published and translated into English, with a few still only available in German; the University of Chicago's founding father of American Egyptology, J. H. Breasted, translated into English five published volumes of such treatises).

Apropos psychology, while much Egyptian art (tomb-wall paintings and, especially, monumental sculpture) cleaves pretty closely to the Old Kingdom severe style and canon of proportions, a good deal evolves throughout Egypt's three millennium history (and not simply Akenaten's apparently more-realistic Amarna style). For example, tomb wall-paintings can have “cartoon bubbles” quoting conversations among depicted family members or even artisans or workmen. The literate artisans' village Deir el-Medinah (New Kingdom), across from the Valley of the Kings, has left hundreds of inscribed ostraka (pottery shards), from which we can reconstruct disputes and other aspects of their day-to-day life. We also have diplomatic cuneiform clay tablets from the correspondence between the pharaohs and other great rulers, who at times drop their royal/deific facades to an amazing degree. They can even become bantering, as did those between Queen Nefertari (while Ramses II the Great was on campaign) and the Hittite emperor (over a marriage between royal children and dowry issues, among other things). Certain heroic legends and sagas, fables and morality tales, and “wisdom literature” often cast in the form of a father's letters to his son form windows to ideal and actual personality types.

Moreover, certain sexual motifs in written and artistically depicted Egyptian mythology—masturbation is a big one—and recurrent varieties and vicissitudes of relationships among the gods, or between deities and persons, cry out for psychoanalytic and social psychological scrutiny (circumcision seems to have been the rule for boys; and even occasionally among girls). Egyptian “psychology” was a combination of heart-centered (like Aristotle's, albeit secular, psychology, which was also seated in the heart—the brain being simply a humoral-ventilating mechanism) and “*ba*”- and “*ka*”-based theistic/spiritual/moral. The latter notions are complex, with some scholars disagreeing over their respective roles and relationships in both earthly existence and the afterlife. I follow Erik Hornung mostly here, usually considered the foremost Egyptian religious and religio-psychological student of the latter-half of the twentieth century (referenced later, with the other Egyptological citations). Based on much evidence, he believes that beneath the pantheon and apparently exclusive polytheism there was a primordial, pre- and post-Akenaten, conception of the one god (“*ntr*”). The “*ba*” was said to be the image or likeness of “god,” while the “*ka*” was more personal psychological, but also, to a lesser degree, made in “god's” image as well. The heart was said to be able to welcome “God” into its abode at will (a sort of early unificatory mysticism). In the *Book of the Dead*, which was kept in ample supply by countless specialized scribes copying and recopying

it, for it was absolutely essential (through its manifold magical rites, prayers and spiritual/moral petitions and protestations, charms and charmed phrases, etc.) for the noble or “upper-middle-class” Egyptian to negotiate his or her way through the countless perils of the afterlife to immortal bliss. One of the earlier tests was a moral one in which the heart of the deceased was in one dish of the suspended balance and the feather of “*Maat*” (cosmic and spiritual/moral right order or balance), personified as a goddess, was in the other. While spiritual “in essence,” the “*ba*” and “*ka*” were in some measure dependent on the integrity of the body if they were not to be abandoned to annihilation. If something did befall the body, numerous small Osiris statuettes (*ushabti*) and wall paintings and incised or bas relief wall sculpturing could all stand in for the body. Apparently the “*ba*,” as the person’s prepotent image of “god,” stayed closer to the body, while the “*ka*” was more free to wander the outside world (limited by a daily time period), though some write as if the “*ba*” were more mobile.

The Egyptians seem to have incorporated a primitive conflict psychology, often between the living person and his god-like element the “*ba*.” In Volume I of her three-volume translation of Egyptian literature (reference below); Miriam Lichtheim (1975, pp. 163–169) included a fascinating instance of the aforementioned between a depressive contemplating suicide and his “*ba*.” It is from the Twelfth Dynasty (i.e., “Middle Kingdom”). The first part is missing; and it comprises 155 vertical columns (with gaps). She notes that her translation is similar to that of the great expert on Middle Egyptian language, R. O. Faulkner. A suffering man longs for death. His depressive lens on life carries the usual complaints—that the world and everything and everybody in it (including himself) is rotten and of no account. Therefore, he plans to take his active leave from it. Angered by his self-pitying litany of complaints (which continues for many stanzas) and by his failure to listen to the reason of his wife (or their children) or of his “*ba*,” the latter threatens to leave him if he does not give up the idea of self-immolation and face up to living. Knowing that the “*ba*’s” flight would mean annihilation if he killed himself, he swears to stay with life until natural death effects his release to a much better resurrection. The “*ba*” tells him two proverbs favoring life and agrees to remain with him through the balm of a natural death to the shore of the other side. This could be interpreted as a form of self-psychotherapy. The man’s last four poems reflect his decision to await a natural death, which will be much sweeter than life, especially with his “*ba*’s” supporting presence. While this may seem macabre or still depressive to us; it was more in line with views of the higher castes, who had access to immortality—though most still enjoyed earthly life—as proved by their tomb wall-paintings.

Moreover, some of the pleasant metaphors he uses from life on earth—even though describing death/resurrection—suggest to me the beginning of a gradual recovery.

I shall only reproduce the third and part of the fourth in verse, and remainder in prose (Lichtheim, 1975, pp. 168–169):

III

Death is before me today
 [Like] a sick man’s recovery,
 Like going outdoors after confinement.
 Death is before me today
 Like the fragrance of myrrh,
 Like sitting under sail on breeze day.

Death is before me today
 Like the fragrance of the lotus,
 Like sitting on the shore of drunkenness.

Death is before me today
 Like a well-trodden way,
 Like a man’s coming home from warfare.

Death is before me today
Like the clearing of the sky,
As when man discovers what he ignored.

Death is before me today
Like a man's longing to see his home,
When he has spent many years in captivity.

IV

Truly, he who is yonder will be a living god,
Punishing the evildoer's crime.
Truly, he who is yonder will stand in the sun-bark ["barque"],
Making its bounty flow to the temples.
Truly, he who is yonder will be a wise man,
Not barred from appealing to Re ["Ra"] when he speaks.

What my "ba" said to me: "Now throw complaint on the [wood-pile], you my comrade, my brother! Whether you offer on the brazier, whether you bear down on life, as you say, love me here when you have set aside the West [i.e., the land of the dead, burial, and the afterlife]! But when it is wished that you attain the West, that your body join the earth, I shall alight after you have become weary, and then we shall dwell together!"

Colophon [by the Twelfth Dynasty scribe who copied the papyrus]: "It is finished beginning to end, as it was found in writing."

E. Strouhal, *Life of the Ancient Egyptians* (London: Opus, 1992). See Chapter 19, "For Every Malady A Cure".

P. Montet, *Everyday Life in Ancient Egypt: In the Days of Ramses the Great*, trans. A. R. Maxwell-Hyslop and M. S. Drower (Philadelphia: University of Pennsylvania Press, 1981).

B. G. Trigger, B. J. Kemp, D. O. Connor, and A. B. Lloyd, *Ancient Egypt: A Social History* (Cambridge: Cambridge University Press, 1983).

G. Robins, *Women in Ancient Egypt* (Cambridge, MA: Harvard University Press, 1993).

M. Seidel and R. Schulz, *Egypt: Art and Architecture* (New York: Barnes and Noble, 2005). Profuse color plates.

E. Hornung, *Conceptions of God in Ancient Egypt: The One and the Many*, trans. J. Baines (Ithaca, New York: Cornell University Press, 1982).

R. T. Rumble Clark, *Myth and Symbol in Ancient Egypt* (London: Thames and Hudson, 1991).

M. Lichtheim, trans., *Ancient Egyptian Literature*, Vol. I: Old and Middle Kingdoms; Vol. II: The New Kingdom; Vol. III: The Late Period (Berkeley: University of California Press, 1973–1980).

W. K. Simpson, ed., *The Literature of Ancient Egypt*, new ed., trans. R. O. Faulkner, E. F. Wente, Jr., and W. K. Simpson (New Haven, CT: Yale University Press, 1973).

J. B. Hurry, *Imhotep: The Egyptian God of Medicine* (Chicago: Ares, 1987). Author an M.A. and M.D. C. Reeves, *Egyptian Medicine* (Princes Risborough, UK: Shire Egyptology, 1992).

L. Manniche, trans., ed., *An Ancient Egyptian Herbal* (Austin: University of Texas Press, 1992).

W. K. Dawson, "Medicine," in S. K. Glanville, ed., *The Legacy of Egypt* (Oxford: Oxford University Press, 1942), 179–197. An M.D.'s excellent essay and list of and commentary on major extant papyri.

J. R. Harris, "Medicine," in J. R. Harris, ed., *The Legacy of Egypt*, 2nd ed. (Oxford: Oxford University Press, 1971), 112–138. One of the very best essay-length treatments in English; by an Egyptologist and a medical man.

C. E. Smith and W. R. Dawson, *Egyptian Mummies* (New York: Kegan Paul, 1921). Numerous black-and-white images of mummies, including X-ray images. An early treatment of its subject. Dawson was an M.D. Egyptologist.

P. Lauber, *Tales Mummies Tell* (New York: Harper Collins, 1985). X-rays and scans.

A. R. David and E. Tapp, eds., *The Mummy's Tale: The Scientific and Medical Investigation of Natsef Amun, Priest in the Temple at Karnak* (New York: St. Martin's, 1973). The authors are both M.D.'s. Full scale pathological and multiple types of scanning work and photos.

M. Bucaille, *Mummies of the Pharaohs: Modern Medical Investigations*, trans. A. D. Pannell and M. Bucaille (New York: St. Martin's, 1992). Author an M.D. Mostly text (very good). Some photos.

J. Reade, *Mesopotamia* (Cambridge, MA: Harvard University Press, 1991). Beautiful photos.

G. Roux, *Ancient Iraq* (Penguin, 1991). By an M.D., who was France's greatest Assyriologist.

A. L. Oppenheim with E. Reiner, *Ancient Mesopotamia: Portrait of a Dead Civilization*, rev. ed. (Chicago: University of Chicago Press, 1977); see the chapter Medicine and Physicians, pp. 288–305. Also describes a class of "practical physicians" below the "scientific" caste.

8. J. G. Howells, ed., *World History of Psychiatry* (New York: Brunner/Mazel, 1975). Coverage of the history of psychiatry by indigenous scholars throughout the world (the West, Communist bloc, and so called "Third World"). The only available textual and bibliographical resource for many of these countries and areas. Also helps give an ethnographic appreciation of other regions' psychiatries to North American and Western European readers. See also J. G. Howells and M. L. Osborn, *A Reference Companion to the History of Abnormal Psychology* (Westport, CT: Greenwood Press, 1984).
9. J. Ehrenwald, ed., *From Medicine Man to Freud* (New York: Dell, 1957). By the previously-referenced author.
10. S. W. Jackson, *Melancholia and Depression: From Hippocratic Times to Modern Times* (New Haven, CT: Yale University Press, 1986). Extraordinary textual and bibliographic (primary and secondary sources) achievement on this historically most central of psychiatric syndromes. M. A. Screech, *Montaigne and Melancholy: The Wisdom of the Essays* (London: Penguin, 1991).
11. E. B. Brody, *The Search for Mental Health: A History and Memoir of the World Federation for Mental Health, 1948–1997* (New York: World Federation for Mental Health, 1998). Invaluable history of this international psychiatric organization by its long-time secretary-general and editor-in-chief of the important *Journal of Nervous and Mental Disease*. It has an excellent bibliography on pertinent general psychiatric and subspecialty psychiatric sources, for example, transcultural psychiatry and its issues, including how to "access" important but unpublished, primary source material, as well as a complete year-by-year list of World Federation for Mental Health publications. G. W. Dowdall, *The Eclipse of the State Mental Hospital: Policy, Stigma, and Organization* (Albany: State University of New York Press, 1997).
12. S. W. Jackson, *Care of the Psyche: A History of Psychological Healing* (New Haven, CT: Yale University Press, 1999). Splendid text and set of references from ancient to modern times.
13. S. Finger, *Origins of Neuroscience: The History of Exploration into Brain Function* (Oxford: Oxford University Press, 1994). Copiously illustrated and diagrammed, slightly oversized hardback book. Topically organized. Covers thinkers, theorists, and investigators from antiquity through the mid-twentieth century. As helpful to general and neuroscience-oriented psychiatrists as a refresher and overview as it is to psychiatric historians.
14. M. S. Micale, ed., and "Introduction," *Beyond the Unconscious: Essays of Henri Ellenberger in the History of Psychiatry* (Princeton, 1993). A collection of Ellenberger's essays, some relating to other facets of the history of dynamic psychiatry and some on more general psychiatric issues. Micale's introductory essay, "Henri F. Ellenberger and the Origins of European Psychiatric Historiography," is worth the price of the book. His bibliographic references are as heavy in general psychiatric as in dynamic psychiatric sources. He also refers to long out-of-print texts by Ellenberger, such as his 1954 monograph on the history of Swiss psychiatry (a country whose psychiatric importance is out of all proportion to its tiny size). There is a complete, year-by-year Ellenberger bibliography as well. Micale also recounts his own junkets to Europe for additional source material. Sorrowfully, as Micale tells us, Ellenberger was too stricken by Parkinsonism to do much intellectual work during even his initial retirement years. This is a great tragedy; considering Ellenberger's formidable scholarly output as,

first, a busy Menninger Institute faculty member and practitioner, and, second, professor and chairman of the department of criminology at the University of Montreal. We can only imagine—especially with his years of historical knowledge and wisdom (and acumen as a general psychiatrist/criminologist, psychoanalyst, and expert phenomenological/existential psychotherapist)—what might otherwise have flowed from his pen. He edited, in 1958, with May and Angel, *Existence* (New York: Basic, 1958), the best English-language text of phenomenological/existential psychiatry and psychotherapy, which included, unfortunately *still-rare*, English-language translations of case histories by Binswanger, Minkowski, Straus, and others—given Anglo-Americans’ continued woefully inadequate knowledge of important Continental phenomenological psychiatrists such as the great Karl Jaspers and Henri Ey. Ellenberger might also—for all we know—have further meliorated this ignorance. Be all that as it may, a groundbreaking, timeless, and brilliantly written magnum opus such as *The Discovery of the Unconscious* only appears once in a historical generation or so. It has taught-and will continue to teach-first-rate psychiatric (or medical, for that matter) historiography to generations of young M.D.’s and Ph.D.’s. In that book Ellenberger exhibits a remarkable lack of “school”-partisanship; reminiscent of the Lutheran Ranke’s matchless history of the Papacy. So Ellenberger with his laurels can rest in peace, while the rest of us can barely gaze upon his ever-soaring spirit.

15. P. Roazen, *The Historiography of Psychoanalysis* (London: Transaction, 2001). This is an important bibliographical and historiographic resource (especially on Freud’s patients—such as the work of Peter Swales). Some of Roazen’s chapters are quite controversial, while others are more straightforward. Nevertheless, the author is always stimulating and very often provocative. See also Roazen’s *Freud and His Followers* (New York: Meridian, 1974) for its references and its wealth of information from countless audio-recorded hours (from ten years previously) from many of Freud’s patients (including some who later became prominent psychoanalysts) and from Freud’s latter first- and second-generation followers. Finally, see J. M. Masson’s re-translation and edition of the Freud-Fliess correspondence, which is vital to the “proto-history” of psychoanalysis: *The Complete Letters of Sigmund Freud to Wilhelm Fliess, 1887–1904* (Cambridge, MA: Belknap Press of Harvard University Press, 1985). Despite Masson’s problematic books (such as *Assault on Truth*), this is a much better translation than the one from the early 1950s and is more complete as well.
16. H. Ruitenbeck, ed., *Freud as We Knew Him* (Detroit: Wayne State University Press, 1973). Papers by analysts and others quite close to Freud for long periods of time. Essential reading; includes bibliographical resources.
17. N. G. Hale, Jr., *Freud and the Americans, Vol. I: The Beginnings of Psychoanalysis in the United States, 1876–1917; Volume II: The Rise and Crisis of Psychoanalysis in the United States, 1917–1985* (Oxford: Oxford University Press, 1995). Many American references pertinent to both general psychiatry and psychology, and not merely psychoanalysis, not found elsewhere. An elegantly written mine of information about American psychiatry and American psychoanalysis. J. Sayers, *Mothers of Psychoanalysis: Helene Deutsch, Karen Horney, Anna Freud, Melanie Klein* (New York: W. W. Norton, 1991). Compared to most professions in the earlier to mid-twentieth century, psychoanalysis had a greater percentage of prominent women analysts, including the interpersonal theorist Clara Thompson, and Helene Deutsch, a pioneering analyst with schizophrenics and “psychotic characters” (probably our mostly “borderline-disordered” patients—as were her “as if” personalities too); and Frieda Fromm-Reichmann, who wrote the first psychodynamic theoretical/therapeutic primer for general psychiatrists. See also the patient-autobiographical account (*I Never Promised You a Rose Garden*) of Fromm-Reichmann’s surprisingly successful, pre-medication, long-term psycho-dynamic treatment of “Hannah Green’s” schizophrenia, in which her great humanness and intense dedication to her patients comes through. In childhood observation and developmental theory, as well as in child play therapy, there were Margaret Mahler and her female colleagues from the Philadelphia Institute of Psychoanalysis; Anna Freud’s partner, Dorothy Burlingham, at London’s developmental-observational and child-treatment Hampstead Clinic; female analysts at the Yale Child Study Center; Annie Reich, a much-acclaimed New York analyst from Vienna; and important Vienna analysts such as Ruth Mack-Brunswick, Eva Rosenfeld, and Princess Marie Bonaparte.

18. D. Wyss, *Psychoanalytic Schools from the Beginning to the Present*, trans. G. Ong (New York: Jason Aronson, 1973). History of the Freudian schools (including British object relations psychology) and the neo-Freudian schools. Gracefully written and informative text, and a broad bibliography of primary and secondary sources.

Evolutionist Digression

19. Apropos Sulloway's aforementioned *Freud: Biologist of the Mind* (1979), see also L. B. Ritvo, *Darwin's Influence on Freud: A Tale of Two Sciences* (New Haven, CT: Yale University Press, 1990), and E. R. Wallace, IV, *Freud and Anthropology: A History and Reappraisal* (New York: International Universities Press, 1983). All three converge on the importance of Darwinian and nineteenth century biological sciences for Freud's psychological and cultural thinking. However, Wallace also emphasizes the importance of the social sciences (especially cultural anthropology) and of philosophical and historical thinking for Freud's sociocultural writings, such as *Totem and Taboo* (1913) and on many of his psychological concepts (cited elsewhere). See, too, R. J. Richards' magisterial study, *Darwin and the Emergence of Evolutionary Theories of Mind and Behavior* (Chicago: University of Chicago Press, 1987). Richards' is a double Ph.D. in both the history and the philosophy of science, and these two perspectives enrich his story throughout. Evolutionarily influenced psychologies (and psychiatries) have flourished from the 1870s through today. In fact, evolutionary theories and factors are becoming incorporated—at a rapid pace—into psychiatric investigative and clinical thinking (as in medicine generally). I cite some of the pertinent writings in the Epilogue. Because of all this, I include the following digression—which is historically-pertinent too.

A genically reductive example is R. Dawkins' *The Selfish Gene*, rev. ed. (Oxford: Oxford University Press, 2006). Dawkins's purely DNA-level natural selection ("sociobiology," adopted from his teacher, the entomologist-turned-pangenic reductionist of all human psychosocial phenomena E. O. Wilson) ignores that contemporary neo-Darwinism also speaks of other levels at which natural selection can operate: the phenotypic molar-organismic, the population, and the species. Dawkins's human "psychology/sociology" asserts that we are genically determined "lumbering robots"—DNA's "survival machines." The preservation of "selfish genes" is "the ultimate rationale for our existence." Presumably there must even be "discourse-producing genes" responsible for Dawkins's symbolically mediated (i.e., linguistic) arguments, which would self-reflexively hoist him on his own petard—because if the latter, like all other human behaviors (including communication), are a function of "selfish genes," then he cannot claim that his arguments are determined by the rational and evidence-based hypothetico-deductive scientific method. In short, he cannot have his pangenic human reductionism and science too. Indeed, he "proves" his thesis about all human mentation/behavior not by anything remotely resembling the controlled-experimental method, but rather with latter-nineteenth century cultural evolutionist anthropologists' at-times questionably applied "comparative method." But whereas they still believed in psychology, social structure/function, and culture, they would have failed to understand how a non-psychobiological/non-social/cultural theory could use comparativism. He clearly derives "altruism" from the selfish genes' determination of the individual organism to maximize the survival and hence subsequent replicability of that selfish gene in its close kin members—hence the explanation for a certain bird's warning cry at the approach of a predator, even though it may cost that bird its life. Such stances basically elide ethics as it has been deliberated upon by 2,500 years of philosophers. The agnostic Thomas Henry Huxley, the reclusive, neurotic, and psychophysiological Darwin's "bulldog"; in a tract on evolutionism and ethics originally published in 1870 [*Lay Sermons, Addresses, and Reviews* (New York: Macmillan, 1903)]; argued vociferously against an evolutionarily derived ethics because—contra "social Darwinists"—selfish competitive/interorganismic conflict could not form the basis for a humane and genuinely altruistic morality. While Huxley may have discarded Christian theology; he held fast to most of its morality—even sending his children to Anglican

Sunday School! He was always searching for some version of a comprehensive science-based philosophy which could become a secularized “church” (his word). And from his *Autobiography* and other sources, we know that Darwin did not throw-over the church easily. The tragic death of his daughter was probably as important as anything. And he went to the local Anglican chapel every Easter—where parishoners greeted him with a brass band! Finally, before summing up with a reconsideration of Dawkins’s social “Darwinism”; we return to his conception of the human-driving gene as a sort of “miniaturized teleological homunculus, or steersman.” He defends this in two self-contradictory ways. (1) He uses these as metaphors because it is much harder to keep expressing them in more scientific ways. But he infrequently attempts the latter, and the teleology carries his argument far, far more often. (2) He is doing this to help us “empathize” with the selfish gene—which brings me right back to the teleological homunculus!

Robert Young (cited earlier and below) has argued that social Darwinism is alive and well. Dawkins’s sentiments prove that. Dawkins’s tone is every bit as important as his content:

What has happened in modern civilized man is that family sizes are no longer limited by the finite resources that the individual parents can provide. If a husband and wife have more children than they can feed, the state, which means the rest of the population, simply steps in and keeps the surplus children alive and healthy. There is, in fact, nothing to stop a couple with no material resources at all having and rearing precisely as many children as the woman can physically bear. But the welfare state is a very unnatural thing. [*How can it be “unnatural” when his book teaches that we are fully natural beings, an integral part of nature, whose social institutions are genetically determined?*]

In “nature”—again his selective and self-contradictory use of the term—implies that some human social institutions (i.e., federal or state financial assistance) are over and against nature. “Humans,” after all, by his repetitive refrain, are nothing more than “survival machines”—“robotic vehicles blindly programmed to preserve the selfish molecules known as genes” (p. xxi).

Parents who have more children than they can support do not have many grandchildren, and their genes are not passed on to future generations. There is no need for altruistic restraint in the birth rate because there is no welfare state *in nature* [again][my italics]. Any gene for overindulgence is promptly punished: the children containing that gene starve. Since we humans do not want to return to the old selfish ways by which we let the children of too-large families starve to death, we have abolished the family as a unit of economic self-sufficiency and substituted the state.

In contrast, hundreds of anthropologists, over the decades, have found that nonliterate tribal societies have various sorts of “redistributive” systems; and that they do infinitely better than we at not only tolerating, but also finding viable sociocultural niches for the chronically ill and even psychotics. In addition, not only nuclear, but also extended families and clans are intact, such that benevolent aunts and uncles can make up for deficient parents and readily adopt any orphaned children. Moreover, their socially cohesive and psychologically satisfying rituals, clubs, and sacred belief/action systems are intact, whereas ours are in shambles. It is perhaps they who should pity us.

Furthermore, the elderly (unlike in our exalted society) are generally accorded great respect for their sapiential authority. Of course, there are the rare exceptions, as in the Eskimo expectation that the elderly will at some point leave the group to die alone in the snow; and, as described in Colin Turnbull’s *Uganda Mountain People* (New York: Touchstone, 1976), the ultimate expression of Hobbesian man in the state of nature: nasty, brutish, and short-lived. But there are quite comprehensible reasons for the rare aforementioned exceptions. The Eskimos live in an incredibly harsh environment with limited resources, and Turnbull’s “Mountain People” fell afoul of the tyrannical and genocidal Idi Amin (the United States only intervenes in white European genocide, or where oil is involved). They were barbarously treated; many were killed, and the survivors were harried away from their centuries-old home on the plateau into rugged and resourceless mountains. Hence, their mutually-destructive giving up. For biocultural anthropological critiques of sociobiology see: (a) M. Sahlins, *The Use and Abuse of*

Biology (University of Michigan, 1976); (b) K. Bock, *Human Nature and History* (Columbia University, 1980); and (c) T. Ingold, *Evolution and Social Life* (Cambridge University, 1986).

Too many writers have focused one-sidedly on Young's look at the externalist aspects—for example, social/economic/political determinants of evolutionary theory. Finally, Young, in his consideration of evolutionism as both a potentially socially conservative creed and a powerfully evidenced science, brings us back to the internalism versus externalism conflict in a refreshingly novel way (pp. 23–24):

Both historians of science and other sorts of historians are coming to see that their interests cannot be compartmentalized, that—to put it crudely—science happened in history and has influenced historical events increasingly. That there was a need for these changes in attitude implies that both historians of science and other sorts of historians have tended to make two related assumptions: first, that scientific ideas and findings can be dealt with as relatively unequivocal units with fairly sharply defined boundaries and clear-cut linear influences [see Edwin R. Wallace, IV, “Determinism, Possibility, and Ethics,” *Journal of the American Psychoanalytic Association* (1986): 933–973, on “reciprocal and multifactorial intersectional causation”]; and second, that the “nonscientific” factors played relatively little part in shaping the development of scientific ideas. There have been reactions against these assumptions, which have, however, led to a rather polarized situation with “internalists” and “externalists” conducting relatively unconnected studies.

As mentioned earlier, Young calls for a history of science acknowledging both externalist and internalist factors—and combining them in interpretive explanations. In places he even speaks of somehow “transcending” them. He is neither anti-science generally nor anti-evolutionism particularly. He simply wants each side to balance its universalizing discourses.

C. Zimmer, *Evolution: The Triumph of an Idea*, “Introduction” by S. J. Gould (New York: Harper/Collins, 2001). Chapter 9 examines evolutionism and medicine/psychiatry. E. Mayr, *What Evolution Is* (New York: Basic, 2001). This quintessential treatise on the status of evolutionism should be read after the following book, which focuses more on Darwin: E. Mayr, *One Long Argument: Charles Darwin and the Genesis of Modern Evolutionary Thought* (Cambridge, MA: Harvard University Press, 1991). Indeed, in Darwin's pre-Mendelian/DNA genetics and pre-Drosophila experimental period, and with a much smaller and more fragmented fossil record, by necessity Darwin's 1859 theory did partake of the features of a long but brilliant argument—based partly on what one might call “the consilience of inductions.” Even as evolutionism advanced, some philosophers pointed out that no science, even neo-Darwinism, escapes some metaphysical presuppositions and illogic. For example, it is often stressed that natural selection and adaptation are tautological or circular. In other words, they argue that what survives or is “naturally selected” is *ipso facto* what is most adaptive. But one should not look at logic—if, in fact, they are correct about the circularity of argument—totally isolated from today's abundant multidirectional lines of evidence powerfully supporting the theory. I have the largest problem with Darwin's emphasis on randomness—whether it is limited to organismic variations or also includes environmental ones. As a determinist (and we aren't operating at a quantum level, which I have clearly argued is causal), I do not understand this. Even mutations are necessitated by chromosomal and DNA events themselves internally *or externally* (i.e., radiation, or Thomas Hunt Morgan's experimental induction of fruit fly mutations).

20. O. Flanagan, *The Science of the Mind*, 2nd ed. (Cambridge, MA: MIT Press, 1991). Covers the major theorists and orientations in psychology, including Descartes, Freud, behaviorism, cognitive-developmental psychology, cognitive sciences and artificial intelligence, sociobiology, and the psychobiology of consciousness. All issues are very pertinent to general psychiatry. A good bibliography as well. R. E. Fancher, *Pioneers of Psychology* (New York: W. W. Norton, 1979). Major figures and movements from Descartes through Piaget and Skinner. L. Stevenson, *Seven Theories of Human Nature: Christianity, Freud, Lorenz, Marx, Sartre, Skinner, Plato* (Oxford: Oxford University Press, 1987). P. Carruthers and P. K. Smith, eds., *Theories of Theories of Mind* (Cambridge: Cambridge University Press, 1996). L. D. Smith, *Behaviorism and Logical Positivism: A Reassessment of Alliances* (Stanford, CA: Stanford

- University Press, 1986). Primarily a history and critique, without special pleading, of two movements which are no longer in the forefronts of their respective fields.
21. G. Izenberg, *The Existentialist Critique of Freud: The Crisis of Autonomy* (Princeton, NJ: Princeton University Press, 1976). An excellent companion to Spiegelberg's *Phenomenological Psychiatry*. Acquaints the reader with the major existentialist psychiatrists and psychologists and provides a thorough bibliography as well.
 22. E. Kurzweil, *The Freudians: A Comparative Perspective* (New Haven, CT: Yale University Press, 1989). See also P. Gay, *Freud: A Life for Our Time* (London: Norton, 1988). Avoids the many inaccuracies in Ernest Jones's three-volume *The Life and Work of Sigmund Freud* (though Jones's brilliantly interpretive work laid an indispensable foundation for subsequent Freud studies). In keeping with his customary historiographical rigor, Gay relies mostly on primary sources and unpublished archives. He brings a rare combination of historical and psychoanalytic training to his task. This should be the first "read" for any would-be student of Freud and the history of psychoanalysis. Some of Gay's work on related topics (e.g., *Freud for Historians*) was cited in Chapter 1. Yet a third indispensable, interpretative Freud biography is that by a psychoanalyst and Freud's personal internist, Max Schur: *Freud: Living and Dying* (New York: International Universities Press, 1972).
 23. T. Gelfand and J. Kerr, *Freud and the History of Psychoanalysis* (Hillsdale, NJ: Analytic Press, 1992). A variety of essays developed from lectures at the 1990 Hannah Series in the History of Science, University of Toronto. Several of our book's authors have chapters there.
 24. S. Turkle, *Psychoanalytic Politics: Jacques Lacan and Freud's French Revolution* (New York: Guilford, 1992). Useful introduction to Lacanian psychoanalysis. R. Bayer, *Homosexuality and American Psychiatry: The Politics of Diagnosis* (With a new Afterword on AIDS and Homosexuality) (Princeton, NJ: Princeton University Press, 1987). P. Cushman, *Constructing America: A Cultural History of Psychotherapy* (New York: Addison-Wesley, 1995). Interesting and provocative study.
 25. E. Kraepelin, *One Hundred Years of Psychiatry*, trans. W. Baskin (New York: Philosophical Library, 1962). Historiographically interesting to see the great diagnostic/"organic" psychiatrist's perspective on the history of his discipline.
 26. E. S. Valenstein, *Great and Desperate Cures: The Rise and Decline of Psychosurgery and Other Radical Treatments for Mental Illness* (New York: Basic, 1986). Important history and set of references not usually found elsewhere. P. McCandless, *Moonlight, Magnolias, and Madness: Insanity in South Carolina from the Colonial Period to the Progressive Era* (Chapel Hill: University of North Carolina Press, 1996). Draws on much unpublished archival material. A social, political-economic, institutional, and intellectual history of madness in the second-oldest Southern colony/state. A "micro-history" that complements the "macro-histories" by Grob and others.
 27. M. Summers, *The History of Witchcraft* (New York: University Books, 1956). A classic history, originally published in 1926, by the same Episcopal priest who in 1925 translated the *Malleus Maleficarum* into English. A true believer in witchcraft!
 28. C. S. North, J. E. M. Ryall, D. A. Ricci, and R. D. Wetzel, *Multiple Personalities, Multiple Disorders: Psychiatric Classification and Media Influence* (Oxford: Oxford University Press, 1993). A critical approach, with historical analysis of the upsurge (they call it an "epidemic") from the 1980s forward. They mention Janet's 1907 observation that most cases of "multiple personality disorder" or "MPD" were from America. They remark that by the 1970s, "MPD" was considered virtually extinct. Of the fourteen cases reported between 1944 and 1969; six were Cornelia Wilbur's, who long remained the doyenne of the diagnosis, the patients, and their "hypnoanalysts." They describe a highly political valence to the consolidation of the "MPD" movement.

Indeed, during my academic clinical career (1970 to 1995) in neuropsychiatry and psychoanalytic psychiatry at three medical centers (the University of South Carolina, Yale, and the Medical College of Georgia), I was profoundly struck (especially at this last, 1980s on) by the all-consuming passion (and mutually protective small cadres) of the "MPD" aficionados. Moreover, one of these, the director of an

inpatient unit, would be hypnotizing and audiovisually recording the two or three “MPD’s” he invariably had on his 30-bed female unit. It was clear that the ward staff were equally enthralled, such that the “MPD’s” got a huge proportion of the staff attention. Moreover, I have never heard of a “multiple” in the three sites mentioned, who was not discovered to be so *under hypnosis*. This is apparent in that three of the five psychiatric journals that devoted special issues to the topic from 1987 to 1989 were journals of clinical hypnosis. From 1983 to 1991, the cited authors tallied that the comprehensive bibliographies on “MPD” included 847 references, with the vast majority on American cases. “MPD” is much more rarely diagnosed in Britain and on the Continent. Moreover, the authors note; the number of “personalities” has been steadily increasing—300 reported in one study! F. R. Schreiber’s *Sybil* (Chicago: Henry Regnery, 1973) attracted far more public than psychiatric, attention. She was also the first patient with alleged child abuse. Since then such abusive histories have become a stock-in-trade in the “multiples” literature. Thigpen and Cleckley, authors of the famous 1957 *Three Faces of Eve* (New York: McGraw-Hill), published a highly skeptical 1984 article in the *Journal of Clinical and Experimental Hypnosis*. In the authors’ opinion—and in mine—the jury is still out. I would feel much more comfortable if nearly all these cases were not unearthed under hypnosis. It is well known that “histrionic” personalities are *highly suggestible*, as are the much more severely disturbed borderline personality disorders.

S. E. Braude, *First Person Plural: Multiple Personality and the Philosophy of Mind*, rev. ed. (London: Rowman and Littlefield, 1995). Dr. Braude, a professional philosopher, previously wrote two studies of parapsychology, *ESP and Psychoanalysis: A Philosophical Examination* (Philadelphia: Temple University Press, 1979) and *The Limits of Influence: Psychokinesis and the Philosophy of Science* (London: Routledge, 1987). He notes that the *Diagnostic and Statistical Manual of Mental Disorders, fourth edition*, deleted “MPD” from its diagnostic classificatory categories. He argues that most explanations of the condition fail to adequately distinguish it from related states—such as hypnotic-trance, dreaming, and “mediumship.” He maintains that even a deeply divided non-iatrogenic multiple has an underlying psychological unity. He updated his prior edition to include recent empirical and conceptual work—including the charge that clinicians hypnotically induce false memories in highly suggestible patients. He discusses the professional redefinition of “MPD” as “dissociative identity disorder.”

See J. L. Singer, ed., *Repression and Dissociation: Implications for Personality Theory, Psychopathology, and Health* (University of Chicago, 1990). Collection of different points of view.

I. Hacking, *Rewriting the Soul: Multiple Personality and the Sciences of Memory* (Princeton, NJ: Princeton University Press, 1995). He notes that twenty-five years ago, one could list by name the tiny number of “MPD’s” recorded in Western medicine, but that today hundreds of people in the United States receive hypnotic treatment for it. The “MPD” movement—clinicians, patients, and grassroots hangers-on—claim childhood sexual or physical abuse as its pan-etiology, even though it was never mentioned among clinicians prior to Schreiber’s (1973) blockbuster bestseller *Sybil*. Again, critics accuse “MPD” clinicians of hypnotically implanting false memories. Most diagnosed patients are women. Why is that? How does a therapist’s defining an illness affect those who allegedly have it? Hacking, a noted philosopher, uses the “MPD” epidemic and its links with contemporary concepts of child abuse to scrutinize today’s moral and political climate, especially our power struggles about memory. He then turns to a fascinating (much smaller series) of earlier, hyponotically diagnosed and treated “multiples” in late nineteenth century France. I must emphasize that Janet, of course, who opposed his “pathogenic” concept of “dissociation” to Freud’s “repression” (Freud abandoned hypnosis very early in his career), was then the key-player in “MPD.”

S. L. Gilman, H. King, R. Porter, G. S. Rousseau, and E. Showalter, *Hysteria Beyond Freud* (Berkeley: University of California Press, 1993). A splendid cast of writers with what, to many, will be novel and provocative points of view. They draw on the insights of cultural history and feminist theory. H. King argues that the alleged roots of hysteria in classical antiquity were actually the invention of medieval and Renaissance physicians. G. S. Rousseau describes how hysteria became a troubling reminder of the mysterious and melancholic side of human character. E. Showalter examines hysteria over the last two centuries as an expression of the way that gender relations have been absorbed in medical discourse: when women are the doctors and theorizers, rather than being themselves the patients, the narratives of female

hysteria change. R. Porter describes the subversive nature of hysteria, with its ambiguous status in both mind and body, for eighteenth century medicine, with its claims of scientific rigor. Finally, S. L. Gilman uses previously unpublished nineteenth century iconography of hysteria to show that the diagnosis was not simply to identify pathology; but also to stigmatize the different and “dangerous” outsider—the Jew, the black, the hermaphrodite, the foreigner, and the woman.

29. W. Alvarez, *Minds That Came Back* (Philadelphia: J.B. Lippincott, 1961). Essays on autobiographical accounts of mental illness and recovery over half a century. Alvarez was a noted psychosomaticist. Very-strong bibliographically.

J. M. MacGregor, *Discovering the Art of the Insane* (Princeton, NJ: Princeton University Press, 1989). In the latter nineteenth century, European psychiatrists became interested in the art of the mad. Collections of their work were formed in academic mental hospitals (some still extant). Some of these artists, such as Adolf Wöffli, became famous. Dubuffet’s 1945-founded *art brut* movement incorporated their work and greatly contributed to its notoriety. Excellent illustrations. S. Gilman, *Seeing the Insane: A Cultural History of Madness and Art in the Western World* (New York: Wiley, Brunner/Mazel, 1985). Top-notch photographs, illustrations, and text.

L. Gamwell and N. Tomes, *Madness in America: Cultural and Medical Perceptions of Mental Illness Before 1914* (Ithaca, NY: Cornell University Press, 1995). Similar to Gilman’s, but limits its focus to the United States.

30. J. Z. Sadler, *Values and Psychiatric Diagnosis* (Oxford: Oxford University Press, 2005). By a psychiatric physician and long-time leader in the Association for the Advancement of Philosophy and Psychiatry. Embraces historical, philosophical and ethical, clinical, and research/investigative dimensions. A must-read for American and international psychiatrists/mental-health professionals, as well as for historians and philosophers of psychiatry/clinical psychology, interested in the various approaches to, and manuals upon, psychiatric diagnosis. This book’s broadly based perspective examines a number of different vantage points on psychiatric nosology—including that of the Continental phenomenologists; and of course the editions of the American Psychiatric Association’s *Diagnostic and Statistical Manual of Mental Disorders (DSM)*, all the way through the revision of *DSM-IV* (i.e., *DSM-IV TR*, 2000), and its (2002) companion book, *American Psychiatric Association Practice Guidelines for the Treatment of Psychiatric Disorders* (Washington, DC: APA Press). This last, APA comprehensive manual, is very useful for clinicians and clinical researchers, and the pharmacotherapeutic twist is quite strong. See also the mind-body articles in this *History’s* “Epilogue”.

For historical and contemporary psychiatric practice and nosology; see Karl Jaspers, the great Heidelberg-trained clinician, philosopher of psychiatry, and noted Continental phenomenological philosopher. His perspectives are still quite pertinent to diagnosis and diagnostic/therapeutic systems in psychiatry. The aforementioned association of philosophically oriented psychiatrists and psychiatrically informed philosophers has taken Jaspers as their intellectual godfather. His eclectic, and not simply phenomenological, epistemological, methodological, and ethical orientation, to a variety of psychiatric issues and “schools” is carried by concern with psychopathology and its classificatory schemata—which, he believed, should incorporate a number of ways of knowing and testing: including humanistic and sociocultural science ones. Jaspers was concerned that psychiatry had not yet produced a science of general psychopathology, much less a philosophical foundation for it. He was also exercised by psychiatry’s failure to formulate an empirically based and scientific concept of “health” or “normality.” Both criticisms are just as apt today—despite the plethora of works purporting to define “mental health” (see E. R. Wallace, “The Meaning of Mental Health,” op. cit.). It is key to note that he viewed philosophy as primarily important in its epistemological role—including the evaluation of the internal coherence of general psychopathologies, the nature of their relationship to the relevant sciences and to general medicine (including the latter’s notions of general pathology, nosology, therapeutics, and “wellness”), and the recognition and avoidance of metaphysical lines of thought that might otherwise confuse the general psychopathologist’s clinical and

scientific endeavors. Jaspers was of course aware that “ontologies”—theories of being—and valuations were embedded in any nosological enterprise (general medical included). He simply felt that they should be as explicit and as scientifically/clinically based as possible. In some ways, there was a split between Jaspers’ non-skeptical view of scientific certitude in his book on psychopathology and the metaphysical/ontological, valuational, and strongly phenomenological lines of thought in his professional philosophizing. His *General Psychopathology* underwent many revisions and has been much more influential on European than on American psychiatrists. The present English-language edition (900 pages long) was translated largely from its German-language fourth edition (1942); though it also includes parts of the seventh edition (1959): K. Jaspers, *General Psychopathology*, trans. J. Hoenig and M. W. Hamilton (Chicago: University of Chicago Press, 1963) (Hoenig is an M.D. and D.P.M., and Hamilton is a philosopher).

31. E. Kurtz, *Not-God: A History of Alcoholics Anonymous* (New York: Hazelden, 1979). Very readable intellectual and social history of the grandfather of the 12-step movements.
32. P. E. Stepansky, *In Freud’s Shadow: Adler in Context* (Hillsdale, NJ: Analytic Press, 1983).
33. G. F. Drinks, *The Birth of Neurosis: Myth, Malady, and the Victorians* (New York: Simon and Schuster, 1984).
34. C. Colbert, *A Measure of Perfection: Phrenology and the Fine Arts in America* (Chapel Hill: Univ. of North Carolina Press, 1997).

Section Two

Periods

Proto-Psychiatry

Chapter 3

Mind and Madness in Classical Antiquity

Bennett Simon

Introduction

The history of psychiatry in Greek and Roman antiquity is the frame story for the history of psychiatry in the Western world as well as the history of that topic in a particular era and in particular places. That is, it is not only one current in the stream that becomes modern psychiatry, but it is also the *caput Nili*, “the head of the Nile.” The terminology, categories, and core ways of thinking about mind and its derangements that evolved in ancient Greece have left an indelible stamp on all subsequent thinking about these topics. The distinction between rational and irrational, the notion of an internal mental life, and the notion of psychic conflict and that psychic conflicts can be categorized, classified, studied, and systematically influenced are all legacies from classical Greece. The notion of the body as a system, as a balance, as a mechanism, as a hierarchy of organs, or as a parliament of organs—these underlie the medical models that arose from the fifth century B.C.E. onwards. Furthermore, the Greeks developed the idea that it is possible to understand how balances and imbalances among organs and body constituents influence mind and madness, how one central organ (at first believed to be the heart, but later the brain) is the organ of mental operations, and that that organ mediates influences from the outside world and from the internal world of the body. The articulation of a concept of body and a concept of mind and the realization that if the person is thus divided there is a need to find a way of conceptualizing the unity are Greek “discoveries” or presuppositions that have left a permanent mark on our thinking about thinking.¹

It is also apparent that much of the vocabulary of Western psychiatry is taken literally from Greek and Roman sources, and that new coinages (e.g., “psychotherapy”) drew heavily upon Greek and Roman words, often subtly importing the conceptual complexity of the ancient world into the modern way of thinking. Mania, delirium, libido, melancholy, emotion, hysteria, passion, paranoia, and hypochondriasis are but some of the many terms taken more or less literally from the ancient languages and categories of thinking.

In previous work,² I have applied a particular schema to the history of psychiatry in classical Greek antiquity, a schema that is in part shaped organically by the historical material and in part by conceptual models within modern psychiatry. The schema posits three models of mind and mental illness: (1) poetic models, principally in Homer and the Greek tragedies; (2) philosophical models, principally those of Plato; and (3) medical models.

The *poetic model* presumes a relatively open boundary or “field of forces” as the main feature of the mind of the person. That is, the heroes and protagonists of epics and, to a lesser degree, of tragedies are represented as having unusual mental states inserted into them or inflicted upon them by an outside agency, typically a divinity. In the epics, many mental states and thoughts are depicted as thus induced by a divinity, while in the tragic dramas, it is mostly extreme states, such as madness, that are so induced. In Homer’s *Odyssey*, (23:5 ff)

Penelope, hearing her old nurse Eurykleia announce to her that Odysseus has returned and has slain the suitors, is incredulous, and announces that surely the gods have driven her mad, that they have wrecked her mind, which is ordinarily quite sane. In Homer's *Iliad*, Agamemnon explains and exculpates his own arbitrary and tyrannical behavior against Achilles—behavior that led to the “wrath of Achilles,” by invoking *Até*, a deity of infatuation and madness, and Achilles accepts the explanation. In Greek tragedy, the gods or demons drive heroes mad, sometimes with some clear motive of divine revenge (e.g. Ajax in Sophocles; Orestes, in Aeschylus and Euripides; Pentheus and his mother both driven mad by a vengeful Dionysus, in Euripides' *The Bacchae*) but sometimes more capriciously (e.g., Heracles, in Euripides, *The Madness of Heracles*). Healing comes from outside interventions, either by a divinity or another human being, and the healing or restoration is described in the language of one agency or person influencing the afflicted person.

This model was more or less rejected, or certainly downgraded, both by medicine and philosophy as primitive or superstitious, but it never entirely disappeared throughout antiquity. Some of the tragic heroes who went mad (e.g., Ajax, Heracles) became “figures” or exemplars of madness even in medical literature down through the Renaissance. In modern times, interpersonal and social/psychiatric models of mental illness have used the model of mind as existing within a field of forces as a major premise. While there is no actual historical continuity between the ancient models and the contemporary ones, there are certain structural similarities that I have detailed.

The *philosophical model*, principally that found in Plato, emphasizes internally generated mental states, an internal and somewhat autonomous mind (as expressed mainly in the language of *psuché*, psyche.) That mind, or psyche, is divided at times against itself and is often in conflict is epitomized in one of Plato's versions of the psyche: a tripartite hierarchical division of the psyche into the rational, the spirited-affective, and the appetitive. Madness, in this scheme, arises from a dominance of the lower portions over the highest, the rational. Healing consists in redressing the imbalance, principally by the dialectical methods of philosophy, which can be applied either by the person himself or herself or in dialogue with another person. But for Plato, there is in some dialogues, a divine element involved in human disturbance, most notably in his *Phaedrus*, where, “the greatest of our blessings come from madness providing that it is divinely granted” (244a-245c) (translation my own).

This model was to prove extremely important, and all subsequent philosophical (and psychological) models in antiquity, starting with Aristotle, either took this model as a starting point or had to consciously devise new models as refinements or opponents of the Platonic model.³ It has remained as one important ingredient in psychological and psychiatric thinking over several millennia, and has thereby influenced all conflict theories of mental illness, including Freud's.

The *medical model*, as exemplified in the Hippocratic corpus, premises mental activity as an aspect of organ activity (brain or heart). “Madness comes from moisture,” moisture affecting the brain, is the clarion call of the author of the Hippocratic treatise *On the Sacred Disease*, and epileptic seizures originate with disturbances in the brain, not a divinely instigated attack on the person. Mental activity is normal or abnormal in relation to the degree of balance and harmony achieved among the different organs or the different humoral components of the body. Melancholia, much of what we would call delirious states, and hysteria are the disorders par excellence of this model.⁴ Treatment consists in correcting the imbalances by changes in diet and the regimen of life and the use of medications.

This model eschews magic and superstition, though it never entirely removes a place for the divine either in causation or cure of mental disturbance. It is the most durable and most continuous of the three models defined, and it can be traced from classical antiquity through Roman, Byzantine, medieval, and Renaissance thinking about madness, down to the twentieth century.

While the schema of these three models is useful, it does have several limitations. Clearly, there is the danger of oversimplification, especially when the models are influenced by contemporary psychiatric models. Then there is the difficulty of assessing the relative importance of each of these models at different points in antiquity and for different parts of the population. Furthermore, for completeness, a fourth model, that of folk-healing and folk belief, has to be added. One aim of this chapter is to outline some of the main features and issues in popular belief and popular healing, and thereby to set the stage for a later attempt at fuller integration of this model with the other three models.

Another aspect of my earlier work is the attempt to locate certain aspects of the history of psychiatry in antiquity in particular historical and social contexts, especially in regard to the concept of hysteria and the nature of male–female relations within fifth century Athenian society.⁵ Rosen⁶ and Ducey and Simon⁷ hypothesized psychosocial and historical correlates of the contents of psychosis, especially megalomania, in Hellenistic and Roman antiquity. Dodds’ speculations on the relationship between the cultural anxieties of classical Greece⁸ and of later antiquity⁹ and the representation of various normal and unusual mental states are still the most impressive in the literature on ancient psychiatry. Unfortunately, as important and as problematic as are these kinds of correlations, it is not possible here to deal adequately with the issues entailed. As later chapters in this volume detail, even for the nineteenth and twentieth centuries, for which there is abundant historical material and data, studies of the social and cultural context of mental illness are still problematic. For antiquity, at best we can hope to delineate something of the “atmosphere” of a particular period in a particular place and imaginatively connect that with the meager data we have on the form, content, and distribution of unusual mental states or mental illnesses.

Let me then define the scope of this chapter. It is not a systematic overview of the field of Greek and Roman “psychiatry,” but rather it is a discussion of selected topics. The reader is referred to a combination of other works to build her or his own systematic survey, for there is no one work that adequately answers that need. Nor, in my opinion, can such a work be written at this point. The topics are selected in part to illustrate what kinds of further research and enlargement of areas relevant to our topic are needed to round out the picture of the history of “psychiatry” in antiquity. The discussion of Roman topics is quite limited, partly because of my limitations, and partly because the Roman material is more scattered and less accessible than the Greek material. However, by the time of late antiquity, distinctions between Greek and Roman in the areas of medicine and philosophy become quite blurred and are rather arbitrary.

The topics chosen reflect less a modern theoretical division of the field (“etic”), even eschewing my own schema of “models of mind and mental illness,” than a tilt towards the “emic,” the field as seen and experienced by those in the midst of it. This chapter, then, while not totally free of suppositions and positions derived from the contemporary psychiatric scene (for that is neither possible nor entirely desirable), is written in order to broaden the base of relevant data so as to arrive eventually at a useful integration of the “etic” and “emic” perspectives.

The topics are as follows:

1. The question of what is entailed in writing a history of psychiatry in Greek and Roman antiquity.
2. The role of “ancestors” in the history of psychiatry—how “founding fathers” and illustrious forbears are created by later generations to bolster their own doctrines and methods.
3. The humoral theories of antiquity—the interface of science and fantasy/folklore.
4. Demonic and divine possession; exorcism and cursing.
5. The evil-eye as a source of emotional distress and madness.
6. Hero worship and hero shrines as healing shrines; the cult of Asklepios as one of many hero cults.
7. Mystical experiences and the cultivation of alternate states of consciousness, especially in later antiquity.
8. The beginnings of an attempt at systematic treatment for emotional distress in the philosophical schools of late antiquity; for example, was there a Stoic psychotherapy?
9. Cross-sectional “hypothetical” historical situational studies: a case example of a person in distress and the means he or she would seek for relief in late fifth to early fourth century B.C.E. Athens, and another set in second century C.E. Alexandria or Asia Minor.

What Is Entailed in Writing a History of Psychiatry in Greek and Roman Antiquity?

“The history of psychiatry in Greek and Roman antiquity” becomes a *topic* first and foremost at the beginnings of modern psychiatry, namely in the nineteenth century. Until that time, the teachings, doctrines, dogmas, and theories of antiquity were so much a part of living tradition and practice that their history was

not indeed a proper subject.¹⁰ Just as “English” did not become an academic subject until the time when all of English literature could not be taken for granted as something that every educated man or woman would have mastered (i.e., the end of the nineteenth century),¹¹ so it was with the history of psychiatry in antiquity. Indeed, the main use to which the history was put (and still is, in more subtle forms, however) is to create an illustrious and interesting past for one or another feature of modern psychiatry, sometimes by way of showing how far we have come from a primitive and naive view, and sometimes to show that our seemingly modern concept has indeed the authority and dignity of millennia behind it.

By Greek and Roman antiquity, I designate the period roughly from the late second millennium B.C.E. to late sixth century C.E. These limits designate respectively the period of the ascendancy of Mycenaean Greek civilization and the fall of the Roman Empire in the West. The myths of the madness of the daughters of King Proteus and their cure by the seer Melampus may refer back to some Mycenaean cult or ritual, but otherwise the earliest references to something like madness, possession, or losing one’s wits are in the Homeric epics, roughly late eighth century B.C.E. The latest material in our survey comes from certain aspects of Stoic and of Neo-Platonic philosophy, which bring us to the third century C.E.. Late medical writers, such as Alexander of Tralles and Paul of Aegina, would bring us into the early Byzantine world. The bulk of the material presented and discussed in this chapter, however, falls between the fifth century B.C.E. and the second century C.E.

The geographical boundaries of the topic change with the period under discussion. The earlier centuries cover primarily mainland Greece and the islands and the Greek settlements of Asia Minor. As the centuries progress, especially as we enter the Hellenistic period, the boundaries enlarge towards Rome and her world to the west and to Egypt, Israel, Syria, Persia, southern Russia, and India to the east. Even for the earlier centuries, a fuller understanding of the Greek material would entail an examination of the interactions among the Greek world, Egypt, Babylonian-Sumerian civilization, and the Indo-European heritage of Greek culture.

If the temporal and geographical boundaries present serious problems of choice, the problems of content pose monumental issues that quickly go to the heart of the question of what is “history of psychiatry?” In the ancient world, there was no profession of psychiatry, no psychiatric institutions, no formal branch of knowledge devoted primarily to “mental illness,” and no medical texts dealing primarily with mental disturbance. At the same time, even taking a restrictive definition of mental illness—that is, florid psychosis—there is abundant evidence of the existence of such problems, though it is scattered through medical, social, literary, artistic (Greek vases), and epigraphical sources. Such evidence will either be discussed or alluded to and bibliographical amplification suggested. Evidence that is presumed to exist but has not been collected or sifted in any readily accessible way will be indicated as areas that deserve further work.

Does material about the functioning of “normal” mind belong in this chapter? Theories of mind in antiquity were primarily under the designation of philosophy (to a lesser degree under the rubric of medicine) not psychology (no such area was delineated), and where does ancient philosophy belong in the history of psychiatry? In this chapter, some topics from the area of philosophy will be discussed. This is necessary because as psychiatry evolved it was intimately associated with accounts of the workings of the normal mind as the background for discussing deranged thinking. Furthermore, there was a certain give and take between the realms of philosophy and of medicine, and that “trade” is itself a noteworthy phenomenon. When it comes to the realm of treatment, the appropriation by philosophy of the medical notion of sickness, treatment, and health becomes more prominent. There are hints in earlier Greek philosophy, especially Plato, of philosophy as a treatment for the maladies of the psyche that Plato defines as most damaging to individuals and society (ignorance, excessive domination of the appetites over the reasoning parts of the soul, and others). In later Graeco-Roman philosophy, with both the Stoics and Epicureans, we find fuller elaboration of the idea that philosophy properly used is indeed the treatment of choice for the madneses and sadnesses attendant upon living in the world.¹²

Greek and Roman literature, whether epic, tragic, comic, poetic, or historical, is replete with references to madness and madmen, often used metaphorically to illustrate some other point. But even such allusive

and indirect discussions contain much of value for illuminating the shifting and variable popular conceptions of madness. We find a Greek comedy of the fourth century B.C.E. in which one character calls the other mad and tells him to go to Anticyra (the main source of hellebore in antiquity), where he can get treated with hellebore—the great emetic and purgative—for his melancholic condition. The other character replies that he does not have enough “life insurance” to risk such a medical treatment, and we get a glimpse of both an established method of treatment and a popular grain of skepticism about the alleged medical wisdom and expertise.¹³

Greek tragedy has provided several awesome portraits of madness, its generation in the dramatic setting, and its resolution, such as the madneses of Ajax and Heracles and the madness induced by the god Dionysus. These tell us that such psychoses must have been recognizable to the audience and inform us of a depth of passion, comprehension, and compassion that the playwright could convey to that audience. Probably some ten or fifteen percent of the tragedies performed had madness as a significant feature. Nevertheless, the embeddedness of madness in a particular literary context repeatedly poses significant problems of interpretation and of the reliability of extrapolating from literature to life.

Ancient historical writings typically characterize, as we do, acts of poor judgment or grandiose undertakings as a form of insanity. Occasionally the question is raised as to whether a particular leader or historical personage is not merely metaphorically insane to attempt some feat of daring but may be “clinically” insane as well, such as Herodotus’ account of Cambyses’ vicious behavior.¹⁴ Madness as a derogatory term for one’s enemies is recurrent. The Jews changed the epithet of Antiochus III, the Hellenistic Syrian king whose attempt to stop the Jewish religious practices instigated the Maccabean revolt, from *epiphanes*, “manifestly great,” to *epimanes*, “totally insane.” Late in our period, the emperor Constantine proclaimed that the Jews, after their murder of Christ, are totally blind in their soul, have no right opinions, “went out of their minds and are led, not by reason, but by uncontrolled passion.”¹⁵

Turning to medical sources, where we should expect to most easily find our psychiatric ancestors and progenitors, professional diagnosticians and healers, we face an extraordinarily confusing array of material. Apart from substantial problems of authenticity, authorship, and dates of important source material, we must decipher a dense and difficult terminology and a minefield of polemic within ancient medicine that seemed to lead to continuous rewriting of medical history. Observations tend to be embedded in such a dense matrix of supposition and theory that it often takes an act of faith to extract the sense or factual core of an observation. Presuppositionless interpretation of ancient medical texts has proven nearly impossible from antiquity to the present. Again, even the acknowledgment of a separate category of “psychiatric illness” is at best late in our period, and not a very stable category at that.

Furthermore, though antiquity recognized categories such as “science” or “medicine” as opposed to magic and superstition, both the content and suppositions of such categories may be so vastly different from our own that only with the greatest difficulty can we undertake an unprejudiced examination of what is “scientific” in ancient medicine. A prominent historian of ancient science, G. E. R. Lloyd, wrote two books whose very titles indicate the problematic nature of defining what is “science” or scientific in antiquity, namely, *Magic, Reason and Experience: Studies in the Origins and Development of Greek Science*¹⁶ and *Science, Folklore and Ideology: Studies in the Life Sciences in Ancient Greece*.¹⁷

When we come to the realm of social history, “folk healing,” or popular notions of the causation and treatment of illness, physical or mental, we encounter again very substantial problems. Apart from the sheer enormity of the material to be sifted—archaeological, epigraphical, the meandering encyclopedia and compendia of late antiquity—we again encounter serious questions about the boundaries of our inquiry: Does all of religious experience and all religious phenomena pertain to the history of psychiatry? Yet, it is in this realm that we probably encounter the most persistent and durable of ideas, beliefs, and practices in the area of attempts at healing. Two brief examples:

1. The assessment of certain bizarre states of mental distraction and motor movement (or motor paralysis) as indicating possession by a demon and the modes of treatment of such conditions remained astonishingly similar in Roman Egypt and Roman Judaea (cf. New Testament scenes of Christ and the demoniacs),

medieval and early modern Greece, much of Western Christian Europe, and the Middle East, and remains in the hut of a Moslem healer in India today.¹⁸ Evidence of such notions of possession go back probably to third millennium B.C.E. Sumerian civilization.

2. Incubation in a sacred place and the interpretation of the accompanying dreams or visions as a method of healing adhered to certain tried and true localities, and many famous healing shrines of the middle ages and even of modern times have an astonishing continuity with the healing tombs of heroes of Greek antiquity.

Another problem in approaching this vast amorphous realm of healing gods, rites, herbs, amulets, magic rituals, curses, astrological practice, and prayers is whether to focus on the impressive similarities that stretch over time and space in our period or on particular historical and ethnic or religious differences. Roman, Christian, Jewish, and later Moslem cultures each developed its characteristic style and stamp; and these developments in turn all have intricate histories of their own.¹⁹

The last main consideration in this discussion of the scope of the history of psychiatry in classical antiquity concerns the fact that in the actual life situation of people struggling with emotional distress and/or diagnosable mental illness, people would (as they still do) reach for any number of possible avenues of relief for their distress. To speak of what was *the* treatment for mental illness at a particular time or place misses the point that, as far as we can tell, throughout antiquity there were a multiplicity of treatments available; if one did not get better with method A, one tried method B and all others humanly possible. Or, some tried several at once, and not necessarily seriatim. The historical account of this interplay of methods of treatment, the pathways and methods by which sufferers and their families or communities choose treatments, is extraordinarily difficult but extraordinarily important because it comes so close to being one of the perennial features of the history and practice of psychiatry. Contemporary anthropologists and students of health care systems have by now done several detailed studies of these processes in places such as the Mexican Highlands and Taiwan,²⁰ and such a model is useful in integrating sometimes confusing and contradictory historical material.

The history of psychiatry, therefore, must include the study of the interplay in any given age between what is considered “official” or “scientific” or “medical” knowledge (including the methods of study that are deemed appropriate to those forms of knowledge) and other forms of knowledge that those holding the keys to “scientific” knowledge consider “superstition” or “folk medicine.” These other forms of knowledge include old wives’ tales or popular conceptions and misconceptions about how mind, body, and their diseases work. The term “old wives’ tales” also points to issues about the role of women in the history of mental healing and mental illness, a topic that is scarcely beginning to be discussed in any systematic way.²¹

The ways in which these categories may get sharply distinguished, creatively merged, or retrogressively confused constitute as much a part of the field of psychiatry and, accordingly, of its history as do the particulars of the theories and treatments of mental illness. While such a study is an important part of the history of any aspect of science or technology, it is particularly vital in the study of the history of attempts to understand human behavior and its disturbances and aberrations. For, in that realm, what people believe to be true has a powerful causative effect on what comes out to be true. Sometimes important truths may get submerged in the struggle as one “side” or another of the “science” versus “superstition” category is victorious. Briefly, one such instance can be seen in the history, down to the sixteenth and seventeenth centuries, of the descriptions of hallucinations and delusions of madmen. Classical knowledge, one variety of official or “scientific” knowledge, had codified and bequeathed certain fixed patterns of how to be “mad”—hearing the sounds of animals, the music of flutes or cymbals, imagining that you are Atlas carrying the world on your shoulders, or that your head is a giant piece of pottery. These patterns were discovered and described in examining particular patients. It is likely that certain patients were “trained” to report only such experiences in their derangement as would “make sense,” and that simultaneously observers could only assimilate and report that which they already knew should be there.

In sum, the study of *how* knowledge about normal and abnormal human behavior is codified, classified, stratified and *how the various categories of such knowledge compete and cooperate* is central to the history of psychiatry.

The Role of “Ancestors” in the History and Historiography of Ancient Psychiatry

In the history of psychiatry as it is most commonly written by psychiatric practitioners (and for other psychiatric practitioners), there is a tendency to try to locate important figures in the past who seem to be “ancestors” of the modern psychiatrist. Pinel, for example, is “the father of modern asylum psychiatry” and Benjamin Rush is “the father of American psychiatry.” When the history of psychiatry gets researched and written by people primarily trained as historians, one sees less of this presentistic tendency. “Fatherhood” becomes more complex and problematic, and “trends,” “forces,” “currents” and the like tend to become more central in these accounts. It is important to realize that this habit of clinicians writing history actually reveals something important about the current state of the field and is part of its ancient history. That is, the creation of ancestors for a medical enterprise goes back to antiquity. Hippocrates as the “father of medicine” was a creation of physicians writing some three to five centuries after he lived, practiced, and wrote whatever few works of his own that we may actually have. As the work of Wesley Smith²² has shown, Galen, in the second century C.E., in particular was responsible for elevating Hippocrates to this status and thereby canonizing him. Galen had his own reasons in terms of needing to justify and elevate his own theories, and there is also the distinct possibility that Galen created a particular Hippocrates out of several possible (and somewhat contradictory) available notions of Hippocratic medicine.

Any reader of a text on the history of psychiatry, or of any clinical treatise in psychiatry that begins with an historical overview of the subject matter, must read carefully to see who are the progenitors of the author and how the author may wittingly or unwittingly have distorted or selected the works of those progenitors to coincide more closely with his or her own. Pinel, for example, begins one of his treatises on madness with an appeal to the spirit of Hippocrates (and Aretaeus too) as a scientific clinician, a shrewd observer of the patient, and a doctor unburdened by too many complex and fantastic theoretical suppositions. This is hardly an incontrovertible view of Hippocrates, and within a few decades French and English psychiatry would declare their independence of the stultifying weight of ancient medical tradition, with its hypertheoretical and nonobservational approach. Zilboorg’s²³ discussion of Hippocrates, while not totally incorrect, is certainly skewed towards a particular Hippocrates as ancestor of the modern sophisticated practitioner: “If Hippocrates strove toward the liberation of psychiatry from mystical prejudice and toward a unified biological point of view on mental diseases, he did so without many established scientific facts at his disposal.”

These observations contain a caveat on the historiography of ancient psychiatry in terms of the yearning of psychiatrists in every age to create psychiatrists of yore in their own contemporary image. But it also suggests that the quest for idealized figures and ideals of practice and of inquiry is an important part of the history that must not be neglected.

Ancient Humoral Theory: Black Bile and Other Bad Humors

Serious and life-threatening diseases, as well as abnormal mental states, were frequently ascribed to the actions of black bile, and Galen considered that humor the cause of the most serious illnesses. Our term “melancholia” is a precipitate of several millennia of belief in the dangerous results of too much black bile in the body. In principle, each of the humors could produce some variety of mental and emotional disturbance, and several of the humors became associated with normal character types, or predispositions. However, black bile remained the leading “culprit” as cause and predisposer to mental disturbance even in the late Middle Ages, when it was said that “*Gaudet diabolus in humore melancholice*”—the devil rejoices in the humor of black bile.

There are several facets, or rather faces, to the humoral theories of illness, physical and psychic, that developed in antiquity. There may well be a common Indo-European background of beliefs in the role of different balances and imbalances of bodily substances as related to illness. It is also possible that Indian beliefs influenced Greek beliefs, and that, in Hellenistic and Roman times, Greek beliefs and “systems”

also filtered back in to Indian medical beliefs and practices. A theory, *qua* medical explanatory model, more or less systematic, that the balance or imbalance of humors explains illness arose in the fifth century B.C.E. There are clear precursors of humoral theory in what we might call “beliefs” about fundamental substances in the body, beliefs that seem to lie more in the realm of folklore and fantasy than of medicine. Black substances and bile as concomitants or causes of disturbed thinking and feeling or of special states of anger and outrage are to be found in Homer. The story of the transition or blurred boundaries between “magical beliefs” and “scientific beliefs” (or rather, systematic beliefs) has been told by a number of medical historians.²⁴ What is important in this story is that the boundaries among scientific hypotheses, alleged scientific facts, and folk beliefs are never entirely clear. *Fantasies* about the destructiveness and malevolence of “blackness” seem to flit in and out of seemingly scientific discussions of humoral etiology of illness down through the Middle Ages and the Renaissance. Other boundary problems in humoral theories are that the list and number of relevant humors are not entirely stable in antiquity, and even when frozen in number as “the four humors” there was some variability in which substances could represent humors. The humors also seem to exist, or coexist, in some kind of flow or interchange with forces and substances outside of the body. It is not only that various foods seem to contain more of one humoral substance than another (or can be more easily converted to a particular humor), but that climate, geography, water, winds, and seasons are somehow intimately related to the patterns of actions of the humors. The particulars can be found in various ancient medical texts, oriented as they were to how the patient can alter his or her lifestyle to prevent or fight off deleterious effects of one or another humor, but the details vary considerably and can hardly be considered as one “system” or a fixed theory. There seems to be some overlap in this respect too with Ayurvedic medical thought and practice, and, as suggested earlier, the questions about relationships between Greek and Ayurvedic medicine are complex.

The humoral system thus functioned not only as a medical theory, but also as a bridge between “popular” or fantasy-fed beliefs about the body, the soul, and the environment. The relationship between the devil and black bile mentioned previously may be indicative of the way that humors were in part transformations of beliefs in possession by external agents or demons. The use of cathartics and emetics such as hellebore in the treatment of madness allegedly caused by black bile may well have overlapped with the same fantasies associated with the idea of demonic possession and exorcism.

Another “bridging” function served by humoral theory was to link mind and body in a variety of ways. It is important to keep in mind that for both the average sick person and for the physician *qua* practitioner, the “mind-body” question was not a question. For the patient, the link between body and mind was a cultural given and an experiential unity. Our modern expression “it’s my nerves” is probably quite similar to what a fifth century B.C.E. or second century C.E. citizen of the Greek-speaking world would have thought about some emotional upset—namely, an explanation couched in some somatic expression. The humoral theory was a perfectly “natural” one for expressing distress in a unified mind-body language. For the physician *qua* practitioner (in contrast to a minority of physicians who had a serious philosophical bent), a perfectly simple model of mental or emotional distress as a concomitant or epiphenomenon of physical illness sufficed. A sickness marked by a black mood, with suicidal propensities and some persecutory ideas, was a reflection of the predominance of black bile, just as certain kinds of sores, tumors and gastrointestinal disturbances might be so caused. Indeed, the tantalizing clinical vignettes we have from antiquity suggest that a good deal of what the doctors saw of mental disturbance was closely associated with febrile and delirious states of one sort or another.

For the philosophers, starting with Plato and Aristotle, and for those physicians with a theoretical-philosophical commitment such as Galen there was a problem in “reuniting” mind and body in some meaningful way, that is, reuniting the mind and body that philosophy had divided. The humoral theory was one such effort at constructing a model of how mind and body might be influencing each other. In particular, for Aristotle to some degree and more so for the philosophers of later antiquity, the “mind” that involved character, moral decision making, and many of those passions that make us so distinctively human was much more problematically linked with the body, and there were a variety of efforts to deal with the problem of separation of the two “entities,” mind and body.

The *evidential* status of the humoral theory, or how the ancients saw the evidence for the humoral theory, remains an unresolved question in the history of medicine. I am impressed with how little concern there seemed to have been for actually seeing or demonstrating the presence of black bile in those conditions allegedly caused by its actions. For one thing, it is not exactly clear what “black bile” is, in contrast to blood, phlegm, and yellow bile. Insofar as it is connected with actual substances, it is probably some agglomerate of coffee-ground vomitus, tarry stools, brownish bile that might be vomited up in various gastrointestinal disorders, and darkish urines that could appear in a variety of disorders, probably some of them malarial. Perhaps dark menstrual blood or heavily clotted blood associated with miscarriages contributed to the sense of dangerous dark substances, and some suggestion of such a connection may be latent in the imagery of the Furies and how they drive Orestes mad in Aeschylus’ *Eumenides*. The passages in ancient literature that evince an interest in a tangible, tastable, odiferous substance called black bile are relatively few. It was a “given” that needed no empirical verification, only occasional confirmation by way of seeing some black substance associated with a serious disease.

From the point of view of some physicians (e.g., Hippocrates in *The Sacred Disease*), the realm of the humors and interrelated substances and qualities (e.g., wetness, dryness) was to be carefully delineated from the realms of spirits and possessing demons. This line of thinking did not eliminate the gods or the divine, but it did attack what the physicians saw as the capricious and totally ad hoc nature of explanations of illness framed in the language of attack and possession by anthropomorphic agents. The humoral theory defined a professional arena in which the physician, together with the patient and “nature,” could combat illness. Other “professionals” and “paraprofessionals” were thereby excluded from the ranks of legitimate practitioners. From the side of the patient, the humoral theory provided a guilt and shame-free explanation of his or her illness, a rationale for treatment, and a theory of the “regimen,” the proper balance of eating, exercising, purging, bathing, and the like, that the patient could follow and thereby have a sense of some mastery over his or her body and its ills.

Demonic Possession

It is important to keep in mind that throughout the centuries of antiquity, there was a more or less unspoken assumption that the universe is peopled with a great variety of agencies, personages, deities, and deity-like forces, some helpful, some malevolent, some both, and these agents and agencies played an important part in human welfare, illness, and also in severe emotional distress. *Daimones*, guardian spirits, *Keres*, *Furies*, and *Larvae* are among the many names for particular agents.²⁵ The details of this assumption and the degree to which it was articulated certainly varied in the thirteen or fourteen centuries we are considering. During the early Christian centuries the conflict and contrast between Graeco-Roman (and other pagan) entities and more specifically Christian entities (e.g., Judaeo-Christian guardian angels, souls of deceased saints, Satan) highlighted this view of the world.²⁶ The assumption was “popular” but not “vulgar” or only prevalent among the uneducated, but it pervaded ancient cults, philosophies, religions, and healing practices.

Concomitant with the multiplicity of the external agencies, there was another assumption, less clearly articulated, of the divisibility or “fractionability” of the person or the psyche and of the ability of the psyche to leave the person and migrate.²⁷ These two interwoven views constitute the framework for the deeply held belief that illnesses, whether benign or grave, including unusual or disturbed mental and emotional states, were caused by a demon or possessing spirit. Healers could exorcise the invading spirit and restore the person to health.

It was suggested previously that the medical-humoral views bore some relationship to the “possession” views of illness, and we can see an example of this overlap in a Roman comedy by Plautus, *Captivi* (third to second century B.C.E.).²⁸ There a “pseudo-madman” is described as raving and violent, and

Do you see his whole body splotted with those ghastly yellow blotches? Black bile has the man in its grasp Now he’s speaking deliriously, the spirits [*larvae*] are driving the poor man.

Madness as deriving from a specific attack upon a person by a specific Olympian deity, often out of some motive of revenge but sometimes capriciously, is portrayed most vividly in Greek tragedy, a topic treated in searching detail in R. Padel's *Whom Gods Destroy: Elements of Greek and Tragic Madness*.²⁹ In these dramatic representations we do not see any attempt at exorcism applied to such suprahuman, immortal, and far-reaching deities, but rather only hopes or prayers that the god may relent, or the realization that only when the worst has happened has the god then relented, or at least stopped. The Eumenides or avenging furies in Aeschylus' *The Oresteia* who drive Orestes mad need to be placated but not exorcised. Perhaps some ceremonies of exorcism or, more probably, ceremonies of ritual cleansing of a murderer underlay the dramatic trial and reconciliation scene in *The Eumenides*. But undoubtedly far more common was possession by lesser deities, such as are alluded to in Euripides' *Hippolytus*. Phaedra, consumed by a secret illicit passion for her stepson Hippolytus, is gravely ill. The chorus of women tries to figure out the nature of her disturbance:

Is it Pan's frenzy that possesses you
or is Hecate's madness upon you, maid?
Can it be the holy Corybantes
or the mighty Mother who rules the mountains:
Are you wasted in suffering thus,
for a sin against Dictynna, Queen of the Hunters?
Are you perhaps unhallowed, having offered
no sacrifice to her from taken victims?³⁰

(They also add another supposition, which is a gloss on the previous ones, namely that some other woman's love has beguiled her husband.)

We have evidence that for some of these diagnosed forms of possession or "seizure," there were specific rituals, including (for the Corybantic possession), group dance and ecstatic experiences aimed at healing the afflicted.³¹ We also know, for example, from the opening chapters of the Hippocratic treatise *The Sacred Disease* that visible seizures were often attributed to the action of one or another deity, sometimes the specifics of the seizure indicating a specific divine attribution ("if he foam at the mouth and kick, Ares is to blame"³²).

Possession by a demonic being, with a ritual of contending with and driving out that demon, seems to come into prominence more in Hellenistic times and cuts across national and religious boundaries. The most famous ancient examples are the accounts in the Gospels of Jesus driving forth demons, especially the accounts in Mark and Luke of the man possessed by the demon, "my name is legion, for I am many."³³ These accounts imply that possession as an explanation of illness was quite commonplace, and that Jesus was not unique in being able to heal by exorcism, but rather that he was especially good at it. Thus, at first the disciples were called to heal, and when they could not prevail, then Jesus tried and succeeded.

In the ancient world at large, there is evidence of beliefs in destructive demonic possession going back to Sumerian and early Babylonian civilization, and many authors have documented the common body of beliefs.³⁴ Prayers and incantations of exorcism are also very durable, and documents found in Hellenistic Egypt³⁵ bear a remarkable similarity to incantations in rural Greece of the nineteenth and twentieth century³⁶ and many parts of Eastern Europe. Some Orthodox Jewish prayer books in use down to a few decades ago contained (in small print) charms and incantations in the forms of prayers containing formulae for appeal to various angels to drive away evil spirits. A typical ancient charm of exorcism runs as follows:

For those possessed by daemons a well-tested charm Take oil from unripe olives together with plant mastigia and lotus pith and cook it with colorless marjoram, saying: "[magic words; among others, IOEL, HARI, PHTHA], come out of X." ... You must write on a tin tablet ... and hang it on the patient. This is an object of fear for every daemon and frightens him. Stand facing him and exorcise him "I conjure you by the god of the Hebrews, Jesus ... you who appear in fire, ... Tannetis, let your angel descend ... let him arrest the daemon that flies around this creature shaped by God ... for I pray to the holy god through Ammon So you speak, too, and tell me what kind of a daemon you

are, one in heaven or one in the air I conjure you by him who burned down the stiff-necked giants with his beams of fire, who praises the heaven of heavens.”³⁷

The mixture of deities, beliefs, mythologies (possible allusion to Zeus destroying the Titans with lightning) is quite characteristic of many of these charms, especially those used primarily by practitioners outside of one of the monotheistic religions. The charm is compounded of different ingredients, which may be used by the exorcist or by the patient; something is written, something is recited, and we know from various sources that the recitation and exorcism often had to be energetically repeated.

Daemons also came and went, undoubtedly having their local and historical fads, shifting personalities, functions, and names.³⁸ Certain periods of life, critical transitions, such as the period immediately after childbirth, were particularly dangerous; among the Greeks, Lamia, for example, a female demon, might afflict a child with a fatal illness or dry up the mother’s milk.³⁹

The Evil Eye

The belief in the power of possessing demons to create mischief and illness and of the power of exorcism to cure is, in turn, intimately related to ideas about the evil eye. This belief, more or less broadly defined, is the belief in the power, accidental or intentional, of one person’s look or gaze to damage or kill another person’s body, soul, or possessions. It is quite ancient and widespread, and appears to be circum-Mediterranean in original locale, though by diffusion it spread to other parts of the world.⁴⁰ Some believe that its origins are in India, and some authorities claim its presence in Africa is aboriginal, not primarily via contact with the Mediterranean world. It is deeply embedded in Greek, Roman, and Middle Eastern cultures, but its most prominent expressions in our period are to be found well into the Hellenistic and Roman centuries. The malignant and malevolent effects of the spell cast by “the evil eye” overlap considerably both conceptually and in terms of warding off and removing those effects with witchcraft and possession. The evil eye is prominent in popular belief as a source of sickness, madness, and death. It is prominently associated with the idea of envy, *invidia*, in Latin, and this is exemplified in Catullus’ most famous poem, “Vivamus mea Lesbia atque amemus,” “Let us live, my Lesbia, and let us love.” The speaker urges his beloved to give him hundreds, indeed thousands of kisses, but then cautions her, “and when we have finished many thousands of kisses, let us mix up the number, lest we know it, or lest some evil person be able to cast an envious eye on us [and destroy us].” “*Nec invidiat.*”

Methods of averting the effects of the evil eye include a variety of talismans and amulets, including eye amulets (or, as in the modern Middle East, the *hamsa*, a hand with an eye in the center), various gestures, often obscene and angry, such as the sign of the fig, spitting, and the use of the color blue. It is possible that the *tsitis*, the fringes dyed blue, commanded in the book of Numbers to be worn on the edges of garments may originally have had some element of averting the evil eye. Also important, as in the quotation from Catullus, is the attempt to conceal or minimize what one has by way of happiness, goods, or children. Sharing and giving away are also important, and it may be that certain forms of hospitality involve apotropaic measures against the evil eye.

Alan Dundes⁴¹ pointed out how the belief in the evil eye seems interrelated with the following sets of assumptions: (1) life and the fertile increase of life depend on liquid: wet = life and dry = death⁴²; (2) there is a finite and quite limited supply of good in the world, and one person’s gain is always someone else’s loss; if one person gains semen, milk, wealth, or health, someone else is diminished; (3) therefore, poor or sick people are a threat to wealthy and healthy people, and those in power fear the effects of the envy of the less fortunate. There are popular symbolic equations, or interchanges, where eyes may be equal to breasts or testicles, and a single eye may be equal to a penis. (In Greek painting, one frequently sees a large, detached penis portrayed with an eye or eyes on it.) In this schema of unspoken assumptions about the world, envy, expressed through the eye, somehow shrivels and dries up and makes other people infertile, unproductive, and ill, physically or emotionally. Dundes’ emphasis on the connection of liquids with the effects and the averting of the effects of the evil eye (e.g., as in toasts, “Here’s lookin’ at you”) suggests an easy link also with the realm of

beliefs in liquids, such as the humors, that are involved in the maintenance of health, well-being, and sanity. Although I cannot adduce any direct evidence, it seems likely that especially the most “evil” humor, black bile, overlaps with the realm of beliefs about evil eyes and the destruction of good fluids. I speculate that in the imaginative world of antiquity, black bile was the antithesis of good white fluids, such as semen and milk.

Healing Shrines and Hero Worship

A widespread belief in the Hellenic world was in the power that deceased “heroes” could exert, especially in the immediate vicinity of their graves. Worship and cult at the alleged grave sites of various mythological and mythohistorical figures was an important part of ordinary religion and is thought to have begun in the late eighth century B.C.E.⁴³ These heroes tended to be figures such as Ajax or Achilles, who were epic heroes, or figures such as Oedipus, not a military or epic hero, but heroized by virtue of the extraordinary life he had led, a life both accursed and sacred. On occasion a known historical figure such as an Olympic victor could become a hero and his grave site a place of worship. These heroes had the power to help the people around them or considerable power to harm. The power of these heroes did not accrue from any particular saintly or virtuous life, except in the sense that the “virtue” or *areté* of an epic hero was in his extreme prowess and power in battle or, later, in the slightly modified form of battle known as athletic competitions, such as the Olympic games. A story told by several authors in Roman times (Pausanias and Plutarch)⁴⁴ conveys something of the primitive and raw energy, verging on madness, whether in battle or in athletic competition, that seemed to attend the figure of the cultic hero:

Kleomedes of Astypalaia killed a man ... in a boxing match (484 B.C.E.); he was condemned by the Greek arbiters and lost his victory, and went out of his mind from grief: he went home to Astypalaia and attacked a school there where there were sixty boys: he overturned the pillar that held up the roof, and the roof fell in on them: the people stoned him and he took refuge in Athena’s sanctuary, where he climbed inside a chest that was kept there and pulled down the lid. The Astypalaians laboured uselessly to open it; in the end they broke open its wooden walls, but they found no trace of Kleomedes either alive or dead. So they sent to Delphi to ask what had happened ... and the Pythian priestess gave them this oracle:

Astypalaian Kleomedes is the last hero:
worship him: he is no longer mortal.

Ever since then the Astypalaians have paid honours to Kleomedes as a divine hero.⁴⁵

One might surmise that the good citizens of Astypalaia were relieved to learn from the oracle that this was the last of the heroes!

Among the capacities of the deceased but powerful heroes were those of bringing on sickness or, more commonly, healing sickness. Some of these healing grave sites were those of legendary specifically healing figures involving Asklepios and his family, but others were of mantic figures, who might send dreams or oracles, sometimes of a particularly healing nature. Some sites were for general healing and others were for quite specific problems, such as fevers or diseases of children. The worship and attendant healing at the temples of Asklepios seem in origin and in spirit to overlap considerably with the more generic aspects of worship at the graves of heroes. Asklepios is mentioned in the *Iliad* as “a blameless physician” and has two sons who are doctor-warriors, Machaon and Podalirios. In later medical tradition, these sons became respectively the founders of surgery and of “diseases within,” which includes not just medicine, but also psychosis—the “flashing eyes and depressed spirit of Ajax” were within his province. Later, beginning with Hesiod (eighth or seventh century B.C.E.) and even more in the sixth century, myths about Asklepios as a demigod are found, including the element that Zeus struck Asklepios with lightning when he tried to resurrect the dead and had to promise to limit his work to healing the ill and not resurrection. My speculation is that this represents a professional foundation myth, that is, the establishment of medicine as a profession in the late sixth and early fifth centuries was heralded by a myth that encodes the curbing of the grandiosity and *hubris* of the physician.

The ritual healing procedures of the temple, particularly the temple at Epidauros, the discussions with the priest, the “incubation” (that is, sleeping in a sacred spot in order to have a dream visitation from the god or a direct act of healing from the god, unmediated by a dream), the instructions and medical regimen received from the god, the gift of gratitude—all of these have been detailed and described.⁴⁶ A typical cure is recorded in the temple inscriptions from Epidauros: A man with a urethral stone comes to the god for help. He lies down and has an erotic dream of intercourse with a beautiful young man, and has an ejaculation that expels the stone.

The best-documented but most exotic case of a long-term relationship with the god Asklepios in order to heal a variety of illnesses, seemingly psychic as well as somatic in origin, is that of Aelius Aristides, an orator and world-class hypochondriac who lived in the second century C.E. and a contemporary of Galen (whom he once consulted). Aelius spent the better part of a decade wandering from Asklepiian temple to temple in different parts of the Mediterranean world, seeking and obtaining divinely inspired dreams, including some in which he had direct interviews with the god; he recorded these experiences.⁴⁷ His story has been told several times by now, briefly by Dodds⁴⁸ and more elaborately by Rosen.⁴⁹ Overall, there was an intimate and complex relationship between healing sites and the generation, reception, and interpretation of oneiric experiences.⁵⁰

What is not clear for our purposes in the history of psychiatry is the role of these temples in the treatment of manifest major emotional disorders, especially the psychoses. Comedy, as in Aristophanes’ *Wasps*, gives us an indication that a visit to a temple of Asklepios was part of what a distraught family might try to cure their relative of some self-destructive obsession. In general, the available inscriptions document fascinating conditions and how, with the help of the god they were cured, but not florid psychoses. If we can extrapolate from the Christian use of shrines of the saints, we could assume that any and all disturbances might have been brought to the temples.

The relationship between medicine and the temples of Asklepios seems not to have been essentially competitive or combative. The Hippocratic physicians of the island of Cos constituted themselves as a kind of guild under the name of the “sons of Asklepios,” and there is little if any sense of competition between official temple healing and medical healing (though there was between medical healing and what the doctors called “magic”). Greek physicians were not merely pragmatic in assuming it was worth trying a temple cure if their treatments did not work, but they also were probably being quite self-protective by sending patients with poor prognosis to the temples. Healers, then as now, were not eager to ruin their statistics by taking on difficult or incurable patients.

The practice of incubation in order to receive a healing vision or dream continued into the Christian period, and in some instances the same sites that had been pagan shrines passed over into churches or Christian shrines where people sought Christian healing visions and revelation.⁵¹ During the early Christian centuries, Christ as healer and Asklepios as healer were at first complementary in the Graeco-Roman world, but they gradually became competitors, with Christian healing emerging as the victor.⁵²

The Cultivation of Mystical States in Late Antiquity

At one point in his quest for healing and direction from the god Asklepios, Aelius Aristides experiences a dream wherein he watches a statue of himself change into a statue of the god, and Aelius sees this as a symbol of his unity with the god. As Dodds⁵³ pointed out, in late antiquity, that is, beginning more intensively in the second and third centuries C.E., we find in a variety of sources and settings (Christian, Jewish, and “pagan”) a thrust, a yearning for closeness, oneness, and union with a deity or with *the* deity. Within the Neo-Platonic tradition, especially in the works of Plotinus (205–270 C.E.) and his disciple Porphyry (232–305 C.E.), we begin to find extended expositions of the texture and topography of the closeness and distance between the human and the divine. Levels and layers of space and of creation lie between the two, and in Neo-Platonic philosophy, some Gnostic and Hermetic writings, and probably in some Jewish precursors of later Cabalistic thought, we begin to get something like a mapping of the universe and of the

process of creation. Neo-Platonic philosophy draws heavily on Plato's cosmogonic dialogue, *The Timaeus*, enormously influential in both Jewish philosophy, especially Philo, and later Christian philosophy, especially Augustine. The paradigm of Neo-Platonic thought is of the godhead at the center and origin and emanations of different forms of spirit-matter, with the spiritual element becoming progressively attenuated the further the remove from the godhead.

Dodds and others believe that during this period there were some individuals who were practicing exercises, regimens, or intellectual procedures that constituted a process of passing through different mystical stages. Plotinus and Porphyry probably experienced several kinds of mystical union, and they wrote extensively in the language of such union. Proclus (fifth century C.E.) laid down an order of progression towards union, an order that became known in Latin and Christian mysticism as *via purgativa*, then *via illuminativa* and *via unitiva*. Modern studies of meditative disciplines suggest that there is within each meditative discipline a regular progression of states and experiences, and that many of the experiences recorded by mystics over the centuries can be understood as one or another stage in the ordered cultivation of the experience. Undoubtedly, there are significant variations in the content and in the method of obtaining these experiences within different traditions and within different disciplines in the same culture, but there also seem to be some striking cross-cultural and transhistorical similarities. There is reason to believe that, historically, some influence from Indian meditative traditions was reaching the Graeco-Roman world and that this played some role in the thrust towards experiences of closeness or unity with the deity.

At the same time, within that world, there were several varieties of approach to obtaining experiences of fusion or closeness, including a relatively intellectual-contemplative process typical of Neo-Platonism, which was in principle accessible. The hermetic *asceses* (secret spiritual disciplines), such as in the several gnostic traditions and in some Jewish groups, are less clear in their method, and may well have involved meditative and bodily exercises available only to the initiated.⁵⁴

The importance of this tradition for the history of psychiatry is twofold. First, it represents a considerable expansion of a capacity of the normal mind, via training, to reach heights and depths of experience beyond ordinary reach. Second, the rise of mystical yearnings is probably very important as a response to religious, social, and political turmoil in the early Christian centuries; it may represent some attempt to heal the "malaises" of that era, as experienced by many individuals primarily as being cut off from the divine or from the godhead. This is strongly argued by Dodds,⁵⁵ and mystical traditions must be considered in any thoroughgoing study of the social psychology of the centuries in question.

Stoic Philosophy as a System of Psychotherapy

Beginning in the third century B.C.E. in Greece and extending through the first three centuries of the Christian era, a number of different, often competing philosophical schools arose, and at least two of them, the Stoic and the Epicurean, made some serious claim to provide a method of treatment for diseases and discomforts of the psyche. Now, Greek philosophy, beginning with Plato, had in some sense portrayed itself as a method of therapy, or treatment for the troubled psyche.⁵⁶ An anecdote from Plutarch, much quoted in histories of psychiatry, ascribes to the sophist Antiphon (fifth century B.C.E.) "a craft of relieving the soul of pain" (*techné alupias*) and claims that Antiphon hung out a shingle, as it were, in the agora in Athens announcing his craft.

Hellenistic philosophy, beginning with the early Epicurean and Stoic schools, specially later Stoic philosophy as preached and practiced in Rome (say in the first century B.C.E. with Cicero, first century C.E. with Seneca, and second century C.E. with Marcus Aurelius) began to develop both more elaborated theories and working methods of applying philosophy as a treatment for psychological distress. The older Stoics all seemed to have elaborated theories and ideas on the passions and on the disorders of the passions. In addition, they articulated an ideal of an art or method of treating the diseased soul⁵⁷:

It is not true that whereas there is an art, called medicine, concerned with the diseased body, there is no art concerned with the diseased soul, or that the latter should be inferior to the former in the theory and treatment of individual cases.⁵⁸

Recent work by Pigeaud,⁵⁹ Preuss,⁶⁰ and Nussbaum,⁶¹ as well as older work by Leibbrand and Wettley,⁶² has shown that the disorders that Stoicism addressed were “problems of living,” those moral and existential dilemmas that accrue with the state of being a thoughtful and sensitive human being. Psychosis, such as severe melancholia in ancient terms, was probably not considered within the realm of philosophy. But problems and conflicts of being a ruler, a statesman, a courtier, a citizen, a parent, a philosopher, a physician—these were the kinds of issues that Stoicism in its several varieties addressed and for which it prescribed. Some of the famous watchwords associated with Stoicism such as *ataraxia* (“imperturbability”) and *apatheia* (rising above the *pathé*, or passions) represent both means and ends of such therapeutic efforts, whether self-therapeutic or with the help of a philosophic mentor or colleague.

Preuss⁶³ presented a detailed study of the application of Stoic doctrine to dealing with actual severe distress. In particular, he examined the famous philosophical treatise of Cicero, *Tusculan Disputations* (around 45 B.C.E.). Cicero reviews many earlier and contemporary theories, both Stoic and others, including views on consolation, whether for loss of a loved one (he had just lost his beloved daughter), loss of pride in country, or loss of some important and cherished goal. Much of the discussion is in the form of how those who set out to console another person should approach the task: “*Haec igitur officia sunt consolantium ...*”:

These are the duties of comforters: to do away with distress root and branch, or allay it, or diminish it as far as possible or stop its progress and not allow it to extend further, or to divert it elsewhere.⁶⁴

Some of the practical steps and guidelines in the kind of argumentation with the grieving person can be extracted:

1. The importance of proper timing in approaching the person.
2. The importance of allowing for *gradual* change (*pedetemptim*, “a step at a time”):

by slow degree, pain is lessened as it goes on, not that the actual conditions are ordinarily changed, or can be so, but experience teaches the lesson which reason should have taught before, that the things once magnified are smaller than they seemed.

3. To discuss the common lot of life, as well as the specific circumstances of the distressed person (*Non tibi hoc soli*: “Not to you alone has this happened”).
4. To show the folly of being overcome by grief; there is no clear advantage in being so overcome.
5. But finally, “*Sed non natura exoriatur, sed iudicio, sed opinione, sed quadam invitatione ad dolendum ...*”:

In each case we must go back to the one fountainhead, that all distress is far remote from the wise man, because it is meaningless, because it is indulged in to no purpose, because it does not originate in nature, but in an act of judgment or belief, in a kind of call to grief when we have made up our minds that it is our duty to feel it.

6. All of these approaches do not always work, and even when they do there remains an ineradicable quota of pain and its effects: “all the same the sting and certain minor symptoms of shrinking of soul will be left.”

The question of whether or not we can properly speak of “Stoic psychotherapy” is a complex one and ultimately cannot be answered without a broader consideration and precise definition of what constitutes psychotherapy. Furthermore, anyone who has attempted to describe systematically what the current practice of psychotherapy according to a particular theory or school looks like or sounds like knows the difficulty of defining and extracting what is done in contrast to what is said is done. Nevertheless, the raising of that question has led both to a more searching attempt to reconstruct Stoic thought and practice and to a reconsideration of the problem of defining psychotherapy. What is clear is that the Stoic methods of consolation, of coming to terms with failures, whether failures within or outside of the person, entailed significant and explicit value judgments and moral considerations. It is useful to use our gradually increasing knowledge of the ancient methods to hold up a mirror to our own methods and schools, particularly in regard to the question of overt and covert moral values in psychotherapy (a task considerably advanced by the work of Nussbaum⁶⁵).

More remains to be done in terms of mining the wealth of the various philosophical schools and their definitions, which include emphasizing their differences from other schools, and the way Greek philosophies interpenetrated Christian philosophical and theological thinking. Philosophy in the context of Christian belief and practice undoubtedly exerted a much greater influence on the masses of the world of late antiquity than did the actual teachings of the great Stoic, Epicurean, and Neo-Platonic masters.

Fictional Cases

In late fifth century B.C.E. Athens, a somewhat older man, in his early fifties, a father and grandfather, begins to become withdrawn, reclusive, and suspicious and is drinking more than usual. He complains of sticking-pains in his ribs on the right side and that his bowels are not right, and close family members think he is visually imagining things that are not there.

He might first go on a short trip outside of the city limits of Athens to a shrine of a hero, oddly enough called “Physician-Hero.” There he might join with a small group of other worshipers and seekers of help and offer some libation of honey and wine poured upon the ground or into a vase standing at the “grave site” and utter some appeal for help in his distress.

This visit to the shrine might be a prelude to his visiting a physician. In a city the size of Athens, there would likely be local, resident physicians, though from time to time a prominent physician from another locale might come through and be consulted. The physician would likely be interested in a detailed discussion of the man’s symptoms and of his regimen of life: his place of residence, his travels, seasons of the year when his symptoms get better or worse, and a good deal of attention to diet and exercise. There would be an inspection of the urine and of any phlegm or vomitus the patient might produce. The physician would quite likely make a diagnosis of a serious disease—a melancholic state. The pain under the ribs and near the liver would be called (literally) hypochondriachal (“under the ribs”) and would be part of the symptom picture of melancholia, as would the withdrawal, suspiciousness, and possible visual hallucinations. There would be some discussion of the use of wine, especially the degree of dilution and the place of origin of the wine. There might well be some discussion of his dreams, and the dream material would be used to suggest occult disease somewhere in the body (e.g., dreams of the top floor of a building would suggest a problem in the head).

Treatment would consist in dosing, once or several times, with white or black hellebore, inducing either vomiting or bowel movements, or both. There might well be various fluids with which to wash, concocted of herbs and juices that would all be considered “cholegogues,” substances that help expel black bile. Foods low in black bile would be prescribed, as well as some graded exercise regimen. It is quite possible that the physician would spend time explaining things to the patient, both the rationale for the treatment and the details of the treatment. Prognosis: fair, especially if doctor’s orders are followed.

Concomitantly, or serially, the man might be considered by his family and neighbors as being possessed by some divine agency, especially if his behavior involved some fitful and erratic activity. He might be encouraged to participate in a ceremonial group, the Korybantes, a group of women and men (though the men tend to be more socially marginal, older, or deviant in other respects), who meet regularly for a kind of healing dance and trance ceremony. Depending on the degree of relief and/or pleasure obtained here from the rhythmical dancing and ecstatic states, he might attend only once or twice, or he might become a regular member and indeed help to spread the good news, and good rhythms, to others about the group.

As word of the man’s distress spread through the neighborhood, a variety of itinerant vendors of advice, magic rituals, special charms, and oracles predicting personal and collective future events would find their way to his house. There would undoubtedly be some heated discussion among the family and neighbors about which of these is “authentic” and which a charlatan; nevertheless, there would be a steady stream of such people and their wares.

Again, depending in part on the degree of persistence and intractability of his symptoms, he might be brought by his family to a temple of Asklepios, perhaps one on the nearby island of Aegina (the more famous one at Epidauros was in “enemy territory” in the Peloponesus). There, he would approach with a

large group of other seekers of help and their families and be exposed to a good deal of conversation and exchange of information about the healing successes, indeed miracles, of the god and his priestly interpreters. He might stop to read (or have read to him) some dedicatory inscriptions put up and donated by grateful patients who were successfully healed, detailing their illnesses and their healing experiences in dreams. He would undergo some ritual purification, receive instructions from the priest, have some contact with the snakes who are part of the sanctuary, and be escorted to a special area where he would sleep and receive a divinely inspired dream. The next morning he would relate the dream to a priest and have its full implications, including any particular instructions for prayer, medicine, and regimen, carefully explained. He and his family would have brought with them either an animal for donation, small or large depending in part on the families' wealth (cf. Socrates' famous "I owe a cock to Asklepios" just before his death in *The Phaedo*), or else a donation of silver or coinage.

If all else failed and the man became much worse, especially if he became violent, he would be secluded at home, and either family or people hired by the family would have to carefully watch over him and protect him from self-destructive tendencies, as well as protect others against him. If he were not so violent, he might become a neighborhood curiosity, occasionally jeered at by boys in the street, and feeling a bit uncomfortable as passers by might spit apotropaically to ward off any evil to themselves from his look or from looking at him. At times, he might end up being pelted and stoned if he got too close for comfort to some of his fellow citizens.

In part depending on the resources of the family, there might be numerous other attempts to find healing places or resources in other parts of Greece or to eagerly seek one or another medical, magical, or divine practitioner who would be passing through Athens. It was entirely possible, then as now, that the patient would not improve and might go on to a lingering death, by somehow becoming marasmatic or wasting away, or committing suicide.

Were this a case in later antiquity, say in second century C.E. Alexandria, or Pergamon in Asia Minor, the same modalities would be available, but there would be a much greater array of all of them. There would be a variety of physicianly opinions available, with numerous competing schools and practitioners. Were the patient well placed enough or wealthy enough to consult with Galen ("a philosophical physician") or one of his close associates, he might encounter some mixture of a physical exam (which would include more elaborate study of his pulse than in the preceding centuries and a more sophisticated examination of sensory and motor nerve functioning) and a medically oriented history.⁶⁶ There would be a more detailed scrutiny of the timing and duration of previous melancholic episodes, combined with inquiry into intermittent states of elation or mania.⁶⁷ In the course of discussion of various moral aspects of his life, including relationships with his slaves, his wife, and his children, Galen would carefully note that certain topics seem to lead to an increased agitation in the patient, as evidenced, for example, by a change in the quality and rate of the pulse. Galen would likely be quite emphatic in the superiority of his treatments to that of others, and would casually but carefully put down other physicians the patient had consulted and any discussions he had with philosophers of a somewhat different persuasion than Galen (who could be quite critical of the Stoics, for example). It is doubtful if the available methods of medicinal treatment would be substantially different from what had been available to our hypothetical patient in the fifth century B.C.E., but there would be much more elaborate theoretical rationales for all of the treatments.

There would be an array of religious practices and cults, including those associated with Isis, Asklepios, Serapis, and Christ, Jewish healing rituals, and perhaps some early Gnostic rituals and treatments. The possibilities of becoming a devotee of one or more such cults were quite substantial, and the patient could well spend a good part of his remaining years in quest of peace and healing in the service of a god. Rituals involving one or another form of exorcism, driving out the alleged possessing daemon by prayers and curses, would be more widely available than they would have been in the fifth century B.C.E.

Again, depending in large part on the social class of the patient, he might well become involved with more extensive discussion with a philosophical friend or perhaps even some professional teacher of philosophy. Here too he would encounter a number of competing viewpoints, and he might find himself vigorously courted to become a member of one group or another.

Conclusion

I conclude this selective survey with an awareness of the wealth of fascinating and important material that has been studied and can be further quarried. I am also aware of the difficulty of making generalizations about how the ancient world understood and treated mental illness and of the critical importance of taking into account the complexity and contradictory nature of much of what was done and theorized at every point in time and place in the ancient world. It is a practical necessity, nevertheless, for students of the history of psychiatry to utilize some conceptual schema connecting the “native” categories of antiquity with modern conceptual schemata about the nature of psychiatry. At the same time one must be aware of the advantages and the debits of construing connections between ancient models and contemporary models. It is legitimate to search out the beginnings of the “biopsychosocial model” in ancient philosophy (e.g., Aristotle) and medicine while paying due regard to the vast differences in assumptions and world outlook between 300 B.C.E. and 2000 C.E. and remaining tentative about the utility of making such connections. My own course through the study of antiquity has been from a schema of models—poetic, philosophical, medical—to an expansion of the number of models and an awareness of the diversity within each, now questioning the utility of my own schemata, and now attempting a new synthesis of the expanded body of data under consideration. This process can make us aware of both the constancy and diversity in approaches to mind and its disturbances in whatever period of history we are examining.

As for the attempt to understand ancient approaches to mind and madness by applying modern theories of sociology and depth psychology, this too is best done on a trial basis, continually stopping and assessing both the fruits and the limitations of particular modern hypotheses. The ancient world had its own modes and categories for understanding societies, particularly for describing the perceived similarities and differences between, say, Greek culture and “foreign” or “barbarian” cultures. Therefore, we must be aware of a history of the process of devising psychosocial explanations of how individuals and cultures function. All of this adds up to the impossibility of writing a definitive “history of psychiatry in classical antiquity,” but offers instead the exciting possibilities of understanding how and why we must continually rework such a history.

Annotated Bibliography

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- Lefkowitz, M., and Fant, M., *Women in Antiquity: A Sourcebook*, 3rd ed., Baltimore, 2005. [A useful anthology with further references on a variety of aspects of the life of women in antiquity; particularly convenient are some source material on hysteria and material from the gynecological treatises of Soranus.]
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- O'Brien-Moore, A., *Madness in Ancient Literature*, Weimar, 1924. [Dated, but still a quite readable and useful overview of some topics in history of psychiatry.]
- Osterreich, J. K., *Possession, Demonic and Other*, New York, 1960. [A fundamental text and collocation of major sources treating possession in antiquity]
- Riese, W., *Galen on the Passions and Errors of the Soul*, Columbus, OH, 1963. [A convenient edition with a useful introductory essay on a work of Galen that is important for this area.]
- Scarborough, J., *Roman Medicine*, Ithaca, NY, 1969. [A useful introduction, survey, and update of the principal features of Roman medicine, including the relationships to Greek medicine.]
- Scarborough, J., ed., *Symposium on Byzantine Medicine* (Dumbarton Oaks Papers, No. 38), Washington, DC, 1985. [A compendium of scholarship in the field; important for understanding the fate of classical teaching and for seeing how those teachings were understood in an era closer to them than our own. See in particular M. Dols, "Insanity in Byzantine and Islamic Medicine," pp. 135–148.]
- Simon, B., *Tragic Drama and the Family: Psychoanalytic Studies from Aeschylus to Beckett*, New Haven, CT. [The chapters on Aeschylus' *Oresteia* and Euripides' *Medea* are especially important.]
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- Veith, I., *Hysteria: The History of a Disease*, Chicago, 1965. [An extremely useful book in terms of the material it assembles on hysteria, historically and cross-culturally.]

Notes and References

1. Some of the reference items mentioned in the text are presented here followed by a brief annotation in square brackets about the significance and value of the work. Some of these works are noteworthy for their accessibility and summary value, some because of the extent and depth of their scholarship, and, unfortunately, only a few for both. A few important annotated items not mentioned specifically in the text are included.

For a brief, useful, and scholarly overview of the history of psychiatry in antiquity, see the relevant sections, with bibliography, in the article by George Mora, "Historical and Theoretical Trends in Psychiatry," in H. I. Kaplan, A. M. Freedman, B. J. Sadock, eds., *Comprehensive Textbook of Psychiatry*, 3rd ed., Vol. 1, pp. 4–94 (Baltimore, 1980). C. P. Ducey and B. Simon, "Ancient Greece and Rome," in J. G. Howells, ed., *World History of Psychiatry* (New York, 1975), pp. 1–38, is also a useful overview, but is more selective. G. Rosen, *Madness in Society* (Chicago, 1968) is quite interesting and gracefully written but focuses on a relatively small number of topics. An excellent short overview is in Porter, Roy, *Madness: A Brief History* Oxford, Oxford University Press, 2002. B. Simon, *Mind and Madness in Ancient Greece: The Classical Roots of Modern Psychiatry* (Ithaca, NY, 1978) covers "classical" Greek antiquity (from the eighth to the early fourth centuries B.C.E.) but again only selected topics are covered in depth. It is written not exclusively from an historical perspective, but also from the viewpoint of delineating certain models of mind and mental illness that are hypothesized to run through the history of psychiatry. E. R. Dodds, *The Greeks and the Irrational* (Berkeley, CA, 1951) is one of the most exciting books written on a variety of topics relevant to the history of psychiatry and must be read and studied, even though it is not a systematic treatise. His mixture of detailed imaginative scholarship, judicious use of psychoanalytic and anthropological approaches, and a deep sympathy for the anxieties of the classical Greek world make this book unique and uniquely useful. See R. S. Peters, ed.,

Brett's History of Psychology, rev. ed. (Cambridge, MA, 1965) for a useful overview of the more philosophic thinkers of antiquity, especially Aristotle. These works, for those who do not read French and German, constitute a good survey with coverage in depth of a number of specific topics.

Jackie Pigeaud, *La Maladie de l'âme: Étude sur la relation de l'âme et du corps dans la tradition médico-philosophique antique* (Paris, 1981) is indispensable for the history of mental illness in Hellenistic and Roman antiquity; its focus is on the interplay of philosophy and medicine. The French is not difficult or convoluted and is accessible to those who are much less than fluent in the language.

The textbooks of history of psychiatry per se are problematic: F. G. Alexander and S. T. Selesnick, *The History of Psychiatry* (New York, 1966) and G. Zilboorg and G. W. Henry, *A History of Medical Psychology* (New York, 1941) are most accessible, but there are frequent errors of fact and generalization; they should be used as armchair guide books. Giuseppe Roccatagliata, *A History of Ancient Psychiatry* (Westport, CT, 1986) is also a place to start but suffers from the same problems as the preceding histories of psychiatry. W. Leibbrand and A. Wettley, *Der Wahnsinn: Geschichte der Abendländischen Psychopathologie* (Freiburg/Munich, 1961) is superb, but it has not been translated into English, is in difficult German, and deals little with folk belief and folk healing.

Access to primary sources is frequently difficult and a bit forbidding. Overall, the Loeb Classical Library of Greek and Roman authors—original texts and facing translations—is still the most scholarly source that is accessible to the interested nonspecialist. The medical works are represented spottily in the Loeb series, but more editions of Hippocrates and of Galen are being prepared. On particular authors, if there is a better edition, often the only way for the nonspecialist to learn about it is to consult a specialist in the history of psychiatry and medicine in antiquity and/or a classicist.

The works of Hippocrates are most abundantly represented in the great series by Littré (in French) with Greek text, French translation, and introductions and notes. The works of Galen are most abundantly represented in the series edited by D. C. G. Kühn, with German translation. These are both nineteenth century editions, and are gradually being superseded by more modern versions, a few in English, some in French, and most in German. For the best available texts, consult the series, *Corpus Medicorum Graecorum*, which now consists of individual volumes of works attributed to Hippocrates of Galen (plus a few others) and different volumes may be translated into English (a few), German, or French. A search under that title in major libraries will provide the complete current list of available texts. Caelius Aurelianus (date controversial, could be fifth century C.E.), *On Acute Diseases and On Chronic Diseases* is found in an excellent edition and translation by I. F. Drabkin (Chicago, 1950). [A fine edition, in Latin and English, of this important medical thinker of late antiquity, with much material on acute and chronic mental illness. A source of many ideas and information for later centuries.] Aretaeus (of uncertain date; could be first century B.C.E. or second century C.E.) can be found in English in an outdated edition (1856), and a good Greek text is available. Consult the bibliography in Pigeaud, op. cit., and in W. Smith, *The Hippocratic Tradition* (Ithaca, NY, 1978). [A detailed discussion of the origins of the traditions about Hippocrates in the centuries just before Galen and in Galen's lifetime. Difficult reading, but a good glimpse of what the modern historiography of ancient medicine is like at its best.]

The newsletters of the Society for Ancient Medicine and Pharmacy are the richest and most scholarly, detailed, and up-to-date source of bibliography and reviews in the area of ancient medicine and related fields. They make available work being done in Europe that is often quite relevant to the history of psychiatry. The standard journals of medical history (e.g., *Bulletin of the History of Medicine*, *Clio Medica*) and the *Journal of the History of the Behavioral Sciences* frequently contain useful articles and book reviews in this area.

2. Simon, op. cit.; Ducey and Simon, op. cit.; Russo, J., and Simon, B. Homeric Psychology and the Oral Epic Tradition. *Journal of the History of Ideas*. 1968; 29:484–494. (Reprinted in Wright J., ed., *Modern Essays on the Iliad*, Bloomington: Univ. of Indiana Press, 1977.) Simon, B., and Weiner, H. Models of Mind and Mental Illness in Ancient Greece. I. The Homeric Model of Mind. *J. Hist. Behav. Sci.* 1966; 2:303–314.
3. The literature on Aristotle is immense and, unfortunately, cannot be reviewed in this chapter. An excellent treatment of mental functioning and malfunctioning in Aristotle is Daniel Robinson, *Aristotle's Psychology* (New York, 1990).
4. For the problem of how much continuity and how much discontinuity there is between ancient and modern diagnostic terms, see Stanley Jackson, *Melancholia and Depression: From Hippocratic Times to Modern Times* (New Haven, CT, 1985). [An excellent survey and critical essay on the history of melancholia, with much useful material presented in the early chapters (and scattered throughout) on antiquity. Notes and references, including to Jackson's articles on Galen and mental illness, are especially useful.] On hysteria, see Mark S. Micale, "Hysteria and Its Historiography: A Review of Past and Present Writings (I) and (II)," *History of Science* 27:223–255, 319–351 (1989) (also this

- volume) and especially the work of H. King, "Once upon a Text: Hysteria from Hippocrates," in S. L. Gilman, H. King, R. Porter, G. S. Rousseau, and E. Showalter, eds., *Hysteria: Beyond Freud* (Berkeley, CA., 1993) pp. 3–90, and "Once upon a Text: The Hippocratic Origins of Hysteria," in G. S. Rousseau and Roy Porter, eds., *Hysteria in Western Civilization* (Berkeley, CA, forthcoming) and the entry "Hysteria" *Oxford Classical Dictionary*. [An important "revisionist" view of Hippocratic "hysteria"; she argues for a striking discontinuity between classical Greek and later conceptions of hysteria; I would argue that the "glass is half-full" and the degree of continuity is astonishing.]
5. Simon, op. cit.; see also P. Slater, *The Glory of Hera* (Boston, 1968). [A psychoanalytic and sociocultural analysis of the representation and significance of the madneses in Greek tragedy, with an illuminating analysis of strains in male-female relationships in classical Greek culture. Problematic in a number of ways; to be read with a grain of salt; it is nevertheless an invaluable and pioneering work.]
 6. Op. cit.
 7. Op. cit.
 8. Op. cit.
 9. E. R. Dodds, *Pagan and Christian in an Age of Anxiety: Some Aspects of Religious Experience from Marcus Aurelius to Constantine* (Cambridge, 1965). [A good introduction to the frame of mind in late antiquity and to source material of some important thinkers, as well sources on popular beliefs.]
 10. See, for example, Isaac Ray, *A Treatise on the Medical Jurisprudence of Insanity*, ed. W. Overholser (Cambridge, MA 1962 [1838]), a "modern work" that does not presuppose the great authority of the ancient writers but still makes references and allusions to the study of antiquity. The main nineteenth century history of psychiatry in antiquity is Armand Semelaigne, *Études historiques sur l'alienation mentale dans l'antiquité* (Paris, 1869).
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 12. M. C. Nussbaum, *The Therapy of Desire: Theory and Practice in Hellenistic Ethics* (Princeton, NJ, 1994).
 13. Call. Comed. 28, reference in H. G. Liddell, R. Scott, and H. S. Jones, *Greek-English Lexicon* (Oxford), under *elleboriao*.
 14. *Histories*, III, 32.
 15. M. Grant, *The Jews in the Roman World* (New York, 1973), pp. 284–285 and endnote.
 16. Cambridge, 1979.
 17. Cambridge, 1982.
 18. Sudhir Kakar, *Shamans, Mystics, and Doctors: A Psychological Inquiry into India and its Healing Traditions* (Boston, 1984); also G. Obeyesekere, "Psychocultural Exegesis of a Case of Spirit Possession in Sri Lanka," in V. Crapanzano and V. Gattison, eds., *Case Studies in Spirit Possession*, (New York, 1977), pp. 235–294.
 19. See, for example, W. D. Smith, "The so-called possession in pre-Christian Greece," *Transactions of the American Philological Association* 96: 403–436 (1965); for the nonliteralness of Greek ideas of possession, see Peter Brown, *The Cult of the Saints* (Chicago, 1981), who makes a strong case for the uniqueness in the pagan world of the Christian worship at the shrines of the saints; and Yoram Bilu, "The Taming of the Deviants and Beyond: An Analysis of *Dybbuk* Possession and Exorcism in Judaism," in *Psychoanalytic Study of Society*, Vol. 11 (Hillsdale, NJ, 1985), pp. 1–32, on the specifics and relatively recent history of *Dybbuk* possession in Judaism: Hebrew magic amulets had to be phrased as charms to *prevent* illness and were forbidden to purport to "cure." (cf. Theodore Schrire, *Hebrew Magic Amulets: Their Decipherment and Interpretation* (New York, 1982).
 20. Arthur Kleinman, *Patients and Healers in the Context of Culture* (Berkeley, CA, 1980).; Fabrega, Horacio, *Disease and Social Behavior: An Interdisciplinary Perspective*. Cambridge, MA., MIT Press, 1974.
 21. A. Cameron and A. Kuhrt, eds., *Images of Women in Antiquity* (Detroit, 1983). [Several articles, especially the ones by R. Padel, "Women: Model for Possession by Greek Daemons," pp. 2–19, and Pomeroy, "Infanticide in Hellenistic Greece," 207–222, are important for bringing issues about women into the history of psychiatry. Good bibliography.]
 22. W. Smith, *The Hippocratic Tradition* (Ithaca, NY, 1978).
 23. Op. cit., p. 50.
 24. For example, H. Flashar, *Melancholie und Melancholiker in den medizinischen Theorien der Antike* (Berlin, 1966). [One of several excellent modern works on melancholy in antiquity, its cultural and historical setting, and the history of transmission of ideas about melancholy.] F. Kudlien, *Der Beginn des Medizinischen Denkens bei den Griechen von Homer bis Hippocrates* (Zurich; 1967). [A superb short work on early Greek medical and psychological thought.] Summarized by W. Smith, *The Hippocratic Tradition* (Ithaca, NY, 1978), pp. 234–236.
 25. For example, W. Burkert, *Greek Religion*, trans. J. Raffan (Cambridge, MA, 1985); see index. [A magisterial

- work, containing much of interest for the history of psychiatry, especially folk-belief and folk-healing, e.g., healing oracles, possession, healing shrines, beliefs in immortality of the soul.]
26. Brown, op. cit., esp. pp. 50–68.
 27. For example, Erwin Rohde, *Psyche: The Cult of Souls and Belief in Immortality among the Greeks*, trans. from 8th German ed. by W. B. Hillis (London, 1925). [A monumental and still indispensable work on the history of beliefs in immortality, possession, bewitchments and kindred topics.] Also see Dodds, *Greeks and the Irrational*.
 28. See discussion in Ducey and Simon, op. cit., pp. 22–23.
 29. Princeton, NJ, 1995. [This is the most thorough and theoretically sophisticated study of madness in Greek tragedy and related topics.]
 30. David Grene and R. Lattimore, trans., *The Complete Greek Tragedies*, Vol. 1 (Chicago, 1960), pp. 141–150.
 31. Burkert, op. cit., see index under Korybantēs and Pan.
 32. Loeb edition, IV, 29–30. The relation of this condition to what the physicians (and Plato) called *husterikai*, “hysterical” states, has been briefly discussed by Simon, op. cit.
 33. Mark 5:1–14; Luke 8:26–37. A phrase from this story, that the possessed man, now cured was “clothed and sane,” *imatismenon kai sōphronounta*, in Greek, was used on a 19th century seal of the Asylum Superintendents Association that later became the American Psychiatric Association.
 34. G. Luck, *Arcana Mundi: Magic and the Occult in the Greek and Roman Worlds (A collection of Ancient Texts, Translated, Annotated, and Introduced)* (Baltimore, 1985), especially pp. 163–226. [The first work I know of that gives some access to material that formed so much of the day-to-day mental life on the ancient world.]
 35. Hans Dieter Betz, ed., *The Greek Magical Papyri in Translation: Including the Demotic Spells. Volume One: Text* (Chicago, 1986).
 36. J. C. Lawson, *Modern Greek Folklore and Ancient Greek Religion: A Study in Survivals*, intro. Al. N. Oikonomides (New Hyde Park, NY, 1909), p.23. [The genus is late nineteenth century traveller’s anecdotal survey of folklore in Greece, but the material is very rich for folk healing and folk theories of illness; the collocation with antiquity is quite important. Useful introduction to this edition.]
 37. Luck, op. cit., pp. 190–192.
 38. In post-World War II Alaska, shamans began to wrestle with “Communist demons,” an addition to the traditional Eskimo catalogue of possessing agencies (Jane Murphy, “Psychotherapeutic Aspects of Shamanism on St. Lawrence Island, Alaska,” in A. Kiev, ed., *Magic, Faith and Healing* (Glencoe, IL, 1964), pp. 53–83, esp. p. 77.
 39. R. Blum and E. Blum, *The Dangerous Hour: The Lore and Culture of Crisis and Mystery in Rural Greece* (New York, 1970), on twentieth century rural Greece.
 40. Alan Dundes, “Wet and Dry, the Evil Eye: An Essay in Indo-European and Semitic Worldview” in Alan Dundes, *Interpreting Folklore* (Bloomington, IN, 1980), pp. 93–133 and bibliography; Frederick T. Elworthy, *The Evil Eye: The Origins and Practices of Superstition*, intro. L. B. Barron (Reprint, New York, 1958); Clarence Maloney, ed., *The Evil Eye* (New York, 1976).
 41. Op. cit.
 42. Cf. Jacob’s blessing at Genesis 49:12.
 43. Rohde, op. cit.
 44. See discussion by Bernard Knox, *The Heroic Temper* (Berkeley, CA, 1964), pp. 56–57.
 45. Pausanias, *Guide to Greece*, trans., intro. Peter Levi (Harmondsworth, UK, 1984), VI, 9, 6–8.
 46. See brief account and bibliography in Mora, op. cit.; E. J. Edelstein and L. Edelstein, *Aesclepius: A Collection and Interpretation of the Testimonies* (Baltimore, 1945) [the classic work on the healing shrines of Aesclepius and the use of dreams and incubation in diagnosis and cure]; and Burkert, op. cit.
 47. Charles Behr, *Aelius Aristides and the Sacred Tales* (Amsterdam, 1968).
 48. Op. cit.
 49. Op. cit.
 50. P. C. Miller, *Dreams in Late Antiquity: Studies in the Imagination of a Culture* (Princeton, NJ, 1994). [An outstanding survey and analysis of the multiple uses of dreaming and methods of dream interpretation in the Graeco-Roman and Judaeo-Christian world of late antiquity.]
 51. Dodds, *Pagans and Christians*, pp. 41–52; L. Deubner, *De Incubatione* (1900).
 52. F. Kudlien, “Der Artzt des Körpers und der Artzt der Seele,” *Clio Medica* 3:1–20 (1968). [Still the best short summary of the state of medical, philosophical, and Christian theological debates on who heals whom, and with what means, in early Christian antiquity.]
 53. Dodds, *Pagans and Christians*.

54. The literature on mystical and gnostic movements in the early Christian centuries is vast, perplexing, and often difficult of access. Several encyclopedia articles are useful, especially “Neoplatonism,” *Encyclopedia Britannica*, 16th ed. (Chicago); “Kabbalah,” “Merkabah Mysticism,” and “Neoplatonism,” in *Encyclopedia Judaica* (Jerusalem, 1972); Dodds, *Pagans and Christians*; Peters, op. cit.; and Walter Scott, *Hermetica: The Ancient Greek and Latin Writings which Contain Religious or Philosophical Teachings Ascribed to Hermes Trismegistus* (Boulder, CO, 1982); Also see J. M. Rist, *Plotinus: The Road to Reality* (Cambridge, 1977) and bibliography.
55. Dodds, *Pagans and Christians*.
56. P. Lain-Entralgo, *The Therapy of the Word in Classical Antiquity*, trans. L. J. Rather and J. M. Sharp (New Haven, CT, 1970). [A pioneering text on medicine as a dialogic enterprise in antiquity. Many useful references to classical sources.] Also see Simon, op. cit., for fuller discussions of earlier philosophies as therapy.
57. For example, Anthony Preuss, Unpublished manuscript, SUNY, Department of Philosophy (Binghamton, NY, 1983), who cites the following passage.
58. Chrysippus, *Therapeia tes psuches* [Therapy of the psyche], quoted by Galen, *On the Doctrines of Hippocrates and Plato*, Part I (Berlin, 1978), Part II (Berlin, 1980), p. 299. [A detailed and thorough edition of an important work of Galen (part of *Corpus Medicorum Graecorum*) that gives access in English to some of the best scholarly work about medicine and philosophy in antiquity.]
59. Op. cit.
60. Op. cit.
61. Op. cit.
62. Op. cit.
63. Op. cit.
64. Book III, ¶XXXI; Loeb Library edition.
65. Op. cit.
66. The anatomical functional distinction between motor and sensory nerves had been established by Galen’s time. See Simon, op. cit., pp. 267–268 and endnotes for references.
67. Some relationship between depression and elation is suggested in Aristotle’s (or pseudo-Aristotle’s) *Problemata* (late fourth century B.C.E.), but by the time of the writings of Aretaeus (probably second century, C.E.—date uncertain) a clearer relationship had been spelled out. See Jackson, op. cit., especially pp. 25–49 and 250–254 and endnotes.

Chapter 4

Mental Disturbances, Unusual Mental States, and Their Interpretation during the Middle Ages

George Mora

Introduction

The Middle Ages is the period in Western history covering approximately one thousand years from the sacking of Rome by the Goths in 476 to the capture by the Turks in 1453 of Constantinople, the capital of the Eastern Empire. Bracketed by the classical culture of antiquity, which preceded it, and by the rediscovered classicism and emergent modern proto-scientific world view of the Renaissance, the medieval period was dominated by the religious conceptions of Christianity. Thus, medieval psychological notions must be extrapolated from philosophical and theological texts. Medieval attitudes toward the mentally ill can be traced for centuries through the study of religious literature, folklore, and iconography. Ample historical documentation exists only for the late Middle Ages, from the twelfth to the fourteenth centuries. Before the twelfth century, the prevailing concepts essentially continued the main themes of late classical antiquity (as discussed in Simon's contribution to this book).

The Classical Tradition

We can identify three main conceptual trends in the assorted body of the theoretical ideas and therapeutic systems found in late classical antiquity: popular, medical, and literary-philosophical.

Popular concepts, based on centuries-old folk beliefs, attributed abnormal psychological phenomena to magic, contagion, and sympathetic or antagonistic interactions between human beings and their surroundings. Attempts to control or eliminate these phenomena were made with the use of purifying principles, drugs, and rituals aiming to liberate the person from the noxious agent. Prevention of diseases—including mental diseases—was carried out through the use of magic objects, mainly amulets that protected the person, talismans that symbolized power, and fetishes that represented a protecting deity. The diseases themselves were mostly attributed to violations of taboos, neglect of ritual obligations, loss of vital substances from the body (mainly the soul, that is, the principle of life), introduction of foreign and harmful substances into the body (possession by spirits), and witchcraft.

The medical concepts can be traced back to the efforts of pre-Socratic thinkers to explain life through fundamental elements, such as air, water, and fire—essentially a naturalistic mode of explanation devoid of supernatural characteristics. Such naturalism underlay fifth and fourth century B.C.E. Hippocratic writings, which deemphasized supernatural phenomena (notably in *The Sacred Disease*, on epilepsy). In the

absence of anatomical knowledge, diseases were attributed to dyscrasia, or lack of proper balance, among the four bodily humors, each of which corresponded to a temperament: blood/sanguine; yellow bile/choleric; phlegm/phlegmatic; black bile/melancholic. The accumulation of black bile in the upper part of the body, notably the brain, produced mental diseases: phrenitis, accompanied by fever; mania of acute origin, without fever; chronic mania (furor); and melancholia, mostly chronic and characterized by sadness and fear. Thus, the brain was construed as the seat of mental diseases, with abnormal behavior, including epilepsy, being mostly attributed to natural causes. Treatment was somatic—medicinal and dietetic—and eliminative (achieved through the use of hellebore).

In the following centuries Erasistratus and Herophilus (third century B.C.E.) of the Alexandrian school stressed even further the naturalistic orientation—Erasistratus by dividing nerves into sensory and motor and by considering the complexity of convolutions as a sign of mental superiority; Herophilus by describing the arachnoid, the dura mater, and its sinuses and by localizing the soul in the ventricles of the brain, a concept that was to persist for centuries. Asclepiades, head of the Methodist School in the second century B.C.E., although adhering to the concept of diseases as related to disturbances in the quantity and formation of atoms, localized the seat of mental illness in the brain (particularly the meninges), distinguished hallucinations from illusions, and prescribed lighted rooms to counteract patients' false perceptions.

Though perhaps not himself a physician, Celsus (first century), in a separate section on the diseases of the mind of his *De medicina*, accepted the contemporary classification of madness but emphasized the need for individual treatment according to each condition: proper sleep induced by suitable herbs as well as by the sound of falling water and by movement; adequate light in the room; appropriate reading and music; support for the fearful; firmness for the unruly; amusement for the depressed; sad thoughts for the elated. Essentially, he anticipated the modern concept of the doctor–patient relationship. Aretaeus of Cappadocia (first century) established a connection between the traditional concepts of melancholia and mania in his two books on acute and chronic diseases, indicating that melancholia is commonly the beginning of mania and attributing the seat of mental disease to the precordial area as well as to the head. Soranus (first to second centuries) advocated truly humane principles in the management of the mentally ill: rooms were to be kept free from disturbing stimuli; visits by relatives were restricted; attendants were encouraged to be sympathetic; and during lucid intervals patients were encouraged to participate in discussions and dramatic performances. Though none of his writings are extant, Caelius Aurelianus reported Soranus's ideas in his fifth century *On Acute and Chronic Diseases*.^{1a} See S. Jackson's chapter on melancholia.

Born at Pergamum in Asia Minor, the second century Greek physician Galen authored some 400 works in which he codified and synthesized virtually all the medical knowledge of his time. His views were to dominate medical thinking for the next 15 centuries. He is best known for his tripartite theory of spirits: natural spirit from the liver; vital spirit from the lung; and animal spirit from the brain. According to Galen, natural spirits from the abdominal cavity are transformed first into vital spirits under the influence of circulatory and respiratory functions, and finally into animal spirits through a process of distillation occurring in the brain and nerves, a doctrine that survived into the seventeenth century.¹ Galen considered the brain the center of sensation and voluntary motion as well as the seat of all normal and abnormal mental activities. He accepted the theory of the four humors and divided mental disease into acute (often febrile) and chronic forms, the latter including melancholia and mania.² Stressing the link among body, mind, and soul, he maintained that the health of the soul depended on harmony of the rational (brain), irascible (heart), and lustful (liver) parts of the body. Although mostly inclined to prescribe somatic therapies such as bleeding, drugs, and diet, he appeared to leave room in his late treatise *On Passions* for psychological understanding by advocating guidance by an older person for patients overwhelmed by their passions. Agnostic on religious matters, Galen was opposed by many Christians.

Literary-philosophical concepts can be traced as far back as the Homeric poems (tenth and ninth centuries B.C.E.), in which the three components of the soul—*psyche*, *nous*, and *thymos*—were still poorly differentiated. *Psyche* (“breath” in Greek), the force that kept human beings alive and that persisted as the spirit of the dead, was regarded as fundamental. In the *Iliad*, the characters act under the influence of strong impulses sent by the gods, whereas in the *Odyssey*, a notion of personal responsibility, based on a connection among success, complacency (*hubris*), sin, and guilt is already evident.

In the fifth century B.C.E., Plato conceived of health as harmony and of mental aberrations as due to disharmony between body and soul. In the dialogue *Phaedrus* he presented four kinds of madness: prophetic (a paroxysm of enthusiasm reached during ecstatic prophecy at the oracles); teletic (achieved through discharge of uncontrolled impulses during ritual ceremonies); poetic (the state of inspiration leading to artistic creation); and erotic (related to human love, which in Greek culture included homosexual as well as heterosexual relationships). In the *Republic* he presented a tripartite subdivision of the soul into appetite, reason, and temper; in the *Laws* he discussed legal issues concerning the insane.

In the fourth century B.C.E., Aristotle combined medical and Platonic motifs in an empirical approach to human life, supporting the view that black bile caused disturbed sensory perception and hallucinations. In a famous passage of the *Problems* he introduced the concept of constitution by raising the issue of the relationship between creativity and melancholic disposition. Elsewhere, in line with his naturalistic orientation, he postulated that the proper balance of passions by various means, such as theatrical catharsis, wine, aphrodisiacs, and music, would have a therapeutic effect on mental disorders.

Stoic philosophy, which flourished especially in the third century B.C.E., emphasized the notion of *apatheia* (moderation of passions) in every human act—essentially a philosophical version of the medical notion of harmony among different forces. Cicero (first century B.C.E.) gave in his *Tusculan Disputations* a detailed description of the passions, in which for the first time *libido* was introduced with the meaning of strong desire. According to him, excessive perturbation of passions may give rise to *morbi*, actual diseases of the soul.³ Seneca the younger (first century) considered reason as basic for proper human behavior and differentiated passions, perturbations of the soul, from mental disease. He advocated the cultivation of wisdom and friendship and the rationalization of morbid processes as medicine of the soul, that is, philosophical examination of the realities of death, pain, and infirmity. Leibbrand suggested that these Stoic themes anticipated the tenets of modern psychotherapy.⁴ The Epicurean Lucretius (first century B.C.E.) in his *De rerum natura* conceived of the soul as mortal and made up of atoms dispersed through the body. His influence was pervasive for centuries. He is considered the precursor of the materialistic and skeptical trends of the Renaissance—although Platonic dualism would also influence “high” and “later” Renaissance intellectuals; and although the Renaissance humanists and artists were still, overwhelmingly, Christian.

By and large, Roman treatment of psychological topics tended to repeat and expand upon Greek themes, the single exception being the contribution of Roman law to the development of legal psychiatry.⁵ The explicit treatment in Roman law of matters of responsibility, competence, custody, ability to contract obligations, and so forth exerted great influence on the late *corpus iuris civilis* of the Justinian era (sixth century), which in turn affected legal attitudes toward the mentally ill for many centuries.

Roman playwrights portrayed madness on the stage in the form of Bacchantes, in which women acted in frenzied ecstasy, a motif also used in the *Aeneid* by Vergil (first century B.C.E.), who—regarded by Christian writers as a precursor of the Christian message—was to have great influence throughout the entire Middle Ages. Ovid (born 43 B.C.E.) wrote in his *Metamorphoses* about hell broth, magic philters, and love potions—all themes typical of the medieval tradition.

Three ancient therapeutic methods, common throughout the ancient Mediterranean world, assumed special importance in Greek civilization, and, later on, continued to be used in pagan and Christian rituals: (1) The interpretation of dreams, which from the prophetic emphasis of Hebrew times eventually acquired more personal significance, finally degenerating into the dream books of the Hellenistic period; (2) the techniques of incubation, stemming from the unconscious need to free Dionysian forces from the gentle constraints of Apollonian harmony and resulting in widespread structured rituals of pilgrimages to shrines and in purifying ceremonies; and (3) the therapy of the word (the persisting belief in the curative power of the word), already central to the technique of the medicine man in pre-literate cultures, which assumed paramount importance in the Homeric poems (as prayer, magic charm, or suggestive speech), in Socrates’s *maieutic*, and in Aristotle’s *Rhetoric* and *Poetics* as the distinct power of the *logos* for dialectic, persuasive, and cathartic effects.⁶ See Simon’s chapter on classical antiquity; and Wallace on “historical psychology” in Chapter One, and on ancient Egypt and Mesopotamia in Chapter Two.

The Early Christian Period

These themes and therapeutic modes, initiated in the classical epoch, continued to exercise their influence in the following centuries. The Greeks and Romans basically (and despite intrusion of elements from popular religion) held a naturalistic view of man, viewing disease as malfunction of the body (*physis*) without personal responsibility. In contrast to this stands the Hebrew tradition. In the Old Testament there are several instances of madness caused by disobedience to God's commands and attributed to the departure of the spirit of the Lord or to possession by an evil spirit (Deut. XXVIII, 28). In some cases, particularly with regard to Saul (1 Sam. X), questions have been raised about prophecy as an ecstatic phenomenon reaching borderline psychotic states⁷—another instance of the obscure correlation between genius and insanity, that is, of the positive traits of the so-called “holy wild man,” later personified in the Gospels by St. John the Baptist. On the opposite side, Nebuchadnezzar came to signify the prototype of the “unholy wild man,” who, because of his sin of pride, was taken by furor, tore his clothes apart, and is depicted in medieval literature and iconography as wandering aimlessly—indeed as a wild beast on all-fours.

The New Testament introduced a new concept of man consisting mainly of three tenets: the psychological and moral inner life of the individual; the essentially otherworldly nature of man; and the emphasis on love (*caritas*, rather than the Greek concept of *Eros*) in human relations.⁸ There are three distinct kinds of reference to disease and medicine in the New Testament: metaphorical, literal, and didactic. In the metaphorical references Christ presents himself as a physician for whom sin is “a malady of the soul” (Matt. IX, 12; Mark II, 17; Luke V, 31). In the literal references disease is considered neither a necessary consequence of sin (John V, 14) nor a product of “devils” or “unclean spirits” (Matt. VIII, 32). The didactic references concern the new overture by Christ to the sick person in need of help (Matt. XXV, 37–40), regardless of the nature and severity of the illness.

Though the Christian message appears antithetic to classical culture, in reality traditional Greek themes are at the base of the novel Christian motifs. In the Hellenistic world two opposed trends emerged: the rationality of Neoplatonism and the irrationality of astrological, neo-Pythagorean, and Eastern religious beliefs.⁹ It was nascent Christianity that attempted to unify these opposite trends into an organic system of faith and practice.

The superimposition of these rational and irrational elements onto each other in the Christian synthesis resulted in an amalgamation of ideas and doctrines representing centuries-old traditions now colored by the tenets of the new religion.¹⁰ Common to these trends were some essential beliefs: man's nature becomes susceptible to illness by virtue of original sin; disease is to be construed as punishment for sin, a test of and means for purgation; and insanity is the worst of all diseases because it deprives man of reason, the faculty that makes him similar to God—indeed, insanity, through its irrationality, is a turning away from God.

Still, the Christian message focused on the forgiveness by Christ of all sins and on the moral obligation to care for the sick, no matter how abominable their condition.¹¹ Since, like the soul, the body was the work of God, some of the early Christian Fathers attempted to combine the new religious tenets with Hellenistic philosophical and medical ideas. Notably, for Origen in the third century, the power to cure does not reveal in itself anything divine, whether due to Asclepius or Christ; in the fourth century St. Athanasius and in the sixth St. Gregory of Nyssa held that, although original sin makes man susceptible to illness, treatment must conform to the soul's passionate states, which manifest in a “diathesis” or “condition” according to the type of sin predominant: rational, concupiscent, irascible, or mixed.

Most important of all the Fathers was St. Augustine, whose ideas in the late fourth to early fifth centuries molded the official attitudes and doctrines of the Church for centuries. Though Augustine did not occupy himself much with psychological (and even less with psychiatric) matters in his immense literary output, he authored the first autobiography in the modern sense, his famous *Confessions*. Augustine described the neonate's inability to differentiate between self and non-self; the smiling response as an expression of object recognition; omnipotent fantasies; and aggression as a fundamental aspect of being human. His philosophical attempt to demonstrate the existence of God on the basis of psychological memory made psychological analysis an intrinsic part of Christian theology.

Just as the lives and beliefs of the ordinary man in the street remained for the most part unaffected by Augustine's contributions to the development of Christian thought, so medicine continued to be influenced by classical Hippocratic and Galenic concepts, but now possibly ameliorated by the humanitarian concerns of the Church. In particular, Aretaeus, Soranus, and, later, Caelius Aurelianus may have been influenced by the new compassionate attitude introduced by Christianity.

New medical concepts did appear in the period bridging late antiquity and the time of the Church's dominance. In the fourth century the Greek physician Posidonius—probably the first physician to concern himself mostly with psychiatric disorders—closely studied brain diseases. The first person to attempt to localize brain functions, he tied imagination, understanding, and memory respectively to the anterior, median, and posterior brain ventricles, an idea that was accepted for centuries, probably due to its analogy with the classical tradition's triadic division of the soul.^{12,13} Based mostly on his own experience, he also described and suggested therapies for phrenitis, lethargy, coma, catalepsy, giddiness, nightmare, epilepsy, melancholy, and hydrophobia. There was, however, little novel theorizing going on about mental illness. Thus, Oribasius in the fourth century, Alexander of Tralles and Aetius of Amida in the sixth, and Paul of Aegina in the seventh century all essentially repeat the themes we have discussed.^{14,15}

By the seventh century new clinical psychiatric pictures had emerged to supplement the classical ones of mania, melancholia, and phrenitis. Lycanthropy, incubus or nightmare, love-sickness, possession, and effeminacy all tended to fuse medical ideas and moralistic concerns with religious beliefs. Medical encyclopedias came to be written by clergyman, notably by Isidore of Seville in the seventh century and Rabanus Maurus in the eighth century. Only hysteria was omitted from their compilations, as it was deemed a disease, not of the brain, but of the uterus wandering throughout the body, and was mainly to be found in virgins or in sexually dissatisfied women.^{16,17}

Neither theological nor medical concepts could replace the importance of popular beliefs stemming from old pagan traditions.^{18,19} As Bonser put it, "the nature of the 'magic' employed before and after the conversion to Christianity is to all intents and purposes one and the same."²⁰ From the beginning Christian writers strove to preserve the message of morality and charity brought forward in the Gospels by dissociating their religion from charlatanism and superstition. Christian authors vigorously attacked pagan practices such as idolatry; the cult of the dead; the animistic worship of nature; ceremonies such as ritual dances related to famine or fertility held at the occasion of pagan festivals; witchcraft and sorcery; augury and divination; and, finally, astrology. But the very fact that for centuries Christian writers launched invectives against these practices demonstrates their continued existence in the Christianized world. The invectives did not work. Pagan rituals continued with minimal changes in the new Christian religion.²¹

Popular practices for the treatment of epilepsy exemplify the retention of old superstitions in this period. Linked to the supernatural from early times (despite the Hippocratic belief in natural causes), epilepsy attracted superstitious and astrological explanations in an uninterrupted way. Epilepsy was treated with animal organs, with precious stones, with sacrosanct verbal formulas, and with saintly relics. Indeed, some of the saints who were so appealed to came to be venerated as patrons of epileptics.

Christ came to be viewed as a new Asclepius (*Christus medicus*), a healer of spiritual and physical disorders ranging from blindness and paralysis to possession by demons and even death. Christianity replaced the existing chthonic religions, from Orphic to Eleusinian, all of which shared the central sacred drama—rooted in fertility rites—of a god triumphant over suffering. The new Christian adepts underwent symbolic purification through the main sacraments of Baptism and the Eucharist (both testifying to the power of words) and gained entrance by a common meal to membership in a society intended to achieve serenity and freedom from earthly concerns in a spirit of brotherhood. Incubation turned into the use of churches and shrines—notably the tombs of the Apostles in Rome and the holy places in Palestine—for the healing of the sick, no doubt including the mentally ill. Cosmas, Damian, and St. Anthony (founder of Christian monasticism) were all venerated for their thaumaturgic medical abilities. St. Julian was considered able to calm the mentally ill, some of whom allegedly underwent improvement upon passing under an arcade built in the tomb of St. Dizier in Haut-Rhin in France.

The Monastic Period

The successive waves of invasions of Rome in the fifth and sixth centuries by Visigoths, Vandals, Huns, German Franks, and Saxons together with the extensive migrations of peoples, famine, and the great plague epidemic of the sixth century—"Justinian's plague"—contributed to the instability of the time and certainly accelerated the decline of the Roman empire. As is typical in ages of anxiety and despair and in periods of transition between old and new values, uncertainty for the future in the social and material world brought about a concern for personal salvation in the other world. In short, religion became paramount. Extreme forms of ascetic withdrawal developed, involving isolation in the desert, perpetual fasting, flagellation, and sensory deprivation. In the early to middle sixth century, Saint Benedict of Nursia in Italy mitigated the excesses of the Middle Eastern anchorites by establishing his famous Rule of combined prayer and work, which has remained cardinal for all succeeding religious orders.

Aside from the few on the fringe who opted for a total retreat from the world, Christianity also introduced some clarity into the lives of more ordinary believers by formalizing a series of deadly sins along with moral codes for coping with them. In the ancient Middle East there was a commonly shared matrix of beliefs in supernatural entities (especially in the power of evil spirits connected with the soul of the dead). Septuple sets of entities abound (not least the seven days of the week), as shown by the seven mortal sins corresponding to the seven planets, the seven ages of man, and so forth. The medieval cosmos was an allegorical world: everything important had layers of interpretable meaning. By wearing layers of meaning as we might wear layers of clothing, the medieval world attempted to overcome the uncertainties of worldly life with its plagues and monstrous and dangerous beings. Medieval thought superimposed its allegorical world upon the world of experience, subordinating the world of sense experience to the ideal world of religious truth. This continued to some extent into the succeeding Renaissance.

Of the seven deadly sins²²—pride, jealousy, temper, sloth, greed, gluttony, and lust—sloth is particularly important to modern psychology. Called *acedia* in Latin (from the Greek *acedia*, meaning lack of care, absence of spiritual zest), it was characterized by boredom, depression, obsessions, anxiety, and a variety of psychosomatic signs mainly affecting anchorites and cenobites devoid of human interaction.^{23–27} The fifth century monk Cassian from southern France, generally considered the master of the Western ascetic tradition, described *acedia* in detail and suggested ways of overcoming it, such as by going on a monastic errand or pilgrimage.²⁸ See Jackson's chapter on melancholia.

After St. Benedict's founding of the monastery of Montecassino near Naples in 529, other monasteries were founded in continental Europe in the succeeding centuries, important ones being St. Columban, St. Gall, Poitiers, Lisieux, Lyons, Reims, Fulda, Bobbio, Cluny, and Montserrat. These monasteries maintained the tradition of classical authors by acting as depositories for existing manuscripts and by having their monks copy and recopy them. As medical manuscripts were included, some monks came to view their vocation as a combination of pastoral and physical guidance. This was especially so as there were few physicians.

The real contribution to medicine, and to the understanding of mental illness, of these monk-doctors is conjectural and controversial, though popular literature has tended to emphasize the dramatic and supernatural aspects of miracles and prodigies allegedly performed by some of these healers.^{29–31} Many monasteries and convents, both Eastern and Western, did establish infirmaries for their own members, for local residents, and for pilgrims, on whose routes a number of them were located.^{32–34} In the Eastern Church these institutions were part of a vast network of services for the poor, the neglected, the crippled, and the elderly (those called in the late nineteenth century "defective and delinquent classes"), which was supported by the solid Byzantine administration.³⁵ In addition to traditional medical concepts and practices—as reported in texts such as Cassiodorus's *Institutiones* in the sixth century, Bede's *Historia ecclesiastica gentis Anglorum* in the eighth, and Rabanus Maurus's *De universo libri xxii* in the ninth century—important monastic hospices were founded, notably by the emperor Justinian and by the monk Theodosius, both near Jerusalem in the sixth century.³⁶ Theodosius's hospice apparently had the then-unique distinction of containing a special section for the mentally ill. The only similar Western facility seems to have been a special

ward for “furious phrenetic” pilgrims that was part of the Hôpital-Dieu des Ardans dedicated to St. Julian in France. A number of monasteries eventually became famous for the production of wine as well as for their cultivation and knowledge of herbs, some of which had medicinal applications.

Thus far, most of the material I have presented deals with political and ecclesiastical events, the only ones for which reliable records are available. The large majority of the population, living in primitive rural conditions, passed mostly unnoticed from generation to generation.³⁷ A simple description here of some basic aspects of early medieval life may help delineate the social and physical background from which diseases emerged. Illiterate and superstitious, most of the population lived in primitive dwellings in the country, lacking artificial light or heat, sewage facilities, and privacy. Events we would consider catastrophic—serious disease, epidemics, deaths (especially of babies), shortage of food, pillage by enemies, danger from animals (from house parasites to ferocious beasts in the countryside), unsafe travel, exposure to fire, and other calamities—all these were accepted with Christian resignation as part of the individual’s journey toward salvation, with the support of a strong extended family and neighbors. While men were involved in field work, hunting, or military pursuits in the service of the lord, women, who tended to remain at home and to perform all sorts of practices based on folk beliefs transmitted across generations, provided most of the medical care. From this derives the image of the female healer acquainted with mysterious and unusual procedures—important for understanding the later phenomenon of witchcraft. Most of the mentally ill were, likewise, kept at home and treated with herbs and other simple remedies. Some may have been put in the hands of itinerant healers. Others, especially if considered possessed by the devil, may have been brought to shrines or to exorcists who, since the fourth council of Carthage in 398, were required, as a sign of contempt for the devil, to take only one of the four minor orders and to be well versed in a long and complex ritual.³⁸

Some of the sick, assuming that their condition was caused by sin, may have benefited from the practice of repentance (*metanoia*) and from confession (*exomologesis*), both of which in early Christian times took place in public, not unlike shamanistic séances of nonliterate cultures. A number of the best-known Fathers of the Church, most notably Gregory the Great in the sixth century, author of the influential *Book of Pastoral Rule*, based their spiritual guidance and counseling on a combination of Stoic and Christian insights. From then on, the so-called “Penitential Books” (at first by Welsh and Irish writers, later by Continental imitators) relied on the traditional medical principle that “contraries are cured by their contraries.” Hence hope was prescribed for dejection, love for hate. These rule books became the standard works used by parish priests in matters of confession and penance. Guidelines for such pastoral counseling included adjusting the penalty to the personality of the sinner; the confessor’s attempt to identify with the sinner; and the importance of offering psychological insights. Pastors came, in time, to play an important role in the psychological well-being of their parishioners.^{39,40}

Arabic Culture

After its beginning in the year 622 with Mohammed’s *Hegira* from Mecca to Medina, the Moslem world stretched by the year 713 continuously from Persia in the East across the Middle East and North Africa to Spain in the West. Islamic culture was (and is) dominated in a different way by its holy book, the Koran, than was Christian culture (known as Frankish in the Islamic world) by its holy book, the Bible. Since in Islam the Western distinction between secular and religious does not exist, all political and legal institutions are religious by definition. Even the names “Islam” and “Koran” connote this: *Islam* in Arabic means “submission to God,” while *Koran* means “proclamation” (“Bible” from Greek *biblia* simply means “book”). The Koran does much more than provide a source of religious belief: it codified the Arabic language (classical Arabic is the Arabic of the Koran) and in detail set forth moral precepts for running individual life, family, and society. Just at a time that the West was descending into what used to be called “the dark ages,” the Islamic world, energetic and inspired by belief in the divine message of its conquests, was set to embark upon its equivalent of the Renaissance.

Muslim intellectual tradition begins with translations (usually by Syrian Christians) of Greek texts, many of which, with the loss of Greek as a language in the Latin West, ultimately were completely lost, with their contents only to be rediscovered centuries later in their Arabic versions.⁴¹

Early Arabic treatises on melancholia combined Greek humoral theory with influences from the East.^{42,43} The tenth century physician Rhazes (al-Razi) from Baghdad, then an important center of learning and science, compiled a great medical encyclopedia (translated into Latin as *Liber continens* by the Jewish physician Faraj ben Salim in 1279) in which he often related psychic events to the physical state of the body. He accepted the Aristotelian classification of three souls located in the cerebral ventricles, advocated confrontation with melancholics to stir them from their torpor, and discussed alcoholism as a disease. His contemporary Avicenna (ibn-Sina) also subscribed to the doctrine of humors and the four temperaments, attempting in his centuries-long influential *Canon of Medicine* to coordinate systematically the medical ideas of Hippocrates and Galen with the biological concepts of Aristotle. In his book he emphasized the role of emotional factors in understanding normal temperaments as well as for achieving stability in the personality.^{44,45}

The Orient has traditionally been the exotic “Other” for Westerners’ imaginations: the place where mysterious drugs, perfumes, and other unusual substances were produced; the source of aphrodisiacs and mood-altering drugs. While most of this belongs to the realm of superstition and fantasy, some drugs that have recently received much attention—notably *Rauwolfia serpentina* (reserpine)—were used early on by the Arabs.⁴⁶ More important, Moslem culture adopted from the beginning a humane attitude toward the mentally afflicted. They were enjoined to do so by the Prophet, who declared that the insane person is loved by God and is particularly chosen by Him to speak the truth. Hence, it is not surprising that, probably also influenced by Byzantium, from the seventh century on the Arabs founded institutions for sick people including the mentally ill, most of whom seem to have been manic-depressives.⁴⁷ Fragmentary reports of these institutions became known in the West as early as the twelfth century. A more complete description by the historian Evilija of the psychiatric hospital built by Sultan Bajazet II in Adrianapolis in the fifteenth century focuses on its relaxed atmosphere, surrounded by charming fountains and gardens, and on its therapeutic regimen, which included special diets, baths, perfumes, and concerts at which instruments were specially tuned to relax the patients.

Prevalence of Feudalism and the Beginning of the Modern World

A new era and a new artistic style began to emerge in the West around the year 1000. By then the “Carolingian Renaissance”—the revival of liberal arts and of the tradition of the Latin authors (but not the Greeks, now lost)—had peaked. Under the Carolingian dynasty education (largely based on teaching by rote memory) flourished again in much of Europe. To be sure, Rome itself was reduced to ruins and Europe was divided into a mosaic of principalities and fiefdoms dominated by cruel rulers; Spain was still under Moslem rule (and would be for another four centuries); and the Mediterranean Sea was infested with pirates. Yet, the monastic order of Cluny, founded in Burgundy in 910 as a model of zeal and devotion, was thriving. By the end of the eleventh century it was followed by the founding of both the Carthusians and Cistercians, from among whom emerged the mystic and statesman St. Bernard of Clairvaux.

Schools attached to large churches now flourished (“cathedral schools”). Outstanding among them was the cathedral school at Chartres, near Paris, where the curriculum slowly came to consist of the *trivium* (grammar, rhetoric, logic) and the *quadrivium* (arithmetic, geometry, astronomy, music). Although medicine was not emphasized, classical medical texts were collected and read.⁴⁸ Principal among the intellectuals at the school of Chartres were William Conches, who was well versed in anatomy and neuroanatomy, Bishop John of Salisbury, and Peter of Blois, who was much interested in medicine.^{49,50} Especially significant among these twelfth century thinkers was Hildegard of Bingen, who had been subject to visions from an early age and who was personally involved with many contemporary potentates.^{51,52} She authored a number of medical books, notably the *Liber simplicis medicinae* and *Causae et curae*, in which she also dealt

with insanity, which she attributed jointly to the Hippocratic humors and to sin stemming from the original sin of Adam and Eve.⁵³

Feudalism emerged from the breakdown of Carolingian society.⁵⁴ It was a complex system of beliefs and practices centered around the following main themes: customs characterized by the combination of fidelity and vengeance, indecency and prudery; by episodic brutality and cruelty; by strict isolation of the nobility in a rigid system of conventions geared to creating a showy impression; and by superficial religion in which outward forms of devotion became all important while actual faith declined. Appearance now dominated substance, with essence and accident, conviction and pretense blending together. Symbolism—St. Paul’s “*videmus nunc per speculum in aenigmate*”—influenced all aspects of life: allegory offered a visible form to such a connection (as shown by the strict meaning of colors assigned to people and things); the image of the world was characterized by impeccable order, architectural structure, and hierarchic subordination. Hence, certain numbers, maxims, emblems, and proper names (given even to inanimate objects) assumed paramount importance: since in God nothing was empty of sense, everything was directed heavenward. The “realism” of the Middle Ages springs from this concern with symbolism.

“Honor,” a strange mixture of conscience and egotism, prevailed in feudalism. The Crusades—those holy wars often typified by the predominance of earthly over spiritual goals, which took place with alternating successes and defeats between the eleventh and thirteenth centuries in an unusual psychological climate—exemplify the contrasting ideals of feudal honor. Gruesome and futile though they were, the Crusades did greatly contribute to widening the horizons and ultimately destroying the cozy closed belief system of the feudal world by opening commercial routes in various Mediterranean seaports and, all along, by exposing the West to the greater sophistication and learning of Arabic civilization. Westerners learned of the considerable Arab advances in mathematics, astronomy, chemistry, and medicine and rediscovered their own Greek past, beginning with Aristotle’s main works.

Things began to change. Traditional feudal ideals merged with a new humanitarianism to produce the Knights Hospitalers, the Knights of St. John of Jerusalem, the Knights of Rhodes, the Knights of Malta, and, finally, the Knights Templars—all geared toward charitable and humanitarian endeavors, such as shelters and hostels on the pilgrims’ routes as well as directly on behalf of the poor and sick, some of which included the mentally ill. Some of them were also “fighting orders,” as is well known.

Twelfth century literature reflects the pessimism of the age: a time of brutal wars, upheavals, and destruction; a time when the old systems and values were breaking down but were not yet replaced by the new.

The Revival of Learning in the West in the Thirteenth Century

Despite the upheavals, signs of revival were apparent. In some areas of Europe, notably southern Italy and Sicily, cultural forces were at work that would result in an early renaissance, a rebirth of learning. With the rise of the bourgeoisie (the development of which will be discussed later), learning—traditionally a clerical monopoly, first in monasteries, then in cathedral schools—was progressively taken over by laymen. The first of these new centers of learning consisted of a sort of corporation of medical teachers and students that flourished from about the tenth to thirteenth centuries as a confluence of classical, Arabic, and Jewish trends in Salerno, near Naples. Probably under the influence of the well-known Abbey of Montecassino, an important center of medical practitioners developed there, known now as the school of Salerno.^{55,56}

Rather than for originality, they came to be remembered for their practical approach to the patient based on common sense, as represented in the famous *Regimen sanitatis Salernitanum*, essentially a popular manual of hygienic maxims presented in poetic form.⁵⁷ It describes traditional medical concepts and therapeutic measures. No interest is shown in mental illness. Yet, the best representative of the school of Salerno, Constantinus Africanus (eleventh century), a translator of Greek and Arabic medical writings, authored a treatise on melancholia that, although based on traditional themes (mainly on Rufus of

Ephesus' ideas), showed some originality in the description of the symptoms: sadness (resulting from the loss of the loved object); fear (of the unknown); withdrawal (staring into space); and delusions regarding close relatives.^{58,59} See again Jackson's chapter as well as Simon's and Berrios's.

From the very bourgeoisie that led the way toward secularization of the Western world sprang in the thirteenth century two of the most famous saints: Francis from Assisi in Italy and Dominic from Guzman in Spain, founders of, respectively, the mendicant orders of the Franciscans and Dominicans, the first geared to helping the poor and returning the Church to its original purity, the second to converting the unfaithful primarily through preaching. Unlike the old monastic orders, these two new orders tended to develop in cities and quickly acquired cardinal importance in the world of learning.

The same thirteenth century saw the rise of new philosophical concepts that greatly influenced later thinkers. In the twelfth century Averroes (ibn-Rushd), a physician and philosopher from Cordova in Spain, became known for so-called "Latin Averroism"—a doctrine of the "double truth" that postulated that contradictory assertions from natural science and theology can both be true. Also from Spain, and trained by Arab scholars, was the Jew Moses Maimonides (Moses ben Maimon), author of the famous *Guide for the Perplexed*, a sort of philosophical manual aimed at proving that nothing in science is irreconcilable with religious beliefs. In a passage that calls to mind the nineteenth century concept of monomania, he wrote that not those who run wild in the streets or throw stones should be considered as mentally ill, but rather those whose minds are clouded by fixed ideas.

The thirteenth century also saw the founding of the earliest universities, essentially free associations of teachers and pupils governed by independent statutes under the protection of the liberal bourgeois attitude prevailing in many cities. With the contribution of some of the finest Franciscan and Dominican minds, a number of the new institutions acquired great renown: Bologna for law, Padua for natural philosophy, Paris for theology, Montpellier for medicine, Oxford for science.^{60,61} It was at Oxford that Robert Grosseteste and his student Roger Bacon set the conceptual foundation for modern science as an empirical enterprise. Singular among the universities stands the University of Naples as a state institution, founded in 1224 by the emperor Frederick II. Prince and scholar, Frederick attempted to synthesize Christian, Jewish, and Arabic trends at his splendid court in Sicily, surrounding himself with many learned men, among them Michael Scot, a controversial astrologer, translator of Aristotle, and developer of a proto-physiognomy based on a hidden correspondence of parts of the human body with heavenly bodies.⁶² Frederick is also credited with issuing formal rules for the medical profession in 1231⁶³: the curriculum was to include three years of logic followed by five years of medical teaching based on original writings of Hippocrates, Galen, and Avicenna, after which the candidate had to pass an examination, following which a license was granted by the state authorities.⁶⁴ The state, while assuring a comfortable living to all physicians (based on a proper honorarium), expected them to treat the indigent without charge. This regulation of the medical profession was soon introduced into other universities. By that time, the study and practice of both medicine and civil law had been forbidden to clergymen by the Church.⁶⁵

Though both Franciscans and Dominicans contributed greatly to the intellectual rebirth of the thirteenth century, two Dominicans came to dominate the century. Albert, called "the Great" even during his lifetime, was influenced by classical philosophers, Christian fathers, the newly rediscovered Aristotelian sources, and Arabic thought. He left an imposing series of treatises of physics, astronomy, geography, mineralogy, botany, and zoology. In psychology, he followed traditional views⁶⁶ while advancing notions of physiognomic types that anticipated modern constitutional theories.⁶⁷ Albert's greatest importance for us, however, is that he was the teacher of the greatest intellect of the Middle Ages, Thomas Aquinas.

From southern Italy, Thomas compiled a remarkable synthesis of theology based on a combination of the main classical (Aristotelian), Judeo-Christian, and Arabic sources in his monumental *Summa contra gentiles* and *Summa theologica*, the latter becoming by the late nineteenth century the official teaching of the Church. Because of this, it is worthwhile to summarize briefly his psychological ideas, particularly those from his important commentary on Aristotle's *De anima*, which indirectly influenced psychiatry.^{68,69} For Aquinas the mind is composed of human faculties divided into: (1) organic faculties (nutritional, growing, and generative powers); (2) sensory faculties, in turn divided into cognitive (consisting of five

external and four internal senses), appetitive (*concupiscibilis* and *irascibilis*), and motor; and (3) rational faculties, inclusive of thought and volition. Comprehension of reality occurs through the interplay of passive intellect (the percepts presented by the senses to consciousness) and the active intellect (the abstract processes of the mind), while the will follows what the rational insight presents as the preferable good. Thomas subscribed to the importance of the bodily constitution of the Hippocratic school, to Galenic localizing concepts, and to the influence of demons and stars.⁷⁰ He also upheld the traditional subdivision of mental disorders into melancholia, mania, and dementia. His main contribution to psychology consisted in the attempt to accept instincts of pleasure, of aggression, and, in particular, of the expression of human sexuality as part of the comprehensive unity of the personality.^{71,72} Since Thomas assumed that intellect, the divine spark in man, cannot be affected by pathological processes, mental diseases, according to him, always result from an imbalance in the underlying physical substrate of the individual,⁷³ which makes Thomas a forerunner of the somaticists and an opposer of the mentalists (the two contrasting psychiatric currents for the last two centuries) and explains the penchant for a somatic etiology of mental diseases in countries of Catholic tradition, which were most influenced by his doctrine.⁷⁴

That was the era of grand intellectual syntheses in which the knowledge of the time was grasped in its entirety and presented from a theological perspective—hence, the importance of the word *universitas* for the thirteenth century. The great philosophical debate of the age (still continuing heatedly in our time) was that of nominalism versus realism: the nominalists holding that only concrete individuals existed, while the realists held that classes of objects were also real. The debate marks the beginning of the philosophy of language, since it was as much about what words referred to as it was about what kinds of things existed. Some have held that nominalism, by tending toward the positive observation of facts, fostered the development of the science of man.⁷⁵

It was also the age of encyclopedic popularizations for the less learned majority. Gilbertus Anglicus's important *Compendium medicinae* described, among other symptoms, auditory hallucinations, irrational fears, and threatening visions, advocating for treatment building up the patient's confidence, especially in cases of distress and suspiciousness.⁷⁶ Bartholomew of England's *De proprietatibus rerum* is also significant. Bartholomew deemed the passions "of business, of great thoughts, of sorrow and too great study, of dread and danger" as conducive to insanity.⁷⁷ A little later the famous physician Arnold of Villanova, while still mixing clinical observations with astrology and alchemy, discussed love-madness, a then-emerging concept related to melancholia, in the context of the four humoral types.^{78,79} Still later, at the beginning of the fourteenth century, the well-known Montpellier teacher Bernard de Gordon described in his *Lilium medicine* a succession of states in melancholia from the hidden (or masked) to the manifest and the complete, this last characterized by withdrawal and total social dysfunction. Furthermore, he considered love as "madness of the mind" ("*amor est mentis insania*").⁸⁰

Social and Economic Progress in the Thirteenth Century

The revival of learning just discussed was an expression of the social and economic developments that had taken place in the same period.^{81,82} Typically, land was now cultivated in a less slave-like share-cropping system. Population increased everywhere from the thirteenth century on. Ties to clan or lineage loosened and were superseded by family ties and by marriage based on mutual consent, evidencing family tenderness. Emerging from the traditional triad of aristocracy, clergy, and peasantry, the new bourgeoisie consisted mainly of people involved in business and small industry, who progressively assumed roles previously enacted by the nobility. Cities, most still small, developed along the main lines of communication (generally used during the Crusades): the sea (Venice, Genoa, the northern cities of the Hanseatic league), rivers (Paris, London, cities along the Rhine), or important land routes (Nuremberg, Strasbourg, Bruges, Vienna). The largest guilds, gathering together those involved in the same trade or industry, acquired social and even political power, leading to special privileges for members. The guilds also became involved in community activities, some of which were charitable in nature, such as the founding of hospitals, and in

some of which women played a considerable role. Trade between urban centers burgeoned all over Europe, with regions developing specialties (minerals from Germany, clothing from Tuscany, the northern cities, and England, seafood from seaports, and so on).

Cities expanded and grew in importance, stimulating activity in many areas, from literary to artistic and juridical. With the success of recurring regional fairs (especially at Lyons, Frankfurt, and Leipzig), new means for financing trade developed, in particular banking. Initially in Genoa and Venice, both great maritime centers, then in Florence, the roots of capitalism were growing. Influential families, such as the Florentine Medici, became lending companies to kings and the Church, acquiring in the process immense prestige. Signaling the change to a mercantile culture, avarice (*avaritia*) replaced arrogance (*superbia*) as the capital sin.

“*Natura est ratio*” (Nature is reason) wrote Albert the Great, echoing his contemporary, the Franciscan Alexander of Hales’ “*ipse ordo est pulcher*.” Alexander’s *Summae universae theologiae*, the first amalgamation of Augustinian Christian doctrine with the Aristotelian system and Arabic thought, was much used by Aquinas and others with system-building intent. The construction of the great cathedrals of the period (such as those at Chartres, Reims, Amiens, and Cologne), some not completed for hundreds of years, represented in stone the universal order expressed in the theologians’ *Summae*, exemplifying concretely that reality was based on number and clarity.

Both the Empire and the Church had attempted to build a society founded on such order. Frederick II’s effort to establish a centralized state system was crushed by the rising power of the princes and by the consolidation of papal power, first by Innocent III and then by Boniface VIII. Ironically, it was the thirteenth century that, while expressing its vision of central order, instead developed modern nation-states. In France the monarchy consolidated, becoming truly royal, while in England the Magna Carta of 1215 forced King John to recognize the rule of law as superior to regal will, thus leading to the establishment of parliament. A regal bureaucracy came into existence to centralize administration and collect taxes, now necessary to support the increasingly luxurious and pompous style of the court.

The Church assumed great temporal power, as evidenced by its issue of decretals and bulls, control of universities, and establishment of new religious orders and the opening of various ecumenical councils. Coeval with this increased ecclesiastical control, heresies arose and spread: the Waldenses in Lyons and the western Alps, and the Cathari in Languedoc, who came to be called Albigenses. Claiming to free the church from corruption and to return it to the purity of the early Christians, these heretical movements actually were a rebellion against the rules of the feudal world, supported by social outcasts and by many women resentful of male domination. Its unity and orthodoxy threatened by these heresies, the Church reacted to secure its power (1) by instituting the Inquisition (established in 1229 by Gregory IX at the Synod of Toulouse and run by the Dominicans); (2) by conducting, with the support of secular monarchs, crusades against the unfaithful, which, aside from the heretics, came to include Moslems and Jews, resulting in some pogroms against the latter; and (3) by instituting, beginning in 1300, the jubilee year. The church had become a monarchy.

The Impact of the Late Middle Ages on Human Life: The Waning of the Middle Ages

The fixed social order of the feudal triad of nobility, clergy, and peasantry, according to which one’s station in life was determined before one was born, slowly began to be replaced by a more flexible society in which social barriers could be overcome and in which the individual began to be more important. Expressing more precisely than Latin nuances of tender feeling, vernacular literatures arose and developed new literary forms in which the expression of individual emotion was more important. Paramount here was the emergence of “courtly love” (“*amour courtois*”) in the western Mediterranean countries. Stemming from a blend of Neoplatonic (devaluation of the material), aristocratic, and religious (the cult of the Virgin Mary) motives,⁸³ courtly love became a ritualized form for dedicating pure and secret love to

the idealized lady—always a woman of high lineage married to someone else. Ascetic ideals were exalted, while sensual impulses were rigidly restrained. The noble woman could provide “magic protection” to her lover, who was expected to pass all kinds of tests through a mystical connection between love, masculine courage, and sexuality—that is, through a new mundane mystique of love.⁸⁴

Assigned on one hand the role of idealized desideratum in the novel concept of courtly love, women on the other hand were represented in substantial numbers in the equally new heretical movements emerging in the same areas. Whether in the context of courtly love or in their rebellious attitude toward the ruling Church, women were personifying men’s visceral fear of them, which can be traced from the earliest cultures and which is unquestionably related to the ambivalent attitude of males toward women as carrier of the mystery of female physiology and the awesomeness of birth. A series of ominous female deities among the Indians, Egyptians, and Greeks documents this ambivalence toward women. Jesus had scandalously mixed freely with women, including public sinners like Mary Magdalene, and had accepted them as disciples. But his message did not endure, replaced by Paul’s misogyny, codified in patristic tradition.

However, this can be overemphasized; as Paul was in full accord with women playing prominent roles in their particular congregations—e.g., Priscilla in Corinth. Moreover, Paul’s misogynistic side, should not lead to ignoring his prepotent role in the early expansion of Christianity; or the theological/pastoral and spiritual/moral gems in his *Letters*. Too, Paul was a skilled administrator; effectively mediating between the personality-based cliques in the early churches. Nonetheless, combining the classical view of woman as inferior to man with the Hellenistic belief of woman as responsible for all sorts of occult practices under the influence of the devil, this tradition resulted in the subservient legal and economic position of most women in the medieval world.⁸⁵

Nevertheless, Sarah Pomeroy has demonstrated that in some areas, such as Hellenistic Egypt, women fared much-better than in others. See also Vicki Leon’s entertaining account of 200 women prominent in antiquity.^{85a} The Hellenistic age also gave a prominence to statuary/sculpture and painting of the female nude—as opposed to the obsessive attention to the male nude characteristic of Greek Archaic and classical times. And the Hellenistic (and later Roman) Pantheon was filled with important goddesses and the (often oracular) priestesses serving them.

At the root of much of this attitude was man’s fear of woman as judge of male sexuality, expressed in the debasement of woman as a sexual partner and in the tremendous ambivalence toward homosexuality because of the passive role in it played by males. As with misogyny, homosexuality has been so clouded by rationalization and defensiveness that only recently has its history, based on a re-reading of the primary texts and on an unbiased assessment of cultural factors, begun to be understood: unconcern in classical societies; tolerance by the early Church; hostility during the dissolution of the Roman Empire; reappearance of a homosexual movement during the rise of the medieval cities in the eleventh and early twelfth centuries.^{86–88} Paradoxically, the very motives pointing to the inferiority of women led to the establishment of strong ties among men, a sort of acquired “siblingship” (French *affrèment*), notably through fraternities based on blood rituals—which themselves reveal a strong homosexual component.

Still, such misogynist proclivities were countered in a number of ways. To begin with there was, as mentioned, the elevation of women in the tradition of chivalric courtly love—and the legends, literature, and troubadorial songs and music it inspired. Then there was the 11th century-onward passionate Italian devotion—by men as much as women—to the cult of the Virgin Mary (“Mariology”). In the arts she held pride of place fully as much as her son Christ. Furthermore, women—such as St. Clare, a close friend of St. Francis—founded their own conventual orders, which rapidly expanded. Such convents and entire conventual orders, received Papal approvals; and not a few of their founders (as well as important medieval and Renaissance women mystical writers and theologians) were sanctified (i.e., “sainted”). Also, the Mothers Superior of the Orders, and the abbesses of their various houses; amassed great wealth and clerical/secular prestige; as well as performing indispensable charitable work; and founding all-purpose hospitals for the medically ill and the mad—as well as for orphans, the poor, and the abandoned elderly. Some of them were clerical medics, knowledgeable of botanical/herbal and other remedies. And “doctor ladies” generally were key to health-care in the non-M.D.’ed villages and rural areas. Too, wealthy bourgeois or

aristocratic widows fared progressively-better; in terms of *de facto* (and later *de jure*) civil, legal, and financial rights in Italy's city-states (some becoming writers and important patronesses of the arts). See Vicki Leon's additional book on 200 prominent women in medieval and Renaissance times; as well as the many women cited in John Finies's *Who's Who in the Middle Ages*.^{88a} Nor was the *Pater familias*—or, in the event of his decease, the oldest brother—; of the aristocratic and wealthy bourgeois clans; indifferent to the marital welfare of their daughters and sisters. Finally, let us not forget that much of the Inquisition's activity was directed against the male, as much as female, members of the mushrooming heretical sects of the later-middle ages and Renaissance—e.g., Cathars, Albigensians Hussites, etc. Too, as will be elaborated in the next chapter; many of the individual witchcraft-accusations were against economically-dependent old widows or spinsters, who infuriated (male *and female*) burghers with their constant “panhandlings” and curses when refused.

Some seventy years ago, the Dutch Johann Huizinga presented a new view of the late Middle Ages according to which the all-encompassing Catholic structure of Europe, which reached its peak in the thirteenth century, was shattered by a series of calamities and ominous events: the destruction and upheavals caused by the Hundred Years War between France and England (1337 to 1453), the endemic spread of the black plague throughout much of Europe, the diffusion of heretical movements in several countries related to the decay and corruption of Rome, the continued menace of the Moslems culminating in the fall of Constantinople in 1453, and the Great Schism (1378 to 1417).⁸⁹ This precipitous erosion of centuries-old ideas and practices resulted in a “general disposition” to melancholia, reflected in the prevalence of the theme of death; in concern with putrefying corpses (hence the belief that the bodies of certain saints never decayed); in a macabre vision of death (mainly, the dance of the dead); and hellish punishments in endless artistic representations (including famous cathedrals).

Since the publication of Huizinga's *The Waning of the Middle Ages*, historians have confirmed its central insights while stressing others on the basis of fresh data obtained from economic and social history. This has resulted in a much less dramatic picture of the late Middle Ages, and in an image of a slow, unevenly progressive development of medieval society.

In summary, from the decay of the Roman Empire, a period of social unrest and political upheaval had ensued in the early Middle Ages, slowly stabilized by the all-pervasive role of the Church in Western countries. At the same time, in the Eastern areas, Byzantine civilization continued for several centuries, until it was superseded by the emergent Arabic civilization, which quickly spread to the Iberian peninsula. A rural lifestyle, largely centered around rather primitively organized self-sufficient groups, came to dominate the West.⁹⁰ Europeans were considerably influenced by many of the progressive and humanitarian aspects of Arabic civilization, especially in the ninth and tenth centuries. The emerging feudal world resulted in the growth of a structured society typified by formalism and an allegorical symbolism that became the characteristic cliché of the medieval world. The slow rediscovery of classical civilization, the consolidation of social life under stable political entities, the progress achieved in agriculture, industry, and commerce, and the ecclesiastical development of the Church led to a theocentric image of the world in the twelfth and thirteenth centuries. The rising role of the bourgeoisie, centered around family life and favoring expression of personal feeling, slowly overcame the strictures of the feudal order, establishing the premises of modern parliamentary and capitalistic society in the West.

The progression toward a centralized and orderly culture was severely disrupted by the calamities just mentioned and by the constant advance of the Moslems in the East.^{91–93} The anxiety elicited by these events led to overwhelming fears expressed in various forms: fear of water, of the dark, of astronomical phenomena, of death, and of the very end of the world.⁹⁴ Great masses of people reacted in two contrasting, yet complementary, ways: on the one side, by trying to expiate the guilt (unconsciously assumed to be connected with sin) through public manifestations of atonement (such as processions), through collective forms of self-punishment (such as flagellations), and by search for reform and purity (such as heretical movements); on the other side, by projecting blame on well-defined groups (Moslems, Jews, heretics, women, homosexuals)—with the strong support of most rulers and, in particular, of the Church, most notably through the establishment of the Inquisition.

Still, alongside the juridical prosecution of homosexuals; was a certain tolerance of them among the Florentine intellectual elite—in keeping with their idea of Florence as the “New Athens,” (which of course had a similar tolerance for it, in certain well defined intellectual and artistic circles). See, for example, Plato’s *Symposium* and *Phaedrus*; as well as the many male “homoerotic” Greek vase-paintings. Also the elite of the army of Thebes (a Greek city-state) was constituted by the fearsome “300”: 150 homosexual couples. The Thebans felt each man would fight harder—to protect his lover. Despite some indications that the classical-Greek love-poetess Sappho—and her island of Lesbos—harbored female homosexual tendencies; the female voice was so generally silenced in all-male “democracies” such as Athens; that it is difficult to know the extent of “Lesbianism.”

Contemporary historiography has been debating the extent and pervasiveness of the feeling of annihilation that developed in the fourteenth and early fifteenth centuries. Social phenomena, literary texts, and artistic creations attest to the presence of such a feeling. Nonetheless, the expansion of the known world with discovery of entirely new areas, the success of protocapitalist business enterprises, and the achievement of new expressions in both individual and social life (notably the emergence of family feelings and the beginning of the balance of power) signify the prelude to a new concept of man anticipating modern civilization.

All this serves as the background for understanding man and his psychological aberrations in the span of the thousand years of the Middle Ages.

Basic Medieval Tenets Concerning the World and Human Nature

Meaningful discussion of psychopathology and mental illness in the Middle Ages requires a propaedeutic consideration of the characteristics of the medieval world and of human nature as then understood.

The medieval world consisted of, not one, but many Christendoms, the main difference between them being the distinction between Northern and Mediterranean cultures, what Ferdinand Braudel called the dividing line of olive trees.⁹⁵ Despite the two cultural styles, some traits are still valid for the Middle Ages in general.⁹⁶ According to Isidore of Seville in the fifth century, the world was considered to be static, a concept that included the supramundane world of the heavens as well as daily life on the earth. In the absence of a concept of process, the world was construed to consist of absolute qualities rather than relative quantities. Time itself was conceptualized as qualitative rather than linear (hence the disregard for exact dates in medieval chronicles), essentially as pendular and cyclic.

This prevailing orientation toward spatial and geometric order was founded on the Neoplatonic concept of reality as plentitude, as “fullness” of the realization of conceptual possibility in actuality. Reality was conceived as a “great chain of being,”⁹⁷ that is, as a hierarchy (a word coined by the Neoplatonic pseudo-Denys in the fifth century) of an infinite number of links ranging from the *ens perfectissimum* to the lowest possible form. Along such a chain of being, which may be considered an uninterrupted sequence from the material to the spiritual and from the insentient to the intelligent, man was viewed as a microcosm extending from the lowest of creation to the Creator. Introduced by Nemesius, Bishop of Emesa in Syria, at the end of the fourth century in his *On the Nature of Man*, the earliest extant handbook of philosophical or theological anthropology, this concept of uninterrupted linkage was accepted by all great medieval thinkers and became central for the understanding of human beings.⁹⁸

Such a view of reality as completely ordered entails that the overall order of the universe would allow for an array of phenomena—from mysterious illness to social upheavals—considered by the ordinary person as “dis-order.” Indeed, instances of such “dis-order” had been explained from early times as the conflict between good and evil forces in the universe, a concept opposed to the aforementioned chain of being. It would be the goal of Christian theologians to integrate these two opposing views throughout the centuries.

For the ordinary person, however, the reality of the universe was given once and forever by God. Man had to accept it without any possibility of choice. From this principle flows the medieval tendency to assign order and legal status to every object and animal and to consider feudalism (with its tripartite division of those who pray, those who fight, and those who labor) as an immutable system of rights and as a way of life.

“Dis-order” was accounted for in this totally ordered system by appeal to wonders—mostly unusual astronomical phenomena such as comets, heavy storms, and earthquakes—as a bridge between nature and man. So the orderly flow of reality was often interrupted by events whose importance was strictly dependent on their unusualness.

In the attempt to tie together phenomena that seemed utterly separate from each other, two concepts—so pervasive as to be at times used almost unconsciously—became paramount: symbolism and allegory. Symbolism (from the Greek meaning “to throw together, to compare”) meant the representation of the concrete through the abstract, in the sense that each material content represented something corresponding to it at a more elevated level, that all of reality was a “hierophany.” Allegory (from the Greek meaning “to speak in other terms”) meant the representation of the abstract through the concrete, in the sense that each immaterial concept could be perceived in some concrete form. As Huizinga incisively put it, “Symbolism expresses a mysterious connection between two ideas, allegory gives a visible form to the conception of such a connection.”^{98a}

Endless expressions of medieval civilization convey a symbolic meaning: numbers (in particular, three, as in the Holy Trinity, and seven, as in the seven deadly sins and the seven virtues),⁹⁹ colors (as in the conflict in Italy between Guelphs and Ghibellines, which evolved into a conflict between “Blacks” and “Whites”), words (hence the importance of proverbs, emblems, and mottoes), and gestures (of faith, submission, prayer, penitence, benediction, and exorcism and in the literary genre of *chanson de geste*). As for allegory, both virtues and vices were portrayed as women, and sins were depicted as animals.

Closely related to symbolism and allegory was the ceremonial character of much of medieval life, with strict rules governing attire, behavior, and speech, mostly based on the aristocratic value system. Human actions were viewed not as cause and effect, but according to their finality, that is, as directed heavenward, with the result that chivalric culture was, as Huizinga described it, “marked by an unstable equilibrium between sentimentality and mockery,” while “the line of demarcation between conviction and ‘pretending’ often seems to be wanting.”¹⁰⁰

From the medieval perspective of theophany, the clerical view of human nature was about man in general, not actual persons. Types, not individuals, were emphasized. Accordingly, man was viewed as the battlefield between vices and virtues, paired according to order rather than according to human nature, and with, in line with Neoplatonic principles, chastity being the highest virtue. The powers of the soul were regarded as separate entities, with human actions being determined by impulsive acts of will (hence the popularity of chess during the Middle Ages). Crucial to the perception of sanctity was the paroxysm of dramatic reversal from vice to virtue, “the medieval logic of inversion.”^{100a} Some famous saints, notably Francis of Assisi, achieved it.

As a consequence of the foregoing factors, some historians have concluded that there was no medieval concept of the individual as a psychological entity, nor of human actions as interconnected and related to motivations in a coherent way.¹⁰¹ Rather, each individual phenomenon was viewed in an isolated way and endowed with certain characteristics related to rituals and teleological ideas.

Absent a concept of personality, mental phenomena were considered in isolation as an expression of the power of the devil or of the almost supernatural conquest of instinctual life leading to unusual mystic experiences. Medieval man was in a constant state of dialectical tension that tended to manifest itself in the extreme forms of diabolical possession or, conversely, asceticism. Past authors, both psychiatrists and medical historians, have been singularly impressed by this aspect of medieval “psychopathology,” and, influenced by psychoanalytic ideas, have inclined toward considering it *tout court* as corresponding to today’s concept of hysteria.^{102,103} In recent years, however, a more sober clarification of medieval psychology has been reached—with less “psychopathologizing” of it.¹⁰⁴

Probably because of the prevalence of darkness in much of medieval life¹⁰⁵—both inside the rudimentary dwellings and outside in towns and cities—exceptional importance was given to light in the figurative sense (hence the tendency to illuminate manuscripts by adorning the pages with brilliant miniature paintings, precious metals, and historiated initial letters, which were often exquisitely detailed ornamental designs). The sense of sight was paramount, with thought often taking the form of visual images. On the other hand,

medieval people relied greatly on the sense of touch (spectacles were not invented until the thirteenth century). The custom of touching saintly relics for propitiatory purposes was widespread, and the “royal touch” by the king was supposed to heal people affected by scrofula, both in France and England.¹⁰⁶ In an epoch before the introduction of printing in 1455, teaching was oral rather than visual, resulting in the popularity of many mnemonic devices in medieval lore. The necessary emphasis on auditory rather than visual means for the transfer of information made control and verification impossible, thereby fostering animistic and magic beliefs. All this had implications for the types of perceptual distortions prevailing in the Middle Ages. See, however, Wallace’s Chapter One, p. 70; for evidence of extremely-accurate, pre-Gutenberg, mnemonic powers.

Belief in the supernatural took many forms. Especially in Mediterranean countries it can be seen as an ambivalence toward nature, regarded both as beneficent provider for human needs and as capricious force causing, without reason or warning, starvation, illness, and death. Natural happenings, such as the withering of crops or mysterious child deaths, were often considered signs of supernatural intervention. Understandably, before the advent of modern medicine, both the endemic spread of contagious diseases (notably of plague) and recovery from serious illness were equally attributed to supernatural influences. In the magic context of attributing calamities to personal sins, penance was considered to have a healing character, hence the frequency of processions and the popularity of pilgrimages.

Women held a dismal position in the Middle Ages.^{107,108} Traditionally it has been held that medieval women had little control over their lives and bodies; were defenseless against oppression and aggression; were married according to prearranged alliances by their fathers; were subject to rather than loved by their husbands; were sexually gratifying objects rather than mutually participating subjects; were left helpless when abandoned or disowned; and, in general, were regarded with contempt by theologians because of their alleged voluptuousness and superficiality. Still, recall earlier remarks that the situation was more complex.

This gloomy picture, about which I shall say more later in relation to witchcraft⁹ is now mitigated by recognition that the woman did have some autonomy as ruler of the house (at times even of large estates) and as nurturer of the children and that she was an essential component in the medieval economy in the area of handicrafts, especially in the spinning of wool. Sin was understood as caused by external stimuli (such as lustful temptation) in male saints and by stimuli from within in female saints. For the latter, miraculous events often assumed private and passive forms such as visions, signs, prophecies, and struggles with demons.¹⁰⁹ Often their mystical visions carried thinly-veiled erotic content (e.g., the famous Spanish mystic, St. Teresa). But so did many male ones—connected with the cult of the Virgin Mary, angels, or Christ himself.

As one can see from this brief discussion, opinions about medieval life and thought at both individual and collective levels are undergoing profound change, with much more attention being paid to the role of women and ordinary people. Moreover, many medieval female sainte and mystics became quite so respected as the greatest male ones.

Psychopathology and Mental Illness in the Middle Ages

Psychopathology

1. Too often, the single term “medieval” is used to denote a uniform body of concepts and practices for a period of time spanning a thousand years. We now understand the considerable differences among the various periods of the middle ages.
2. Data concerning “mental illness” in the modern sense are nonexistent except in a few instances in the late Middle Ages. With no concept of personality, apart from the academic ones of Augustine and Aquinas; mental phenomena simply were often not described separately from physical phenomena.
3. Our ideas about medieval mental pathology have hitherto been based almost exclusively on the extant medical literature. Ackerknecht pointed out the discrepancy between psychopathological theories and the actual practices used in caring for and treating the mentally ill.¹¹⁰ The prescriptive formulas found

in the elite aristocratic and clerical sources may very well tell us nothing (or even deceive us) about actual treatment. As reliable data accumulate about the less articulate lower classes, to which most of the mentally ill must have belonged, we need to be prepared to change our minds about medieval psychopathological presentations and processes.

4. In light of the dominant concept of the “great chain of being,” the role played by anyone in medieval society (especially in the early Middle Ages) was intrinsic to his structure and function in the divine order. Every position had to be filled, and no one could be missed in the uninterrupted sequence trying all human beings together, regardless of the deviant behavior of some of them.

This has prompted some authors to suggest that, as the average peasant was in harmony with his surroundings and unaffected by today’s outcries about maladjustment, alienation, anomie, anguish, and despair, “probably [his] mental health was better than ours” and that “the insane were kindly treated, in general, and were allowed to run at large or to dwell in almshouses without constraint unless they should prove dangerous.”¹¹¹ For others, although “the rural madman was a neglected and an often maltreated nomad ... the medieval church may have been kinder to the madman than the seventeenth-century hospital.”¹¹²

More likely, an attitude of ambivalence toward the mentally ill prevailed. Huizinga stated that “on the one hand, the sick, the poor, the insane, are objects of that deeply moved pity, born of a feeling of fraternity ... on the other hand, they are treated with incredible hardness and mocked.”^{111a} This (see also the quote below) gives the lie to Foucault’s pre-17th century Edenic images of attitudes toward the mad. More recently, Neaman referred to the

ambivalent attitude which the church manifested toward the mad. On the one hand, they were considered bestial ... , on the other they merited special charity ... the doctors ... , the lawyers ... , the church ... all these “orders” of society were ambivalent in their attitude toward the insane.¹¹²

5. Around the thirteenth century human psychology began to change. The rise of bourgeois ideology—based on work and commercial enterprise—at first weakened and then destroyed the tie linking one’s identity to one’s predefined station in life. What one did, especially for a living, increasingly served to define who one was, which greatly contributed to putting those who did not conform to such an ideology in the role of outcasts.¹¹³ Still, the theoretical and philosophical importance of the “Great Chain of Being”; and the analogical modes of reasoning—such as the doctrine of “signatures” as well as of astrology and alchemy, in medicine (discussed elsewhere)—associated with it; continued well into the 17th century (Foucault’s “Age of Reason”).

The concepts of “marginality” in history and “deviance” in psychopathology have increasingly become relevant to understanding the late medieval scene. The catastrophic events of the fourteenth century (plague, perpetual war, the Avignon papacy, and the great schism) shattered the twelfth and thirteenth century holistic theocentric view of the world. Many tried to explain these ominous and unpredictable events by attributing them to the wrath of God for sins committed. This attempt had two consequences: First, the poor, Jews, vagrants, homosexuals, heretics, foreigners, lepers, and the insane were now all construed as even more marginal and deviant: they were now firmly outside of and threatening to the social order. Thus, they were scapegoats through which society symbolically expiated its sins. Second, normal folk who conformed to divine and secular law felt the need constantly to atone and punish themselves for transgressions. The attitude to the insane discussed here is pertinent to the first consequence, while to the second belong episodes of mass hysteria of the dancing mania,¹¹⁴ possibly the children’s crusade, and public penance up to the extreme self-punishment of the flagellants. It must be noted that some medical historians attribute the “dancing mania,” or “St. Vitus’s Dance”; to peasants’ consumption of ergot-infested rye (“ergotism”).

6. By the latter part of the fourteenth century there is considerable evidence in social life, literature, and art for the emergence of individuality, though still alongside a fundamentally Christian world-view.¹¹⁵ Feelings began to be expressed more openly, as evidenced by courtly love, by the acceptance of women as intrinsic to family life, and by the new source of gratification and support entailed by marital relationships and by the rearing and education of children.

7. The late medieval image of madmen became highly stylized in both literature and art.¹¹⁶ A number of literary heroes—notably the Arthurian cycle’s Perceval, Yvain, Lancelot, and Tristan, as well as Yvain (of the Middle English Romance *Yvain and Gawain*) and Merlin (whose gestures are described in *The Life of Merlin*, attributed to Geoffrey of Monmouth)—suffered as a result of unrequited love from acute episodes of mental derangement, during which they acted as *derve*, or madmen,¹¹⁷ running naked in the woods, acting in such a violent and destructive way that wildness and insanity became almost interchangeable terms.

William Langland’s *Piers Plowman*, a poem dedicated to the poor and simple of the world, described correlations between abnormal states of mind and phases of the moon (hence the word “lunatic”).

Iconographically, the madman was typically represented as tonsured and peculiarly dressed in various colors (symbolizing the lack of symmetry corresponding to his lack of reason), at times portrayed in black (probably due to the assumed prevalence of black bile), carrying a staff (perhaps to escape from mocking children) or a bell, and exercising the function of one who denies the theological tenets of the medieval world.^{118–120} In time the figure of the madman came to represent an inversion of the true believer, hence the emphasis on the image of the ape in relation to insanity.¹²¹

Under the appearance of “order,” some medieval customs all along provided release for pent-up impulses and undoubtedly conduced to better-balanced mental health. The depictions of satanic and devilish motives in carved church figures and in many tapestries allowed the expression of sexual and aggressive urges.^{122–125} Even more pertinent were the widespread religious dances and seasonal festivals, such as Carnival and the “feast of fools,” which can be viewed as abreaction for the fear of insanity. A rich iconography concerning religious events of both kinds is still extant.¹²⁶ Eventually the representation of the madman became a literary and artistic convention. The “ship of fools,” which Foucault mistakenly concretized, was one of them.

Mental Illness

1. Clinical pictures that suggest functional psychosis to us were often described as melancholia,¹²⁷ while a variety of excited psychotic conditions were subsumed under mania. Both melancholia and mania may have included some conditions related to religious phenomena. However, in a study of 134 cases of visions from eighteen French and English sources spanning the eighth to the twelfth centuries, only 4 instances can clearly be identified as psychotic in modern terms. None of the medieval visionaries was considered psychotic by their contemporaries. Communication with celestial and demonic beings was then considered an intrinsic part of the theocentric world view rather than as pathological.^{128,129}

Alcoholism was less common before the early sixteenth century, when distilled spirits became cheap and available, although excess use of wines and other beverages could have led to alcoholic symptoms. General paralysis resulting from syphilis was unknown, as this disease did not appear before the Renaissance. In contrast, psychiatric pictures related to malnutrition, infections, and poisoning by ergot (which can exist in flour) and by lead (which was used in cooking utensils) may have been more common than now.

Statistical calculations about the occurrence of mental disease are equally difficult to obtain. By using the relatively fixed ratio of five psychotics per thousand of population obtained from cross-cultural studies, Clarke calculated that around the year 1300 there must have been around 15,000 psychotics in Great Britain’s population of three million persons.¹³⁰

2. Even more conjectural are our notions about how the mentally ill were cared for rather than treated.¹³¹ The scanty data indicate that some of the mentally ill were kept in their own homes or in homes of relatives and friends in their immediate community¹³²—while others engaged in an enforced vagabondage as they were expelled from one town to another.

Aggressive and uncontrollable persons may have been placed in churches, which, built with stone, could withstand violent impacts better than timber-built homes. Moreover, individuals escaping enemies or legal prosecution customarily used churches as refuges.

Some patients may have been housed in local jails or given over as wards for a small fee provided by the municipality. At times the mentally ill may have been expelled from their own towns only to return

at a later date. Some may have been brought by pilgrimage to a religious shrine and left for long periods of time in the care of local families.

3. As with medicine, medieval laws can be traced back to Roman legal tradition to which common-law practices from the northern cultures were later added.^{132a} Beginning with the fifth century B.C.E. Twelve Tables of the Romans, provision was made for a guardian to be appointed among the nearest agnates (that is, relatives on the father's side) for any mentally ill person who was "furious," a raving maniac. Later, specific rules were established, in the case of insanity, for repudiation of a marital partner, contracting marriage, making a will, inheriting property, and so forth. Roman laws provided a balance between privilege and deprivation for the insane. Punishment was forbidden if there was no perverse intention, as insanity was considered punishment in itself ("*satis furore ipso punitur*"). These various laws were codified in the Digest and in the Code of Justinian in the sixth century.

With the rise of Christianity, canon law, considered closer to natural law, became important, with emphasis shifting from the crime to its psychological implications. Baptism and Eucharist were offered the insane; marriage and ordination were denied them.¹³³

In pre-Norman England criminal law was based on the principle of strict liability: a victim of an insane killer had to be paid compensation. Under the "Laws of Henry the First" (1100 to 1135), which are thought to be statements of customs surviving the eleventh century Norman conquest, insane persons were to be guarded by their parents. Even in the thirteenth century, when the jury system was finally established, the insane offender was occasionally disposed of without a trial; in such cases the decision was left to the king, who could issue a royal pardon for an insane person who had killed by accident or in self-defense. Essentially, this was a compromise between a legal system founded on strict liability and the ecclesiastic insistence on the importance of *mens rea*.¹³⁴⁻¹³⁶

The "Statute of King's Prerogative" (*Prerogativa Regis*, 1255 to 1290), probably written by an official of the crown, specified various royal rights and duties, including those concerning the insane. Sections 11 and 12 dealt with the mentally ill, divided into the two categories of "natural fools" (that is, suffering from congenital intellectual subnormality) and "*non compos mentis*" (meaning suffering from psychiatric disorders that could be temporary and marked by lucid intervals). The king was expected to protect individuals belonging to these two categories and their property from exploitation: in the first instance, by taking over their property permanently and providing them with the minimum necessities of life; in the second instance, by not taking over their property but, instead, by working out a more extensive system of maintenance and protection for them. At times, this system was based on the expedient of transferring the custodial rights of the mentally disabled to private persons who accepted the responsibility for a fee. The attribution of "natural fool" was based on the ability to perform simple numerical calculations, often in relation to coins, while that of "*non compos mentis*" was based on defects of memory and understanding and on the evidence of irrational behavior. This system, unfortunately, relied on the honesty of the crown, the degree of which may be judged from the fact that the crown tended to classify up to 80% of the mentally disabled as "natural fools," managing to end up with their property.

Two important points emerge from consideration of these legal procedures: First, protection for the mentally ill gradually passed from relatives to public authority, at first to the king, then to lower courts. Second, the medieval attitude toward the mentally disabled did not consist only of superstition, cruelty, and abuse, but, rather, was at least partly based on the physiological theories of the ancients and on some notions that anticipated modern concepts of human behavior.^{136a} By the late fourteenth century, probably influenced by astrological ideas, the term "*non compos mentis*" had largely been supplanted by "lunatic."

4. The transition of care for the mentally ill from private to public auspices leads naturally to the subject of the earliest mental hospitals. As a result of the contact between Christians and Moslems in the Crusades, the order of Hospitalers of Saint John in Jerusalem founded a hospital in the eleventh century. It is doubtful whether the mentally ill were admitted.¹³⁷

Institutions specifically for the mentally ill are mentioned in early texts as having been founded at Metz, France, in 1100; Milan in 1111; Uppsala, Sweden, in 1305; Bergamo, Italy, in 1325; Elbing,

northern Germany, in 1326; Charing Cross, London, in 1377; and Florence in 1385. These dates are uncertain. Bethlehem (or Bethlem) hospital, founded in London in 1247, apparently began to admit the mentally sick in 1407. It is likely that the mentally disturbed, especially if violent, were kept in solitary confinement in primitive conditions in these institutions. The German literature mentions *tollkisten* (boxes for the frenzied insane) and similar inhumane places of restraint.

By the thirteenth century the tradition of family care for the insane had been firmly established in the little town of Gheel in Belgium.¹³⁸ A church had been erected there to honor the beautiful Irish princess Dymphna, who had fled to Gheel in the seventh or eighth century with her confessor to escape the incestuous advances of her father, who eventually captured and decapitated her. The church and the annexes built for housing pilgrims became well known as a place where the mentally ill could be exorcised of the devil who was causing their insanity. Many remained in Gheel and were given menial jobs by local peasants, thus instituting the tradition of family care for which the town has remained famous ever since.

In 1365 Sultan Mohammed I founded in Granada, then still part of the Islamic world, an institution that also accepted the mentally ill ("*casa de locos y inocentes*"). In Valencia in 1409 Father Juan Gilabert Jofré enlisted the help of his parishioners to build a hospital for the insane as a result of seeing one mistreated and mocked in the street. A hospital was soon erected and inaugurated in 1410 as the Hospital de Santa María dels Ignoscents, Folls e Orats, the first mental hospital in the world.^{139–140a}

Following its example, similar mental hospitals were founded in other Spanish cities: Saragossa in 1435, Seville in 1436, Toledo in 1483, Valladolid in 1489, Granada in 1507, and Madrid in 1540.^{141–144} In 1567 the first mental hospital in the Americas was established in Mexico City. Virtually nothing is known of the types of patients admitted, of the system of care offered, or of the medical procedures used in these hospitals. Very likely most of the patient care was provided by members of the religious orders.

The only exception to our ignorance about the mentally ill in the early hospitals is the *hospitium* for the sick poor in use from 1123 at St. Bartholomew's Church in Smithfield, London. The *Book of the Foundation*, composed in the twelfth century, reports about one hundred cases of supposed miracles that had occurred in the first half century of the church's existence, allegedly resulting from the intervention of St. Bartholomew through visions and other supernatural means.¹⁴⁵ Wilmer identified twenty-two of the cases as neuropsychiatric, among them a man who apparently did not sleep for seven years and was unable to provide for his family; two cases of dumbness in a youth and a child; a young man suffering from hallucinations and impulsive behavior; a woman who, following guilt for a sexual encounter, had become irrational and violent; two young women who had undergone severe breakdowns; and some epileptic patients. All these people had been brought to the shrine of St. Bartholomew and had felt better or been "cured." The clinical course and outcomes of their conditions has remained controversial. Their diagnoses have ranged from today's concept of hysteria to manic-depression and schizophrenia.^{145a}

5. The only reliable clinical descriptions of the mentally ill concern highly important people in the fourteenth century. Most often quoted is the case of Charles VI (1368–1422), King of France, whose attacks of insanity (especially the one in 1392) were described in detail by his chronicler Froissart. Although his case was unusual in terms of the social and political implications of his psychotic condition, he was treated rather well with medical procedures and isolation and, in accordance with contemporary belief, allegedly responded well to religious offerings on his behalf.^{146–147a} The other two cases most frequently reported refer to the thirteenth century Italian artist and author Opicinus de Canistris and to the fifteenth century Flemish painter Hugo van der Goes, who was inclined to fits of melancholy.¹⁴⁸ The English poet Thomas Hoccleve (also known as Occleve) described his own melancholic illness in autobiographical terms in his poem *The Complaint*, and Geoffrey Chaucer gave an excellent report of a case of melancholia in the *Boke of the Duchess*, considered by some as an autobiographical account of his own depression.¹⁴⁹ Finally, Francesco Petrarca, the first of the humanists, complained in the 1300s of *acedia*.¹⁵⁰
6. These scanty reports give one little to compare with today's clinical syndromes. The most favorable area for comparison of the medieval with the modern mentality probably is suicide (from Latin *sui*, "of

the self,” and *cidium*, from *caedere*, to kill). The literature on the subject is extensive and readily available.¹⁵¹ The early accounts are, of course, written from the moral and theological point of view, strikingly different from the modern perspective.

In classical antiquity suicide was mainly considered from the philosophical and religious perspectives. Physicians viewed it leniently and respected the individual’s decision to terminate his life, at times even in a theatrical way, as by immolation. This permissive tendency reached its peak in the moral principles of the Stoics, who advocated a cult of suicide and contributed many writings on the subject.¹⁵¹ In Jewish culture suicide was seldom reported, though it was neither prohibited nor condemned—its most dramatic instance being the mass suicide at Masada, as described by Josephus.¹⁵² In the late Roman Empire suicide was tolerated, even extolled. By and large, moral rather than psychopathological implications of suicide were stressed, although Hippocrates, Caelius Aurelianus, Aretaeus, and Paul of Aegina all referred to the abnormal state of mind of suicidal persons.

Christianity condemned self-killing, equating it with murder,¹⁵³ probably in reaction to the pathological craving by many early Christians for martyrdom. The Council of Braga in 563 and the Synod of Nîmes in 1284 codified this negative attitude by setting rules for confiscation of property, degradation of corpses, and refusal of burial in consecrated ground for suicides. Collective suicides were reported among the heretic Cathars and among Jews eager to escape forced conversion.¹⁵⁴

The word “suicide” did not exist in the Middle Ages. *Desperatio*, the word most commonly used in suicide cases, meant the conviction of not being worthy of eternal salvation and was considered a vice.¹⁵⁵ Aurelius Prudentius, the first important Christian poet, who flourished around 400, allegorically depicted in his poem *Psychomachia* the struggle of Christendom with paganism as strife between Christian virtues and pagan vices. One of the most widely read books throughout the Middle Ages, it greatly influenced Christian iconography. In it he groups together *desperatio*, *tristitia*, *accidia*, and *ira* as the vices that could lead to self-killing. When either *ira* (anger) or *desperatio* (despair) predominated, suicide might result. The vices were often conceived in the form of a genealogical tree and depicted iconographically as young women. Dante described in his *Divine Comedy*, the most important late medieval literary work, the souls of those who have killed themselves as being encased in the other world in thorny, withered trees on which the Harpies feed. The vices leading to suicide served as *exempla* of actions opposed to God’s will, hence the ritual execration of the corpses of self-killers.

Only in the thirteenth century did suicide cease to be a felony in England. Studying fifty-four cases of suicide between the thirteenth and early sixteenth centuries, Schmitt determined that only sixteen were attributed to insanity (fourteen to “furor” and only two to “melancholia”).¹⁵⁶ This contrasts starkly with modern notions linking suicide to depression. For the medieval Europeans one did not kill oneself because one was depressed, but because one had lost a battle between vices and virtues fought on the almost neutral ground of one’s person.

Epilogue

Many “modern” ideas regarding the individual, the family, and society can be traced to the Middle Ages, though the medieval style is so different as to make interpretation difficult. Nonetheless, one can identify the following themes: the twelfth century’s desacralization of nature¹⁵⁷; the emergent rationalism in the thirteenth century, not just of independent thinkers like Abelard and Occam, but even of the orthodox systematizers like Aquinas, for whom every man must act in accordance with reason; the appropriation by laymen of intellectual affairs, as evidenced by the word *clerc* (from clergyman) coming to signify “intellectual”¹⁵⁸; the dominance of the quadrivium (science) over trivium (liberal arts); and the rise of lay consciousness, as expressed by Marsilius of Padua (author of the famous *Defensor pacis*, 1324) and of the so-called *devotio moderna* by Jean Gerson, chancellor of the University of Paris (and whose *De passionibus animi* was one of the first explicitly psychological books printed [1467 with many subsequent printings]).¹⁵⁹

One detects a clear trend toward combining materialistic and spiritualistic concepts in the numerous twelfth century treatises entitled “On the Soul” attesting that “grace does not vitiate nature but perfects it.”^{160,160a} It is now recognized that family feelings were not unknown in medieval society and that the idea of childhood is not a modern invention.¹⁶¹

In regard to psychopathology, Huizinga already stressed the variation in meaning of the word “melancholy” in the Middle Ages. Gerson questioned whether the contemplative life could lead to melancholia and regarded diabolic illusion as due to disordered imagination caused by brain lesions.¹⁶² Words denoting madness—*insanire*, *insipientes*, *stulti*, *vesania*—came to be used commonly in intellectual disputes. For Petrarca, *acedia* meant something psychological rather than religious.¹⁶³ William James’s “sickness of the soul” in religious melancholy can be traced to the Middle Ages.¹⁶⁴

In the realm of mental disorder, overwhelming stress may have produced collective madness, especially in people affected by plague with symptoms of madness.¹⁶⁵ A fine line was drawn between the behavior of the insane and of some saints, notably Juan de Dios and Joan of Arc.¹⁶⁶ The issue of specialized mental hospitals before 1300 remains open,¹⁶⁷ and a specialist in the field has warned that it is perilous to assume that attitudes toward insane inmates were necessarily cruel and inhumane.¹⁶⁸

I conclude by mentioning some themes that “anticipated” modern psychological concepts. In his *Conciliator differentiarum*, Peter of Abano, an Averroistic philosopher who taught medicine, physiology, and astrology in Padua, discussed *praecantatio* (“enchantment”), maintained that suggestion played a crucial role in treating diseases, and held that dreams should be explained in terms of the personality and moral characteristics of the individual patient.¹⁶⁹ Ramon Lull, Catalan theologian and missionary, expressed a notion of friendship with modern resonance in his mystic philosophy. And last, Nicholas of Cusa, who had a lifelong interest in collecting classical and medieval manuscripts, posited in the fifteenth century that knowledge is learned ignorance (*docta ignorantia*). He drew on the Neoplatonists for his concept of the coincidence of opposites (*coincidentia oppositorum*), by which he meant that the mind possessed a faculty of intuition or intelligence (*intellectus*) through which we comprehend the unity and coincidence of opposites in experience. These concepts had direct relevance for the development of modern science in general and of psychology in particular.

With these ideas we have opened the door to the Renaissance.

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Chapter 5

Renaissance Conceptions and Treatments of Madness

George Mora

Introduction

Renaissance (literally “rebirth”) was a term introduced by the painter and architect Giorgio Vasari in his *Lives of the Most Excellent Italian Architects, Painters and Sculptors* (Florence, 1550) to designate the renewal in the arts—and, to a lesser extent, in literature—that had taken place in that period in Florence and other cultural centers in Italy, that is, a return to antiquity and its splendor after the alleged darkness of the Middle Ages.

Vasari’s concept was based on several main points: an awareness of a new spirit in the whole culture; a connection with the “rebirth” of man central to the New Testament; a return to Latin (and, later, Greek) literature and to the moral philosophy based on classical models; the inspiration of political liberty in the context of the various states of the Italian peninsula; and the emphasis on the active life of industry and business leading to earthly success and power at variance with the medieval inclination for spiritual contemplation and transcendence.

This picture of the Renaissance survived the Baroque era and the Enlightenment to constitute the modern concept outlined by the Frenchman Jules Michelet and, in particular, by the Swiss Jacob Burckhardt in his *Civilization of the Renaissance in Italy* (1860): the discovery of the world and the discovery of man as related to the “genius of the Italian people.”

Only a brief summary can be made here of the main political events spanning the period between 1330 and 1530 (or 1400–1600), generally considered as the chronological limits of the Renaissance. Italy was made up of small independent and individualized states (Florence, the small courts in central Italy, the papal domain in Rome, the Kingdom of Naples in the south, the duchy of Milan in the north, and the wealthy republics of Genoa and Venice). After a period of great splendor, the duchy of Burgundy was declining in the late fifteenth century. In central Europe, the Empire was chronically in a state of anarchy and impotence and was run mainly by great families (notably the Habsburgs). France was already moving toward becoming a unified country centered around Paris. Spain, after the unification of 1492, the expansion in the New World, and the subsequent economic boom, was to become the first world empire. England, although afflicted by deep internal conflicts, led the defense of individual freedom that later resulted in liberalism. The Hanseatic League of northern Europe had lost power following the Thirty Years War (1618–1648) and was superseded by the Low Countries. In the eastern Mediterranean the Ottoman empire had continued to grow, especially after the fall of Constantinople in 1453, resulting in the separation of Europe from the Far East.

National individualism emerged almost everywhere in Europe, as evidenced by the establishment of territorial boundaries, of the founding of many universities, of the development of vernacular literatures,

and of awareness of political identity. Emergent nationalism affected religious developments as well: the Catholic hierarchies in France and Spain grew progressively independent from the control of Rome, while with the Reformation Germany and England broke away completely from the Church's control.

Most scholars believe that the Renaissance remained solidly anchored to Christian tradition, despite artistic trends opposing it, the spread of pagan—even erotic—themes in the representation of religious subjects, the boldness of the Aristotelian school in philosophy (notably in Padua) leading to materialistic and skeptical convictions, and the many advances in science resulting in the modern attitude toward progress and technology. Yet, rather than stressing the contrast between the religious emphasis of the Middle Ages and the secular emphasis of the later centuries, the accent has been increasingly put on the “anthropocentric” image of man endowed with renewed (that is, classical) human “virtues” exalting humanity's creativity and uniqueness in the universe. More recently, and more cogently for psychology, the discovery of the child, of the family, and of marriage has been traced back to the Renaissance.^{1,2}

Though Pico and a few other intellectuals attempted to combine the motives of the main religions into one syncretistic belief, clearly the majority of “Renaissance men” combined without difficulty a pagan style of life with a strong sensual inclination and a strong faith,” so that “in essence Renaissance Europe has been less paganized and de-Christianized than traditionally represented.”³ This makes it possible to explain the emergence of the strong movement of the Counter-Reformation in the Catholic countries in the sixteenth century. Moreover on the surface at least; Italian Renaissance philosophy, Christianity, art and architecture were nationalistic, rigorously perspectival, even geometrical.

The Renaissance was not a linear historical process. In recent years, deep contrasts have been discovered in the Renaissance between periods of relative political and economic stability and times of upheaval, between social classes, and between traditional beliefs and heretical movements. A “darker” side of the Renaissance has emerged: a complex of motives based on hoary popular faith in astrology, witchcraft, and superstitions of chthonic origin that tend to surface in connection with deep social, economic, and political changes. A number of studies (many originating from scholars connected with the Warburg Institute of the University of London) have pointed to the importance of such less glamorous, often overlooked, and at times even cryptic aspects of the period's art and culture for understanding the complexity of Renaissance civilization—the ir- or non-rational underbelly of Christian/neoclassical rational order.

The pertinent material relating to psychiatry defies any attempt at categorization and orderly (especially chronological) presentation. Moreover, any discussion of Renaissance psychiatry cannot help but mention the issue of the witchcraft mania. Hence, I shall focus on the emergence of humanism, the image of folly, the esoteric expression of the Counter-Renaissance, the spread of the witchcraft mania, the pioneering contributions of some Renaissance thinkers, and the concrete approach to the mentally ill during this period.

Emergence of Humanism

Traditionally, humanism has meant the rise of classical scholarship, of the *studia humanitatis* during the Renaissance. From about the early fifteenth century in Italy, a tremendous interest in a variety of fields surfaced—in philology, rhetoric, and history—viewed as a return to themes of classical antiquity: the focus on man's unique role in the universe, on his way of relating to others, and, consequently, on the civic “virtues” pertinent to society. Slowly, from the study of the ancient texts, emerged their intrinsic truth, their philosophical message, and their historical conscience; in a word, an entire style of culture.

The French scholar Renan a century ago advanced his famous opposition between Padua, the bastion of medieval Aristotelianism and Averroism, and Florence, the center of Platonic humanism and of civic polity. Today, this contrast is no longer accepted, in view of the blending of classical motives in humanistic thought.

Rather, some specific movements can be clearly identified.^{4,5} Toward the end of the Quattrocento, there emerged in Florence the Platonic Academy, a group of scholars supported by Cosimo de Medici and mainly represented by Marsilio Ficino, in whose works the *via philosophia* is identified with the *docta religio*, a sort of Neoplatonic convergence around a divine unity of the four main themes of light, beauty,

love, and soul. Motifs related to symbolism and occult teaching (mainly of Eastern, that is, Jewish, origin through the cabala)⁶⁻⁸ are even more evident in Pico della Mirandola, who in his brief life emphasized in various works the central role of man in the universe, his creative urge as a being made in the semblance of God, and the deep concordance of all sincere expressions of thought (regardless of time, culture, and religion) resulting in a syncretistic philosophical attitude.

All along, in Ficino, Pico, and virtually all Renaissance thinkers, the attitude toward astrology, the ancient belief in a cryptic correspondence between planetary movements and traits of the soul,^{9,10} was characterized by a great deal of ambivalence,¹¹ ranging from acceptance to skepticism, especially in light of the perennial issue of determinism versus free will.¹²

By the end of the fifteenth century the trend toward recapturing ancient wisdom through a revival of the ancient texts and their intrinsic human philosophy showed signs of declining. Pietro Pomponazzi in Bologna, in discussing the properties of the soul in a purely rational way, concluded against the immortality of the soul as an example of superstitious beliefs.¹³ Machiavelli embraced this same skepticism by postulating an essentially immutable characteristic of human nature that allowed for an understanding of crime and virtue in terms of the cold realities of human motives.

At variance with this skepticism about human nature, which was well represented in the despotic regimes of the time, emerged the belief in the endlessly giving power of nature, immortalized in the works of many Renaissance artists, beginning with Leonardo. Basic to their philosophy of life is an awe-filled attitude toward such power, which in their view manifests itself through all sorts of mysterious analogies and similitudes among various levels of reality, including magic and portentous and prodigious events. Even those inclined toward “scientific” studies, such as Cardan, Fracastoro, Porta, and Cesalpino, were not immune from the influence of such occult beliefs.

Thanks to frequent personal contacts, to the wandering nature of many scholars, to the cosmopolitan character of the top universities, and, of course, to the universality of Latin, the main themes of humanism had already spread to the rest of Europe. The influence of those humanists particularly interested in advocating a return to the original sources of Christian doctrine, the Bible, and the Church Fathers (notably Saint Augustine) was mainly felt north of the Alps, especially in Germany, the Low Countries, and England, where concern with theology and religion ran very high.

Images of Folly

Literary Expressions

Among the vast Renaissance literature, a special place is reserved for Erasmus’s *The Praise of Folly*. One of the greatest humanists, Erasmus was born an illegitimate child in the Netherlands. He was influenced early in life by the school of the “*devotio moderno*,” a pristine Christian morality based on a return to the tenets of the Gospels. Having been trained in theology at the conservative University of Paris, he developed an aversion to scholasticism and a great admiration for classical authors, both their style and their human moral principles.

Among the many peregrinations of his “wandering scholar” way of life was a stay of several years in England, where he became close to the humanists John Colet and Thomas More. While a guest of More he composed in a very short time his *Moriae Encomium* in 1509 (published in 1511), which is considered among the masterpieces of world literature. Simultaneously a satirical and a deeply philosophical work, it is considered the most difficult of his works. It was an extremely successful book, being printed in 43 editions during his lifetime and being further enhanced by Hans Holbein’s marginal illustrations for the 1515 edition, often reproduced in subsequent editions.

The novelty is that “folly” speaks here in the first person, by making a eulogy of herself, a device that allows Erasmus to express a satire of scientists, theologians, clergymen, and intellectuals in general by using an array of double meanings and of cryptic allusions to the point of putting the reader constantly off

balance through the apparently endless semantic labyrinth. The *Encomium*, which literally means eulogy or panegyric, centers on the natural weakness of men, who do not act rationally all the time but often are dominated by passions. Erasmus pleads for the relativity of human judgment (so that any form of conduct can be considered foolish, as there is no clear distinction between truth and falsehood); for the acceptance of passions as intrinsic to human life, even to the extreme of folly (indeed, without folly there is no pleasure, no marriage, and, in particular, no act of procreation); and, in general, for tolerance (a much needed stance in that era of intolerance, which, much to the dismay of pacifist Erasmus, led to the split of the Christian world and to lengthy and cruel religious wars). As Erasmus puts it in the words of “folly,” “there is nothing either good or bad, but thinking makes it so,” and, elsewhere, “without me the world cannot exist even for a moment.” He also emphasized that a Christian way of life was “folly” for the man of business and power.

It follows that, as human beings, we are all actors, and that the mask is an essential part of life; paradoxically, it is nonsense to accept the world as it is, as well as not to accommodate oneself to things as they are. Should this relativistic stance of the world viewed as universal folly lead to skepticism and despair? The answer lies in the return to nature, in the acceptance of ignorance and mistakes, in the ambiguous meaning of folly and wisdom as intrinsic to human nature, and in understanding that only pleasing illusions make life possible. As the old proverb says, “Children and fools sometimes speak the truth.” This popular belief has been embodied in the Christian religion, inasmuch as the “folly of the Cross” represents the highest expression of wisdom and, as St. Paul put it, in the first letter to the Corinthians 1:25, “the foolishness of God is wiser than men. But God hath chosen the foolish things of the world.”

In spite of the off-hand dismissal of reason, Erasmus, writing in 1509 and unaware of the forthcoming Lutheran revival, conveys a basic impression of an understanding and tolerant acceptance of human fatuity in the presupposition that man, living in a more perfect way in an earlier condition, is capable of changing for the better.

As for psychiatry proper, the two themes of salutary folly, which is true wisdom, and pure folly, which is deluded wisdom, are continuously intertwined. The wise and the silly, foolish persons and the insane, are never clearly differentiated. Is this purely a literary convention? Does it represent a conviction about the common emotional basis of rational and irrational processes as, indeed, centuries later the psychodynamic theory of behavior would support? Or is this another fine example of “Erasmian irony”—as folly is represented by a woman—in line with the misogynous trends of the time—all kinds of inconsistencies and mood swings are to be expected?

The answer remains elusive. In the limits of the Renaissance, however, the *Moriae Encomium*, a true reflection of the contradictory tendencies of the time, conveys the message of the defeat of man affected by the “hubris” of his reason, yet still eligible to receive the grace of God. Confirmation of the central meaning of this theme can be found in rich¹⁴ contemporary iconography.¹⁵

Popular Expressions

Knowledge of the image of the “fool,” related to popular beliefs, is intrinsic to virtually all Western cultures of the Renaissance period. Only recently, however, through the combined efforts of scholars from different disciplines, has the role of the fool begun to be better comprehended. Better understanding of joyful collective manifestations, such as the carnival, and of the works of authors such as Brant, Erasmus, and particularly Rabelais has contributed to this.¹⁶⁻¹⁹

Individuals were sorted into types by their unusual appearance. In the Bible the “fool” is the one who lacks knowledge of God or respect for moral standards—the emphasis is on religious or moral, not psychological meaning—the implication being that the fool tends to follow instincts. The New Testament revised the Old Testament’s opposition of folly to wisdom; *stultitia* acquires a positive meaning with Christ the first “fool.” This is the paradox of Christianity, as represented by the myth of the “idiot” and by Nicholas of Cusa’s *docta ignorantia*. Some cultures have equated the lunatic with the poet and the clairvoyant; even Biblical prophets have been construed as madmen. Notably, in Muslim cultures the madman is considered as the one who speaks the truth.

In the late Middle Ages the figure of the court-jester emerged—an “artificial” as opposed to “natural” fool—as the result of the fusion between the Celtic and the Roman fool. By the fourteenth century, the court fool had acquired both a threefold aspect as flatterer, laugh inducer, and official parasite and a discrete role identified by his clothing and other visible signs. The vogue of the court fool culminated in the fifteenth and early sixteenth centuries. Such persons became a regular institution in many dynastic houses, as well as at the papal court; they were treated kindly, and their role was clearly defined and limited. Some fools became so well known as to be remembered in literary works.

Folly is a paradigmatic concept for understanding the Renaissance. On one side, from the medieval theocentric perspective of mankind there emerges in the Renaissance a new image of man as creator and autonomous being, harbinger of the secularization that has continued to our day. On the other side, many forms of social and religious life still follow old-fashioned patterns, and the impetus toward freedom is constantly hindered by all kinds of opposing forces, from despotism to ominous wars, rebellions, and devastating endemic diseases.^{20–22} Indeed the 17th century, Foucault’s “Age of Reason,” witnessed the folly of the most devastating conflict up to that point in history—the religious Thirty Years War (1618–1648)

Confronted with this contrasting and almost paradoxical situation, many Renaissance individuals found an outlet for their frustrated urge for power in various forms of heterodox beliefs and practices, such as astrology, alchemy, and witchcraft. Alienation, too, no longer considered as a theophantic expression (as, indeed, stressed in the preceding chapter) came to be viewed from the human perspective. The fool, aside from the characteristics embodied in the very texture of contemporary society, came to signify something very important: the animal-like—and, especially ape-like—aspect of man attempting to imitate God, so that folly represented the existential nature of man: on one side, a state of natural innocence preceding man’s acquisition of knowledge; on the other side, a satire of the ugliness of man attempting to emulate God’s omnipotence.

Pictorial Expressions

Folly and Madness

For centuries many could not help but be puzzled by the production of some famous representatives of the Flemish school of painting, notably Hieronymus Bosch and Peter Brueghel the Elder, followed by other northerners such as Mathias Grünewald, Lucas Cranach, and Albrecht Dürer. With the advent of psychoanalysis and surrealism, a considerable literature has appeared in recent years on the most obscure as well as fascinating works of these artists.^{23–26} Attention has particularly focused on Bosch’s “The Haywain,” “The Temptation of St. Anthony,” “The Last Judgment,” and “The Garden of Earthly Delights” and on Brueghel’s “The Fall of the Rebel Angels,” “The Temptation of St. Anthony,” and “The Seven Deadly Sins.” Moreover, a few works (Bosch’s “The Cure of Folly” and “The Ship of Fools”; Brueghel’s “Operation for Head Stone”; Dürer’s “Melancholy”) deal directly with psychiatric themes.

Such paintings are relevant to psychiatry on three counts: (1) the possibility that some of the artists may have been affected by a psychotic process while creating these paintings; (2) the likelihood that they attempted to portray insanity in these paintings; (3) and, finally, the interplay of “folly” as literary genre and “madness” as due to mental illness. In spite of the paucity of biographical information on these artists, few now believe that they had psychotic breakdowns, and that possibility for the most part has been disregarded.

The most plausible explanation of these paintings lies in their moralistic thesis: the theme of human weakness, especially of clergymen, seen against the background of a cosmic apocalypse. From the purely aesthetic perspective, it has been suggested that Bosch’s paintings attempted to convey the feelings of overwhelming joy in giving life to new forms and beings of all kinds. Although this aspect may be present, it seems overshadowed by the contemporary impact of stress and anxiety. The security provided by the theocentric view of the world was waning, while the rise of modern consciousness based on the inferiority of moral principles was not yet in sight. As is typical of such transitional periods between contrasting values, fantasies connected with the demonic—primitive aggression, blending of different levels of reality, fascination with repulsive and horrible beings, fear of annihilation with consequent escape into millenarian expectations—tend to emerge.

In the Low Countries, perhaps more than anywhere else, the awareness of stagnating religious institutions and of the need for returning to evangelical principles appears particularly acute, as evidenced by Erasmus's works, which were appearing at the same time.

The themes presented by these artists reveal a thorough knowledge of alchemy and witchcraft.²⁷ Common to their art works are the universal fears of possession by the devil and of impotence toward the perversity of occult forces, pictorially rendered through an obsession with the fears of metamorphosis, engulfment, penetration, and teratogeny. The paintings of Hieronymus Bosch, the most representative of these artists, have been described as curiously isolated and archaic; it has been claimed that he was endowed with exceptional visual powers.²⁸ Rather than being psychotic himself,^{29,30} Bosch represents madness in a way that evokes modern concepts. His phantasmagoric figures exist in isolation without time, space, or relationship to each other. The naked figures are not tempting or sensuous but are symbols representing the nothingness of sin. As Foucault put it, "the animal captures man and reveals him his own truth. ... Impossible animals become the secret nature of man."³¹

Bosch achieved extravagance by mixing symbolism and realism, by contrasting the comic of the detail to the tragic of the whole. His paintings represent a banquet of nausea, because nausea means separation, namely, the demonic. As usual, the demonic is seductive: it is the seduction of the artificial, of the non-natural (in contrast to nature that comes from God). Indeed, the common theme of the temptation unifies Bosch's three main paintings: the intellectual temptation in the "Temptation of St. Anthony," the sensuous temptation in the "Garden of Earthly Delights," and the temptation of power in the "Haywain."

In essence, the message that he attempted to convey centered on the non-nature of man under the seduction of the devil and, ultimately, on hell as alienation from God. His philosophy can be summarized as a dramatic nostalgia for a state of innocence lost by man with the original fall. Satanism, and in particular the pride of knowledge, has contributed to erase the memory of it; only "folly" will return man to his primordial innocent state. Ultimately, his message is a stimulus to moral reflection, consonant with the urge for spiritual renewal that, central to Erasmus's work, will eventually lead to the Reformation.³²⁻³⁶

Insanity

Two of Bosch's paintings, as well as some by Brueghel and an engraving by Dürer, deal directly with insanity. In Bosch's "The Cure of Folly," the theme represents the old belief, widely spread in the late Middle Ages, that the origin of madness was related to the presence of a stone in the head and that removal of this stone would cure the mental derangement.^{37,38} The painting has been viewed as a satire of contemporary belief in the operation of the stone. Portrayed as a charlatan with a large purse on his side, the surgeon in reality is trying to extract money from the patient, whose name "Lubbert" (as indicated in the inscription "Master cut the stone out, my name is Lubbert Das") was commonly used to designate a duped husband. The meaning points, paradoxically, to the madness of believing in this kind of treatment for madness.

Consonant with the contemporary literature on the subject—notably, with Brant's *Narrenschiff* of 1494—the fools in Bosch's "Ship of Fools" are represented as existing in their own separate worlds, finding themselves by chance on the same barge, which has a tree for a mast (symbol of the lost Eden?) and which, unmanned, drifts in happy abandon in a timeless world. Some have interpreted the painting as a satire of drunkards and monks, that is, of the dissolute clergy who let the ship of the Church drift and neglect the salvation of souls.

Some of the paintings of Brueghel the Elder, such as "The Beggars" and "The Deadly Sins," have some connection with madness. His "Cure of Folly" repeats some Boschian themes, but the whole composition, portraying a contemporary Flemish interior, lacks the mysterious aspect of Bosch. The Brueghel painting most relevant to psychiatry is his "Dulle Griet," a title that combines in "Dulle" the meaning of "mad" and of "foolish" or "stupid" (which is also connected with the idea of a female) and "Griet," a variation, like Margot, of Margaret, a name then carrying a pejorative connotation throughout northern Europe.³⁹ One can argue that Brueghel has here portrayed themes of both madness and folly: "Madness" is represented by a large, fast-moving woman with an angry expression, carrying an armload of money and precious

stones (symbols of avarice) and a jug and a frying pan (symbols of gluttony), and showing in her dress a combination of elegance and ugliness (symbol of ambition). These various themes could be related to Brueghel's previous representation of wrath in his "Ira" and to the classical notion, as found in Seneca and Horace and more recently in Erasmus's widely read *Adagia*, of a transition from anger to madness. The second theme, "Folly," is represented by a giant seated on a burning roof in long attire (as typical of the idiot or natural fool) and throwing money away (an inversion of the custom of the fool collecting money from the spectators). Connecting these two large figures are a number of violently active little women, evoking the image of the Bacchantes as typical of the drunken orgies in ancient Greece.

Erasmus had written as follows in "The Epicurean," a section of his *Colloquies*:

A natural fool differs from a brute beast only in bodily appearance; but the brutes Nature produces are less wretched than ones brutalized by monstrous lusts These [madmen] are not drunk with wine . . . but with love, anger, avarice, craving for power, and other sinful lusts far more dangerous than drunkenness from wine How many men do we see that . . . never sober up, never recover from the intoxication of ambition, greed, lust and gluttony.⁴⁰

Brueghel seems to have attempted to present pictorially the distinctions described by Erasmus between the natural, congenital fool or feeble-minded and madness due to surrender to the deadly power of sins. How this meaning of madness relates to insanity in the specific sense of mental illness remains uncertain in Erasmus's *The Praise of Folly* as well as in other Renaissance writings.^{41,42}

Esoteric Expressions of the Counter-Renaissance

Since Burckhardt's famous book on the civilization of the Renaissance in Italy more than a century ago, the figurative arts have been made the object of endless studies and universal admiration. They have been construed as the prototype for the virtually infinite power of creativity of Renaissance man and, stylistically, as the highest expression of classical natural harmony. Then, at the beginning of our century, psychoanalysis offered a new way to explain many aspects of the dark side of the mind. It was followed by surrealism. Later in the century, historiography began revising the traditional view of Renaissance culture by emphasizing the conflictual characteristic of various aspects of the period, especially regarding its religious and social phenomena, as represented by the famous physician Felix Platter.⁴³ The new approach based on the re-evaluation of popular and folkloristic themes made it possible to understand, among other things, the witch mania, traditionally considered alien to the serene classicism of the Renaissance.

Within this revisionist tradition, a number of studies, mainly emanating from scholars at the Warburg Institute, have now been published opposing the traditional view of the Renaissance as based on classicism and attempting to unify under one theme a congeries of social, religious, literary, and artistic trends. In a lengthy book Hiram Haydn introduced the notion of the "Counter-Renaissance." He argued that three main trends characterize the Renaissance: classicism, the Counter-Renaissance, and the scientific reform of Galileo, Kepler, and others.⁴⁴ Since the first and last trends had been well documented, Haydn focused his attention on the "Counter-Renaissance"—the commonly shared anti-intellectual, anti-moralistic, anti-synthesizing, and anti-authoritarian trends of the time.

Since the publication of Haydn's book, scholars from different fields have focused on a variety of obscure and fragmentary texts as well as on often overlooked art works, viewing them from a perspective encompassing the social climate of the time as well as rationalistic-archeological, traditional symbolic, and esoteric popular aspects. Though no comprehensive assessment of these studies has been made, some themes have clearly emerged.

Many Renaissance expressions that seem strange or even bizarre turn out, instead, to be symbols or allegories of hidden aspects of phenomena: symbol being the coincidence of the sensible and the non-sensible, allegory the meaningful reference of the sensible to the non-sensible. Symbols and allegories can be traced to much earlier civilizations. Common in classical times and in early Christianity, they expressed in those cultures a static system of values for a world of order and harmony. In the Renaissance symbols

and allegories emerge, instead, from the complex background of magic, religiosity, and the mysterious.⁴⁵ Complex systems of magical, astrological, and geometric schemata employing stars, circles, and mazes were used in an attempt to overcome fear of chaos arising from the terrible upheavals of the time (wars, famine, epidemics). In complete contrast to the classical transcendental view, nature was conceived in the Renaissance as vital, living, animated, and autonomous. The scientific explorations of the time led to a terror of the infinity of the universe, a terror taking its most visible form in the witchcraft mania and in the attempts to subjugate witchcraft through repressive measures by the ruling class, whether Protestant or Catholic.

Within the limits of this chapter, I can only list the most important symbols and allegories used in the Renaissance: Air can assume all kinds of meanings, especially through musical instruments; fire can have both a chthonic and a heavenly significance; water, especially if streaming from rocks, conveys a religious function; natural products, such as the apple (already charged with biblical symbolism) and the egg, symbol of fecundity, are often found in contemporary compositions; woman, the generative and conservative aspect of the world, signifies virtues and vices, undoubtedly in connection with the misogynous spirit of the time; above all, an endless array of animals, from the ape to the snake to the dragon, are all related to the signs of the zodiac and endowed with mysterious and protective totemic functions, probably because of the similarity between their characteristics and psychological traits in man (a theme central to the many Renaissance treatises on physiognomy).

It was an age fascinated with monsters. In the plethora of Renaissance teratological tomes, animals were described or depicted as metamorphosing into monsters on land, sea, air, or water. Some of the greatest minds of the day, such as the surgeon Paré, wrote on them. It was but a short step to posit in the same being a combination of vegetable, animal, and human traits. The cosmos came to be perceived as a great living animal endowed with the dynamism, tension, and anxiety of the demonic. This explains the apparently absurd belief in unusual interactions among entities as disparate as planets, stones, plants, animals, and human beings.

In one sense, nature reveals reality through a phantasmagoric display of beings and phenomena; in another sense, nature conceals reality by presenting it cryptically through symbols and allegories, as in the Scriptures. On one hand we have the symbolism of “the book of the world” and of “the book of nature,” on the other, “the book of man.” Many Renaissance books are replete with hieroglyphs, obscure numbers, geometrical figures, and astrological signs. Since books were then rare and most people illiterate, only the initiates to the magic arts were able to interpret the meaning of the occult material and to use it to produce “miraculous” effects. Pure sensible beauty is construed as numbers incarnate. As man is a measure of all things (as typified by Christ, the ideal man), the human can “tie” or “untie” matter through the use of energy related to the various forces of the universe. As Cassirer put it, allegoric devices and the use of imagery and symbols are not an external complement, an occasional “dress,” but the medium of thought itself.⁴⁶

Witchcraft in the Renaissance

The Historiography of Witchcraft

I shall limit my discussion to the main historiographic attitudes toward the witchcraft mania, to witchcraft in the context of magic, and, most pertinently, to the issue of psychopathology in relation to witchcraft. No longer is it the prevailing scholarly opinion that many alleged witches were afflicted by today’s recognizable mental disorders. So, on one hand, the relevance of witchcraft for psychiatry proper has progressively declined in recent decades, as it appears less and less to be a directly psychiatric issue. On the other hand, many aspects of magic, and witchcraft in particular, are now considered to express a cultural malaise that may lead indirectly to mental disorders. Hence, my emphasis in the previous section on the “dark side” of the Renaissance.

From the eighteenth century Enlightenment through the nineteenth century, the Renaissance witch hunt was viewed as an expression of absurd superstitions.^{47,48} Early in the twentieth century, with the rise of anthropology and folklore as scholarly disciplines, witchcraft came to be considered as manifesting an

array of popular beliefs that could be traced to early times and took forms in the Medieval and Renaissance periods that varied with local tradition and served as the perennial substrate of official Christianity. This thesis, best typified in Margaret Murray's 1921 *The Witch Cult in Western Europe*, had considerable influence in the past, but has been for the most part discarded.⁴⁹⁻⁵¹

The psychoanalytic mode of explanation became important in the 1920s, beginning with publication in 1923 of Freud's "A Neurosis of Demoniacal Possession in the Seventeenth Century,"⁵² in which he pursued ideas first introduced in his 1913 *Totem and Taboo*. Construal of the witchcraft rituals as signifying female sexual acting out, of the inquisitors' obsession with the lustful aspects of witchcraft as representing gratification of their own repressed sexual desires, and, in general, of the psychodynamics underlying the entire phenomenon of witchcraft all had noticeable impact on explanations of witchcraft.

The events that led to the rise of European totalitarian regimes in the 1920s and 1930s also led to an interest in the new field of social psychology of the topic of mass behavior. The concept of the scapegoat as a means for counteracting overwhelming feelings of anxiety in a period of great distress became important in explaining the events leading to the Holocaust.

With the application of social science concepts to history in the last two decades, considerable progress has been made in understanding the complex phenomenon of witchcraft.⁵³⁻⁶³ This has been essentially due to original archival research into certain well-known episodes of the witchcraft mania, notably in southern Germany.⁶⁴

With the beginning of psychopharmacology in the 1950s and spread of the "drugs of the mind" by the 1960s counterculture, attention was focused for a while on a possibly purely chemical cause of witchcraft, based on the assumption that the ointments used on their bodies by alleged witches in preparation for the Sabbath may have contained active pharmacological substances, such as belladonna, mescaline, and Solanaceae.^{65,66} This thesis, peripheral at most, has received less and less recognition in recent years.

The thesis that many old women prosecuted as witches during the Renaissance were in reality marginal social figures who would today be considered socially deviant, but who then were cast in the role of scapegoats has become increasingly important.⁶⁷⁻⁷⁴

Witchcraft in the Context of Magic

Present in virtually all nonliterate cultures, belief in magic became refined in the Bible and in Roman law through a distinction between white (propitiatory and healing) and black (harmful and vindictive) magic. Early Christianity incorporated into its practices many rituals of beneficent magic from classical culture (such as the cult of saints and worship at shrines), justifying the characterization of the new religion by official paganism as a new form of magic. By the time of St. Augustine in the fourth century, the position was reversed. Pagan gods were now considered as demons aiming at leading men away from God.^{75,76}

In the early Middle Ages those accused of practicing magic were considered sinners and given proper penances, as evidenced in the *Canon Episcopi* of the Carolingian epoch, an authoritative manual for confessors later included under canon law. Contact with Islamic culture through the Crusades in the eleventh and twelfth centuries increased the influence of magic in medicine, alchemy, and astrology. Though strongly condemned by the Aristotelian rationalists of the thirteenth century (for instance, Albertus Magnus, Thomas Aquinas, and Roger Bacon), many of the best minds of the time—particularly Ramon Lull (author of the famous *Ars Magna*), Arnold of Villanova, Michael Scot at the court of Frederick II in Palermo, and Peter of Abano—turned to it. For a while it appeared that learned magic, especially in the form of astrology, would be able to answer the puzzling individual and social problems of the time.

The calamities of the fourteenth century—plague, wars, famine, catastrophic meteorological phenomena, the Avignon captivity of the pope followed by the Great Schism—shattered the foundations of a view of the universe based on exact astrological laws. As typical in periods of overwhelming stress, many found consolation in the millenarian dreams of eternal salvation following the advent of the anti-Christ (as pre-announced in much of the apocryphal literature)—hence the spread of heretical movements, especially in regions influenced by contrasting cultures, such as southern France, or isolated geographically, such as the Alpine areas.⁷⁷

With the fifteenth century revival of Neoplatonism in Florence at the Academia Platonica, mainly through Marsilio Ficino and Pico della Mirandola, on the one side, the figure of the magician became the wise man-king-priest, the God-like artist able to create as a supernatural being and to tie and unite the various aspects of reality, while on the other side, in response to the perennial question of determinism versus free will, a critical attitude was voiced toward forms of black magic. But these were issues for the intellectual elite and had little effect on the beliefs of the masses.

For more typical folks, Pope Innocent VIII's 1484 bull *Summis desiderantes affectibus* was much more important. In it he issued directives to the inquisitors for the persecution and punishment of all those, especially in the Rhine Valley, who reportedly caused damage to adults, children, animals, and crops as a result of a pact with the devil. Innocent's bull was the culmination of a long process begun more than two centuries before with the establishment of the Inquisition of Gregory IX in 1229 for the purpose of repressing the apostasies then spreading mainly in southern France, the Rhineland, and the Alpine regions, resulting in the decision to excommunicate all those accused of magic.

In time, the militant intervention of the Church fostered and spread belief in the rituals of witchcraft—an assortment of bizarre, repulsive, and inhuman practices, such as the flight to the Sabbath, the killing of infants, the use of secret ointments, intercourse with the devil, and the causing of mishappenings to humans, animals, and property, mostly by women endowed with particular marks as evidence of the devil's intervention.^{78,79} Many, including some canonists, remained skeptical about the reality of most of these phenomena, with the exception of *divinatio* (predicting the future), *sortilegium* (divining the future by opening the Bible at random), and *maleficium* (evoking the devil), practices that parodied religious ceremonies and profaned the sacraments⁸⁰ and were punished as crimes by burning at the stake by civil authorities.

As a consequence of Innocent's bull regarding witchcraft, the Dominicans Heinrich Kramer and Peter Sprenger hastily composed the *Malleus maleficarum* ("The Hammer for Witches"), published in Cologne about 1487.⁸¹ Based on their experience as inquisitors in many cases of witchcraft and supported by biblical and patristic quotations, the *Malleus* consisted of three parts: the first argued for the existence of witches and devils; the second defined methods for identifying a witch; and the third described legal issues and sanctions for the persecution of witches. Probably the most horribly misogynous document ever published, it quickly became the standard manual for persecution of alleged witches for the next two centuries.

Luther and the leaders of other Protestant denominations supported persecution of witches. The puritanical attitude of the Protestants may even have exacerbated their harsh attitude toward witchcraft, while in Catholic lands the persisting worship of saints and relics allowed for the continuation of popular beliefs. Following an initial wave of witch hunting in areas with strong heretical movements (especially southern France), the second wave occurred mainly in the sixteenth century in eastern France, southern Germany, and Flanders—areas lost to the Protestants and reconquered by the Catholics. Further support for the persecution of witchcraft came from the imperial *Constitutio Criminalis Carolina* of 1532.

In vain a few enlightened minds raised doubts about the reality of witchcraft and the rationale for its suppression. Among physicians, Agrippa, Cardan, and especially Weyer, whose work will be discussed later, protested. Virtually all the greatest minds of the time were affected by the belief in witchcraft, just as the general population. The British historian Trevor-Roper stressed that "the difficulty of the men of the 16th and 17th centuries was that witchcraft beliefs were not detachable from their general context."^{82,83} In line with Thomas Kuhn's widely employed interpretation of the history of science, one might say that the climate of the time was not ready for a critical assessment of the phenomenon of witchcraft. The new orientation was to come only in the seventeenth century with the emergence of a new "paradigm" based on rationalism, as typified by Descartes.⁸⁴

Witchcraft and Psychopathology

The notion that alleged witches were poor, old, and melancholic can be traced to Agrippa, Paracelsus, Weyer, and Cardan in the Renaissance. In some cases these women were considered gullible enough to be deceived by tricks of the devil; in other cases, women with a melancholic constitution were viewed as

predisposed to become prey for the devil's tricks. Used within the intellectual context of humoral theory, melancholia was a catchword for mental aberrations and disturbed behavior in general.

With the rise of rationalism in the seventeenth century, a more skeptical attitude toward superstitious beliefs and old practices emerged. This was particularly noticeable among learned people, including physicians and magistrates. Scientists began requiring a more rigorous approach toward understanding the phenomena of life. With advancing knowledge in anatomy and physiology, better-defined physical (quantitative) and chemical (qualitative) concepts began to replace the vague notions of humors. Although the term "melancholia" continued to be used, it became increasingly difficult to explain mental illness on the basis of the humors. Increasingly, the role of the nervous system in the pathogenesis of mental illness came to be emphasized. This led to the recognition of other mental syndromes—notably hypochondria and hysteria—in addition to the traditional pictures of melancholia and mania.

By the eighteenth century, with its prevailing rationalism, it is likely that many of the socially and economically marginal women who before would have fallen into the role of witches came to be included in the category of social outcasts. A society increasingly geared to the productivity of the so-called Protestant ethic contemptuously viewed outcasts, which included vagabonds, delinquents, mental defectives, the crippled, epileptics, and psychotics, and excluded them from the mainstream of life. Foucault,³¹ whose interpretation historians now view with skepticism, first called attention to this trend by focusing on the tendency, mainly in France and Germany, to confine many of these outcasts in large institutions (*hôpital général, Zuchthaus*) that represented a combination of a shelter, a jail, an asylum, and a hospital.

By the turn of the eighteenth century, through the pioneering work of Chiarugi in Florence, Pinel in Paris, and Tuke in York, England, the mentally ill began to be separated from other social outcasts. Their psychopathology began to be understood from an organicist and functional point of view. At the same time, more-humane and scientific approaches to their treatment were introduced. The mentally ill at this time were largely psychotics who today would fall into the wide categories of schizophrenia, manic-depressive psychosis, and organic syndromes.

Chiarugi and Pinel both made scattered yet succinct references in their respective treatises on mental illness to cases of melancholia based on religious fixations and on their connection with some of the famous episodes reported in the demonological literature. Esquirol, Pinel's most famous pupil and author of the first "modern" textbook on mental diseases (1838), translated into English in 1845 as *Mental Maladies*, devoted an entire chapter in it to "demonomania," which he defined as a variety of religious melancholia, basically caused by ignorance and prejudice, induced by fear and dread, and especially marked during the turbulent period of the Renaissance.⁸⁵

Clearly the idea was progressively being introduced (or better, re-introduced) that, at least in some cases, alleged witches and possessed individuals may have been mentally ill and perhaps even affected by a sort of mass psychosis. Slowly, in Paris and elsewhere, hysteria came to be viewed as a broad diagnostic category encompassing a variety of clinical pictures—an important change, which resulted in modifying the entire field of mental illness by switching the focus onto nonpsychotic patients. This new group of patients was first treated by neurologists, the most prominent of which was the Frenchman Jean-Martin Charcot, for many years in charge of the neurological ward of the famous Salpêtrière in Paris.

Under Charcot's influence, attention was increasingly paid to the possibility that many women accused of witchcraft, as well as a number of people allegedly possessed by the devil and exorcised in the Renaissance, may have suffered from hysteric symptoms. A number of publications supporting this viewpoint appeared, especially in France. The neurologist and protégé of Charcot's, Desiré M. Bournville, brought out the *Bibliothèque Diabolique* series, short monographs by Charcot and his pupils—mostly on little known cases of nuns allegedly possessed by the devil in the sixteenth and seventeenth centuries—as a further proof of the hysterical nature of their symptoms. Among the eight books that comprised this series, the third one, published in 1885 in two volumes, stands out for its length and importance. It consisted of the reprint of the 1579 French translation of Weyer's *De praestigiis daemonum*.⁸⁶ The very fact that Weyer's book was added to this historical series points to the attempt to consider many cases of alleged witches and of possessed individuals described there as belonging to the syndrome of hysteria.

Meanwhile, the spread of the psychoanalytic movement in the early decades of the twentieth century resulted in the tendency to explain cultural phenomena psychoanalytically. The Renaissance witch hunt came to be viewed in terms of the discharge of repressed sexual and aggressive impulses on the part of alleged witches and inquisitors. Academic psychiatry, strongly anchored to the organicist frame of reference, remained largely unaffected by the psychoanalytic trend. For the next thirty years little of the burgeoning literature about witchcraft dealt specifically with psychopathology, the exception being some allusions to the erotic aspects of the witchcraft ritual.

In his 1935 *The Medical Man and the Witch during the Renaissance*,⁸⁷ Gregory Zilboorg, a well-known psychoanalyst and medical historian, focused on Weyer's work, further emphasizing the psychopathology of the alleged witches, both in terms of traditional psychiatry (illusions, hallucinations, and organic deliria) and of the new dynamic psychology (sexual disorder, erotic nature of convulsions, unconscious lascivious motives in the inquisitors, and the general impact of affect on imagination). Having accepted Weyer's thesis that witches were women whom the devil had made melancholic and insane, and that the word "devil" was used as a colloquial expression for "crazy," Zilboorg concluded that both Weyer's *De praestigiiis*⁸⁸ and the *Malleus* included descriptions of clinical cases relevant to modern psychopathology. In the long chapter devoted to Weyer in his 1941 *History of Medical Psychology*, Zilboorg reiterated Weyer's statement that the witches were unquestionably mentally ill and asserted that Weyer was the true founder of modern psychiatry.⁸⁹ Written in an appealing and passionate style, Zilboorg's was the only English-language general history of psychiatry for several decades. Its psychoanalytic bias certainly abetted the book's popularity, as psychoanalysis dominated academic psychiatry in the mid-twentieth century. The next important general history in English, Alexander and Selesnick's 1966 *History of Psychiatry*, accepted Zilboorg's viewpoint about witchcraft, considering "these severely emotionally disturbed women ... particularly susceptible to the suggestion that they harbored demons and devils."⁹⁰

By the mid 1960s the anti-psychiatry movement was in full swing, given impetus by publication in somewhat abridged form in 1965 of the English translation of Foucault's *Madness and Civilization*, a controversial work that aimed to demolish the traditional view of psychiatry as arising in the nineteenth century from the convergent work of pioneer practitioners of humanitarian bent. Thomas Szasz regarded mental illness as a myth and those branded "mentally ill" as scapegoat social deviants, ideas certainly influenced by the Holocaust.⁹¹

Recent authors^{92,93} discern two distinct types of witchcraft trials: small-scale, centered around accusations of quarrelsome, often single, old women by neighbors; and large-scale trials that were especially prominent in times of conflict between urban and rural areas, between a humanistic and popular ethos, or between antagonistic religious beliefs. The Inquisition implicitly grouped together witchcraft, satanism, and heresy. Fostered by ecclesiastic authorities and supported by political leaders always fearful of social revolts, periodic episodes of mass witch hunting took place.⁹⁴⁻⁹⁷

The recent emphasis on social factors in the history of witchcraft contrasts starkly with the older style of interpretation that tended not to distinguish between the demon-possessed and witches, and that uncritically took the unusual phenomena ascribed to witches in demonological texts as evidence of mental disorders. Earlier interpreters simply disregarded the attribution both in popular belief and in medieval/Renaissance medical texts of mental diseases to natural rather than supernatural causes, just as they accepted uncritically the now-discarded pharmacological explanation of the psychopathology of alleged witches as an effect of ointments absorbed by the witches' bodies. The older psychogenic explanation of the behavior of alleged witches has been severely criticized in the recent literature as a presentistic tendency to consider their psychological phenomena from a modern viewpoint while ignoring the demonological Zeitgeist.⁹⁸⁻¹⁰⁰ In assessing the data on the treatment of alleged witches in local areas of France, Germany, and Switzerland, recent scholars such as Midelfort¹⁰¹⁻¹⁰⁵ have emphasized the following points: (1) Belief in the reality of witchcraft affected not just ecclesiastic and lay authorities, but alleged witches as well. Many alleged witches (whether as a consequence of torture or simply of heavy suggestion as in England, where torture was not used) really believed themselves to be witches and consequently behaved as such. (2) The inquisitors believed they were doing their duty by eliminating the devil's influence from

this world.¹⁰⁶ (3) At times, fear of eternal damnation and of the devastating effect on their progeny of conviction for witchcraft led many women to believe sincerely in the accusations brought forward against them, develop self-destructive tendencies, and implicate others in the same crime.¹⁰⁷ (4) With the progress of medicine in the sixteenth century, medieval nosological categories may have proven inadequate. Clinical pictures that could not fit into traditional medical patterns (notably epidemic diseases) came to be attributed to supernatural causes.

From a broader perspective two major points seem now to be well established: (1) Societies tend to resolve through scapegoating anxieties aroused by severe stress. (2) Renaissance society was misogynist. The majority of men, including some of the most outstanding, were unconsciously afraid of women,^{108,109} leading to an outpouring of misogynous literature and art.

Seen from the perspective of modern psychiatry, evidence for mental illness is convincing in only a few witch trials. Though it is now increasingly acknowledged that most of the women accused of witchcraft were social outcasts living at the margin of their culture, we must beware of using the equation of witchcraft with deviant social behavior as a single-factor theory to explain the very complex phenomenon of Renaissance witchcraft. To do so would be to replace one oversimplification with another.

Important Persons in Relation to Renaissance Psychiatry

The Renaissance was an era of individualism. Though many modern psychological and psychopathological concepts originate in the Renaissance, they are not always easy to find, as they are scattered through works in disparate fields. The word “psychology” is itself a Renaissance product. The first extant work in which it is used in the title of a book is Rudolph Goclenius’s collection of essays on the origin of the soul, *Psychologia*, first published in 1590. The earliest use of the term *psychologia* is in a bibliography of the works of the Dalmatian humanist Marcus Marulus in which his *Psychologia de ratione animae humanae* is mentioned. There is no surviving copy. The work, if it ever existed, would have appeared around 1517 as essentially an ethical treatise.^{110,111}

In an attempt to identify some of the main psychological contributions in the Renaissance, I shall discuss da Vinci, Vives, Paracelsus, Cardan, Weyer, Porta, Huarte, and Zacchia.

Leonardo da Vinci

In his many notebooks, published only recently, Leonardo da Vinci (1452–1519) recorded many intuitions “anticipating” modern psychological concepts. He carefully described the cerebral ventricles based on the injection of cadavers; hinted at the notion of hierarchic functioning of the nervous system (Jackson’s motor automatisms); investigated the psychophysiology of perception, the expression of emotions in physiognomy, and the emotional selectivity of memory; alluded to the importance of self-suggestion (hypnotic fascination, especially in women) and of dreams; and, in general, emphasized the instinctual component of the mind.¹¹² He even criticized belief in the power of magic, stating that, were it real, it would be mightier than entire armies.¹¹³ Unfortunately, all these anticipations remained unknown or forgotten for centuries. Only one had historical significance: Among the sources influencing Rorschach in the formulation of his psychodiagnostic text is Leonardo’s description of forms he fancied seeing in clouds and objects.

Vives

Jean Louis Vives (1492–1540) was born in the same year as the unification of Spain by the Catholic monarchs and of the discovery of the American continent by Columbus. His birthplace, Valencia, was then the prosperous capital of Aragon, a region in which the Jewish, Christian, and Arabic cultures had flourished together. Traditionally held as a champion of Christian orthodoxy—some of his writings have been included in the *Book of Common Prayer*—he was found recently to be also of Jewish heritage. This may

explain why he permanently left Spain in his teens to spend the rest of his life in France, England, and Flanders. Trained at the famous theological school of Paris, he soon developed a dislike for medieval scholasticism in favor of a return to classical authors, their clear style, and their concept of moral virtues. Recognized for the excellence of his writings, he moved to England and became close to Catherine of Aragon, wife of Henry VIII, as well as to the group of outstanding English humanists typified by John Colet, Thomas Linacre, and Thomas More. Having sided with Catherine against the monarch in his repudiation of her, he had to leave. Returning to the Continent, he settled in Bruges, then the thriving business center of wealthy Flanders, where he lived the rest of his life.

Vives's writings reflect his varied background, the breadth of his reading, and the impact of his close contacts with many outstanding minds of his time, notably with Erasmus. In his 1525 *On Poor Relief* he advanced views on welfare, particularly in regard to the mentally ill, that are striking for their modern flavor:

When a man of unsettled mind is brought to a hospital, it must be determined, first of all, whether his illness is congenital or has resulted from some misfortune, whether there is hope for recovery or not. One ought to feel compassion for so great a disaster to the health of the human mind, and it is of utmost importance that the treatment be such that the insanity be not nourished and increased, as may result from mocking, exciting or irritating madmen, approving or applauding the foolish things that they say or do, inciting them to act more ridiculously, applying fomentations as if it were to their stupidity and silliness. What could be more inhuman than to drive a man insane just for the sake of laughing at him and amusing one's self at such a misfortune?¹¹⁴

He later wrote:

Remedies suited to the individual patients should be used. Some need medical care and attention to their mode of life; others need gently and friendly treatment, so that like wild animals they may gradually grow gentle; still others need instruction. There will be some who will require force and chains, but these must be used so that the patients are not made more violent. Above all, as far as possible, tranquility must be introduced in their minds, for it is through this that reason and sanity return.¹¹⁴

Toward the end of his life, Vives published *De anima et vita* (1538), a treatise on human psychology based on traditional philosophical and moral concepts put forward in classical times and represented by the humanists. In exploring the inner aspects of psychological life, he attempted to understand mental phenomena from an empirical point of view, probably using personal observation. This was in contrast to the metaphysical emphasis of scholasticism. As he put it, "What the soul is, is of no concern to us; what it is like, what its manifestations are, is of very great significance." Vives was aware of psychological associations, recognizing their emotional origin, emphasized the role of instinct in human behavior, and believed in the ambivalence of emotions. In light of this, Vives should be recognized, not just as the father of empirical psychology, but also as a forerunner of dynamic psychology.¹¹⁵

Paracelsus

A characteristic Renaissance figure, Paracelsus (1493–1541) remains controversial despite the vast literature about him. Born Theophrastus Bombastus von Hohenheim in the Swiss village of Einsiedeln, he was certainly influenced in his childhood by the spectacle of many coming there to the then-famous local shrine (where his mother ran a hospital for pilgrims) in search of solace and help, and later, in his youth, by the skill and dedication of his father, an engineer, in bringing to light the largely obscure and mysterious material from the Carinthian mine in Austria. After receiving the rudiments of a basic education, he studied medicine in France at Paris and Montpellier, then in Ferrara, Italy. Soon disillusioned by the tendency of physicians to get engrossed in useless theoretical controversies rather than observing patients directly, he was fond of saying later in his life that he owed most of his medical knowledge to the therapeutic procedures he learned from simple country women, based on centuries-old beliefs and practices.

Like many other Renaissance men, his life was characterized by an inner restlessness that both led him to a long journey through many European cities and regions and prevented him from presenting his thinking

in a systematic or consistent way. Rather, his numerous and often extemporaneous writings, mostly written in the German vernacular (in contrast to the universal tendency of physicians to use Latin), cover a variety of topics and reflect so many ideas as to defy any comprehensive presentation or interpretation. It suffices here to mention but a few basic points of his thought. Among his many influences were the Manichean opposition of good and evil as expressed by the Gnostics as well as cabalistic, astrological, pantheistic, and alchemical themes. For the four humors of classical medicine he substituted the three principles of sulfur, salt, and mercury, anticipating the later chemical and quantitative investigations of the body. Finally, in line with contemporary notions, he based his system, sometimes called a cosmological anthropology, on a symbolic and intuitive correspondence between humans and the universe.¹¹⁶

To Paracelsus goes the merit of having written one of the first books entirely devoted to mental illness, *The Diseases Which Deprive Man of His Reason*, which, prepared in 1526, was published posthumously in 1567.¹¹⁷ The following statement, part of the introduction, clearly points to the boldness and novelty of his attitude toward mental illness:

In nature there are not only diseases which afflict our body and our health, but many others which deprive us of sound reason, and these are the most serious. While speaking about the natural diseases and observing to what extent and how seriously they afflict various parts of our body, we must not forget to explain the origin of the diseases which deprive man of reason, as we know from experience that they develop out of man's disposition. The present-day clergy of Europe attribute such diseases to ghostly beings and three-fold spirits; we are not inclined to believe them. For nature proves that such statements by earthly Gods are quite incorrect and, as we shall explain in these chapters, that nature is the sole origin of diseases.¹¹⁷

In his discussion of clinical syndromes, Paracelsus introduced a number of concepts that, dismissed in the past as obscure or unscientific, may be seen today as "anticipating" dynamic postulates. He attempted to define clinical pictures of mental diseases such as manic-depressive psychoses, psychopathic personality, and mass psychic contagion; he relied on a dynamic view of the personality, emphasizing its total involvement in each mental illness; he strongly adhered to the belief that the mental patient is neither a criminal nor a sinner, but a sick person in need of medical help; and, assuming mental illness to be a deviation from normality, he searched for causative factors and for therapeutic methods in order to reintegrate the patient to his original state of health.

Firmly believing that psychic conditions should be treated with psychic methods, he practiced psychotherapeutic methods that today would be considered a mixture of counseling, suggestion, reasoning, and support. Others have stated that the notions of projection, ambivalence, unconscious self-destructive trends, and the economy of the libido are to be found in his writings. Finally, accordingly to Zilboorg, the first reference to the unconscious motivation of neuroses in the history of medical psychology occurred in a passage of Paracelsus's book concerning St. Vitus' dance:

The cause of the disease "chorea lascivia" is a mere opinion and idea, assumed by imagination, affecting those who believe in such a thing. This opinion and idea are the origin of the disease both in children and adults. In children, the cause is also imagination, based not on thinking but on perceiving, because they have heard or seen something. The reason is this: their sight and hearing are so strong that *unconsciously they have fantasies* about what they have seen or heard.⁸⁹

Jerome Cardan

Jerome Cardan (also known as Girolamo Cardano; 1501–1576), an encyclopedic as well as eccentric figure of the Renaissance, considered by many as a charlatan during the positivist era, has been recently re-evaluated for his contributions to medicine (especially psychiatry), mathematics, physics, and philosophy. Born an illegitimate child in Pavia, he describes in his autobiography his parents as quarrelsome and abusive and himself as suffering from nightmares, stuttering, and sexual impotence, facts that may have contributed to his psychological perspicacity. Well steeped in classics, mathematics, and astrology, he studied at the University of Pavia and, later, the University of Padua, where he graduated in medicine in

1526. In 1543 he became professor of medicine in Pavia, where he was in contact with Vesalius and where he taught, with some interruptions, up to 1560. His reputation was so great that in 1552 he spent almost a year in Scotland successfully treating the Archbishop of Edinburgh, John Hamilton, for asthma.

In the meantime, he produced some of his most important works: in 1550 his well-known *De subtilitate* (On Subtlety), followed in 1557 by the *De rerum varietate* (Concerning the Variety of Things). He discussed in them an array of topics ranging from physics to mechanics, cosmology, natural science, demonology, and astronomy, blending indiscriminately the real and the imaginary in an attempt to reach a comprehensive view of science, in which he included magic, alchemy, and various branches of the occult.

Cardan experienced a succession of misfortunes and disappointments in later life. His younger son was jailed for various felonies, and his oldest son was hanged in 1560 for poisoning his wife. He taught medicine at the University of Bologna from 1562 to 1570, all the while ashamed of his situation and persecuted by his enemies. In 1570 he moved to Rome, where he remained until his death. In 1575 his *De propria vita* appeared, an autobiography remarkable for its candidness and realistic presentation of the culture of its time.¹¹⁸

Like many of his contemporaries, Cardan's philosophical tenets include a mixture of traditional and Renaissance concepts. Paramount among the latter is the notion of a universal soul common to all beings (vegetable, animal, and human) and affected by sympathy and antipathy, as well as adherence to mystic and Neoplatonic religious—even superstitious—beliefs. His contribution to psychopathology is notable on three counts. First, he presented himself in his autobiography as impetuous, as inclined to gambling and to paranoid and grandiose ideas, and as moved by a sort of Socratic demon (to the point where he attributed many of the concepts put forward in his books to his dreams). The founders of the new field of criminal anthropology in the mid-nineteenth century understandably regarded him as an exemplar of the relationship between genius and insanity. Second, during his impassioned defense of his son accused of uxoricide, he argued that the mentally ill ought not be held responsible for their criminal acts, a notion that may be viewed as a direct anticipation of the later concept of moral insanity, which is crucial to the field of legal psychiatry. Third, he assumed an enlightened stance on witchcraft, possibly under the influence of Agrippa (who opposed belief in witchcraft and who had taught in Pavia twenty-five years before Cardan) and of Andrea Alciati, a colleague and well-known jurist at the University of Pavia, who had objected to use of torture to extort confessions from alleged witches. In his works, Cardan clearly opposed an uncritical belief in witchcraft. In particular, he attributed the signs of witchcraft presented by the accused to suggestion and deception (to the extreme of self-incrimination), calling these poor creatures “taciturn, insane, and no different than those possessed by demons.” Elsewhere he hinted at a connection between the delusions of witchcraft and sexual disturbances, castigated the inquisitors for their punitive methods and gullibility, and attributed some of the delusions to the pharmacological influence of ointments used by the alleged witches.¹¹⁹

While the first two points—the relationship between genius and insanity and the anticipation of the concept of moral insanity—have acquired relevance only with the advent of modern psychology, Cardan's criticism of the witchcraft mania had ample repercussion in the Renaissance. In particular, it was widely used by Weyer in his 1563 *De praestigiis daemonum*.

Johann Weyer

Johann Weyer (1515–1588), born in Graves, a town in northern Brabant on the border between Germany and Holland (hence the spelling of his name as Wier in Dutch), was deeply influenced in his late adolescence by Agrippa, with whom he lived for some time in Bonn. Physician, theologian, and Renaissance wandering scholar, Heinrich Cornelius Agrippa is especially known for his *De occulta philosophia* (1531–1533), a sort of encyclopedia aiming at establishing occult sciences as natural magic, published almost contemporaneously with his *On the Variety and Uncertainty of Arts and Sciences*,¹²⁰ which argued for the relativity of knowledge. An independent thinker, he succeeded while in Metz in liberating on legal

grounds a poor woman accused of being a witch. He strongly influenced Weyer, by whom he was always remembered affectionately.¹²¹ Agrippa himself was thought by some to be a sorcerer or witch.

At the age of nineteen Weyer began to study medicine in Paris and eventually graduated at Orleans. From 1550 to 1578 he was personal physician to Duke William Jülich, Cleves, and Berg, an enlightened and religiously tolerant man. In the climate of serenity of the small court, he gradually turned his interest from general medicine to the study of individual human behavior, particularly to the study of women who had been accused of witchcraft. On the basis both of personal experience and of a thorough study of the literature, he published in 1563 his famous *De praestigiis daemonum et incantationibus ac veneficiis* (On the Deceptions of the Devils, on Enchantments and on Poisonings), which went through four enlarged editions and was translated into German and French.^{122,123}

De praestigiis dealt with witchcraft from four viewpoints—theological, philosophical, medical, and legal. It was divided into six parts, dealing respectively with the devil; the satanic magicians; the witches; the possessed; help for the possessed, bewitched, and poisoned; and the punishment for sorcerers, witches, and poisonmongers. Having launched an attack against those, especially clergymen, who used sorcery to exercise power on superstitious people, he denied the absurd beliefs in the extraordinary powers of the witches. This does not mean that he dismissed the power of the devil, an impossible stance in the sixteenth century. Instead, Weyer argued that some women, already predisposed because of their sex to credulity, recklessness, and melancholy, can easily become prey of the devil, who disturbs their humors and distorts their senses to the point that they imagine themselves involved in the various rituals described in the demonological literature. For Weyer, a competent physician should be consulted in every case of accusation of witchcraft. He examined a number of accused women himself, some in convents where unusual phenomena were reported. His spirit of inquiry and perspicacity of observation are evident in his descriptions of many cases. By including a brief history, a report of his findings, and his rationale regarding treatment, he “anticipated” the modern psychiatric examination. It is, as discussed previously, questionable whether the clinical pictures described by Weyer can be equated to modern syndromes, as was done by Zilboorg. Nonetheless, he used a great deal of common sense and professional insight over and above humanitarianism in outlining the treatment for each case, the range of which included medications, physical procedures, support, suggestion, and, in cases of mass hysteria in convents, removal of the most disturbed nuns. Weyer’s treatment of Barbara Kremers, a ten-year-old girl who became a *cause célèbre* by allegedly living for more than a year without touching food or drink, exemplifies his method. He convinced the girl’s parents to let her and her twelve-year-old sister stay for a while in his home. It was soon discovered that Barbara surreptitiously received nourishment from her sister. The apparently extraordinary case consisted simply of malingering on an unconscious basis. This entire matter, presented in 1577 in a separate pamphlet “On Alleged Fasting,” offers a clear view of Weyer’s unusual insight and pioneering psychotherapeutic resourcefulness.^{124–126}

At the end of his book Weyer anticipated that his thesis would meet great resistance. He was proved right. Yet, the very fact that *De praestigiis daemonum* went through several editions and translations indicates that there were many who opposed the witchcraft craze, although they were reluctant to state their opinion for fear of persecution. Only a few overtly embraced Weyer’s ideas, at times without mentioning him, for example: the German mathematician Hermann Witekind¹²⁷ and later the German Jesuit Friedrich Spee in his 1631 *Cautio criminalis* (Precautions for Prosecutors), the British esquire Reginald Scot in his 1584 *Discovery of Witchcraft*, the Dutch clergyman Balthasar Bekker in his *De betoverde Weereld* (The World Bewitched, 1691–1693). It is also worth mentioning Montaigne’s skeptical attitude toward witchcraft. In one of his “Of Cripples” (1585 or 1586), Montaigne wrote on the basis of personal observation that these poor women suffered from disturbed imagination and needed to be treated rather than persecuted.^{128,129}

At any rate, the great majority opposed Weyer’s book,¹³⁰ most notably the great French political theorist Jean Bodin, who added an entire section to his 1580 *De la demonomanie des sorciers* (Demonomania of Witches) to prove that Weyer was not a physician but a sorcerer.^{126,131,132} The *De praestigiis daemonum* was soon placed in the Catholic Church’s *Index* of books not to be read under penalty of excommunication,

where it stayed until the nineteenth century. For the most part Weyer's book was overlooked by official medicine for a long time, as medical authors focused first on the classification of mental diseases and then on organic psychopathology. Only with the rise of interest in functional disorders, particularly hysteria, did Weyer's work resurface. Today, after a critical reassessment of Zilboorg's hyperbolic view of Weyer, his position in the history of psychiatry remains that of a great precursor. Such a reassessment finally may be possible thanks to the recent publication of a critical English translation of Weyer's work.⁸⁸ Nevertheless, it must be borne in mind that these innovative Renaissance thinkers had little, if any, direct impact on the development of modern medical psychology.

Giambattista Porta

Porta (or della Porta) (1538–1615), from a well-to-do Neapolitan family, was soon attracted by all kinds of interests related to scientific and borderline occult fields. In his *Magia naturalis* (1558, English translation 1628), he dealt with sympathy and antipathy, portentous operations, alchemical processes, and optical phenomena. He later founded the Accademia de Secreti, open only to those able to discover something new, and advanced a naturalistic explanation of witchcraft based on pharmacological action of the ointments used by alleged witches to undergo all kinds of fantastic experiences, for which he was severely attacked by Bodin in the latter's *Demonomanie des sorciers*.

Genuinely concerned with experimental data as opposed to metaphysical speculations, Porta viewed nature as an uninterrupted chain of being from the vegetable to the animal to the human, justifying a connection among these three realms and, moreover, a connection to extra-natural forces, achieved through the investigation of magic, alchemical, and astrological influences.

His name, however, is mostly remembered for his 1586 *De humana physiognomia*, republished many times and translated into several languages. The field of physiognomy includes three main aspects: the description of functions of the human body (such as characteristics of voice and gesture), the predominant traits of an individual (such as timidity or aggressiveness), and the physical resemblance of humans to animals (for instance, shrewish-looking people tend to resemble the fox). The origins of this field go back to the Greeks, mainly to two treatises, one of pseudo-Aristotle and one of Polemon, a Platonic philosopher of the third century B.C.E. In Arabic culture a naturalistic approach was replaced by an astrological emphasis that correlated personality traits with heavenly bodies. These two trends were combined in the two most important physiognomic treatises of the Western Middle Ages, that of Michael Scot (a famous astrologist at the court of Frederick II in Sicily) and that of Peter of Abano (a well-known Aristotelian philosopher and physician at the University of Padua), both in the thirteenth century. The most important Renaissance contributions to this field, Porta's books' were imitated by many others.^{133,134} Historically, it can be considered a forerunner of Lavater's physiognomic studies (1789–1798), of Gall's early nineteenth century phrenology, and in modern times of constitutional concepts relevant to psychiatry.

Juan Huarte

Born in a little town in western Spain, Juan Huarte de San Juan (1530–1592) first studied philosophy and then obtained a medical degree at the famous university of Alcalá in Henares. He spent the rest of his life practicing medicine. His 1575 book *Examen de ingenios para las ciencias* (The Examination of Men's Wits) was enormously successful, republished many times, and translated into the most important languages (including English in 1594 and again in 1698).

Based on traditional Greek sources (Hippocrates, Plato, Aristotle, Galen), the book aimed to show that only when skill and natural endowment are combined can a person operate at his highest level. Under the influence of congenital, characterological, and environmental factors, in each individual one of the three basic kinds of wits prevails—memorial, imaginative, or intellective—and that to each one of them correspond particular arts and sciences; hence the rationale for guiding each individual through education and vocational orientation to the field of activity most appropriate to his natural wit. In this way Huarte contributed in an important way to constitutional concepts that are relevant to modern psychiatry.¹³⁵

Paolo Zacchia

Born in Rome, where he spent his entire life, Zacchia (1584–1659) obtained a medical degree there and in 1644 was named *archiatra*, that is, first physician of the ecclesiastic state and personal physician to Pope Innocent X. In that capacity he was frequently called to give *consilia* to the court of the Sacra Rota, the highest judicial body of the Catholic Church. From 1621 to 1661 his *Quaestiones medico-legales* (Medical-legal Issues) appeared, the first comprehensive presentation of this matter, so that Zacchia is universally considered as the founder of legal medicine.¹³⁶ Aside from many psychiatric aspects dealt with in the voluminous *Quaestiones*, he showed a special interest in mental illness, publishing in 1639 his *De mali hypochondriaci* (On Hypochondriac Diseases).

A long section of the *Quaestiones* is devoted to mental illness, subsumed by Zacchia under the general denomination of *amentia* or *dementia*, by which he meant all those states of mind in which the rational faculty is impaired. The presentation begins with the strong statement (certainly at variance with the philosophy of the Inquisition) that, in his opinion, only a physician is competent to assess the mental condition of a person. Basic to such an assessment are the individual's behavior, language, actions, degree of rational judgment, and emotional state. He classified mental disorders as: (1) *fatuitas*, generally presented by immature and psychopathic persons; (2) *insania*, comprising mania, melancholia, and disorders of passions; and (3) *phrenitis*, mostly occurring in organic conditions according to the classical tradition. For each of these categories, Zacchia outlined rules regarding imputability and ability to testify, to marry, to enter a religious order, to leave a will, and so forth. Paramount in his presentation is the notion that the person rather than the law is to be given primary consideration. In particular, manic patients, during lucid intervals, could be held only partly responsible for their criminal acts; marriage might be beneficial for some melancholics, who at times could also carry limited responsibilities; special consideration should be given to persons who committed crimes of passion; alcoholics should be treated rather than punished; epileptics were to undergo a period of intensive study and observation prior to acceptance into religious orders; melancholia may lead some to believe in their being possessed by the devil; and, finally, in cases of malingering, not all the symptoms are known and can be reproduced at will. These few points suffice to show Zacchia's tremendous insight into legal psychiatry, so much so that his book can still be read profitably today.

Attitudes Toward Mental Illness

Lay Attitude

In the Renaissance some of the mentally ill continued to remain at home or in some sort of partial confinement within the extended family. Others may have lived a marginal existence in their own town or may have wandered from place to place as a result of their inner drive or rejection by society.^{137,138} A few considered dangerous to themselves and to others may have ended in jail or some similar confined setting.¹³⁹

Though we have, expectably, no reports of the condition of these unfortunate beings, Tomaso Garzoni's (1549–1589) volume *L'hospitale de pazzi incurabili* (1586, translated as *The Hospital of Incurable Fools* in 1600) does shed considerable light on contemporary attitudes toward the mentally ill. After entering religious life at age eighteen, he spent the rest of his short life mostly in Ravenna. Although obviously a very learned monk, he had a bent for noticing and describing the psychological characteristics of everyday people. Indeed, his first work, *Il teatro dei cervelli* (A Display of Minds, 1583) consists of a description of psychological traits taken from his history as well as from contemporary examples.

Garzoni is mostly known, however, for his writing on the mental hospital (in which the word "hospital" has to be understood in the broad sense of hospice rather than in the modern sense of a therapeutic facility). As the author specifically states, his book is intended to popularize the issue of insanity in order to enhance good mental health for the average person. In so doing, Garzoni in fact presents a reliable picture of the contemporary view of mental illness as held by the general public rather than by the medical profession.

In the thirty-first chapters he presents a series of abnormal persons, each one characterized by a particular adjective according to the custom of the time (for instance, odd, stubborn, extravagant). From the description of the behavior of these individuals it is possible to relate these adjectives to modern psychopathological conditions: depression, schizophrenia, stupor, mental retardation, anxiety, psychopathic personality, impulsivity, paranoia, sexual disorders, periodic mania, psychomotor agitation, negativism, homicidal tendency, and others.

That he says nothing in his book about medical treatment strongly indicates that Garzoni was not a physician. Moreover, the work fails to mention violent episodes, methods of restraint or punishment, or even the staff in charge of caring for these individuals. Thus, despite the title, Garzoni's is essentially a literary work, but one that offers an interesting perspective on the lay attitude toward mental illness.^{140,141}

Medical Attitudes

In the history of psychiatry, three main factors have contributed to neglecting the attitudes of Renaissance physicians toward the mentally ill: (1) their emphasis on the issue of witchcraft in relation to psychopathology; (2) their lack of interest in mental illness per se, in particular the lack of direct observations of the mentally ill on the part of physicians; and (3) their tendency to present most psychiatric pictures under the rubric "melancholia," often scattered in works of general medicine.¹⁴²

The gloomy attitude that pervaded so much of Renaissance life—famine, plague, syphilis, wars, the split of Christianity—seems to have influenced medicine toward accepting melancholia as the overwhelming human psychological trait. Several of the masters at the famous medical school of Padua made observations relevant to psychiatry. Giovanni da Monte (or Joannes Montanus) investigated natural and non-natural causes of melancholia, dividing the first into intrinsic and extrinsic; Geronimo Mercuriale differentiated hypochondria from melancholia proper; Prospero Alpini reported several personal observations of melancholia, stressed the cerebral location of the disorder, and introduced from Japan (he was professor of botany at Padua) moxa—combustible cones used to cauterize the insane—a treatment method that lasted into the 19th century; Girolamo Fracastoro, author of a famous poem on syphilis (1530), described the emotional state of the melancholic and cautioned against the tendency toward suicide; Girolamo Capicacci focused on the early signs—sleep disturbances, bad dreams, tendency toward apathy—which may precede the occurrence of melancholia.^{143,144}

Four physicians from other regions interested in mental illness are worth mentioning. In his 1542 *De universa medicina* Jean Fernel, professor of medicine in Paris, followed Aristotelian psychological notions, except for giving pre-eminence to the brain in the pathogenesis of mental disorders. In contrast to his contemporaries he asserted that the brain functions as a totality, disregarding the importance of localization of function. Otherwise, he followed traditional views on mental illness.¹⁴⁵ Conrad Gesner, a typical Renaissance man from Switzerland, dealt at length in a medical treatise with epilepsy, incubus, "*suffocatio uteri*" (women afflicted with hysterical symptoms), and the emotional importance of dreams, besides repeating the usual concepts regarding melancholia, mania, and phrenitis.¹⁴⁶ Ambroise Paré, universally considered the pioneer of modern surgery was, in contrast to the surgeons of his time, a very learned man. He dealt with mental illness in several of his works. In a section on the perturbations of the soul, he carefully described various passions; elsewhere he commented on mental disorders that accompany physical illnesses¹⁴⁷; under disturbances of imagination he discussed psychic disorders independent from physical phenomena. In an interesting book on "monsters" he dealt with devils, sorcerers, and possessed people. Like Weyer, he stressed the influence of the devil on man's imagination. Finally, the German Johann Schenck, a practicing physician in Strassburg and Freiburg, in his valuable book on medical observations published in 1584, dealt extensively with diseases of the head, in particular headaches, convulsions, insomnia, amnesias, epilepsy, and spasms. Like Weyer, he held that physicians rather than clergymen should be involved in the assessment and treatment of demonopathies.

Aside from the traditional methods of treatment—blood-letting, cathartics, and emetics—these physicians variously suggested traveling, music, and recreation as therapeutic means. All of them were aware of

the value of the doctor–patient relationship as enhancing the value of other therapies. But it was two philosophers, rather than practicing physicians, who emphasized the importance of imagination in leading to suggestion and self-suggestion: Agrippa in his *De occulta philosophia* (whose statements were later repeated by Montaigne in his *Essays*) and the liberal-minded Italian Pietro Pomponazzi in his book on the causes of natural effects or incantations, written in 1520 but published posthumously in 1556. All these, however, consisted simply of hints of the empirical methods of treatment developed later by Mesmer and, at the end of the nineteenth century, by Charcot and Bernheim, followed by Freud and the other proponents of the psychodynamic theory of behavior.

Literary Attitudes

Shakespeare is, of course, nonpareil in portraying human passions. Some of his dramatic personages have become prototypes of psychological traits: Hamlet of revenge, Macbeth of unchecked ambition, King Lear of the vagaries of parent–child relationships, to mention only a few. Since the first monograph on Shakespeare’s personages by the English psychiatrist John Bucknill more than a century ago, an extensive literature has appeared on this aspect of his writings.

Shakespeare shows extensive acquaintance with contemporary medical theories. He accepted the traditional concepts of humors and spirits¹⁴⁸ as well as a correspondence between human behavior and heavenly bodies.¹⁴⁹ Indeed, attempts have been made to trace the humoral predominance and, at times, the humoral changes occurring in some of his famous characters. Freud’s interpretation of Hamlet at the time of his own self-analysis gave impetus to psychiatric interest in Shakespeare. A number of applied psychoanalytic studies have focused on some critical points, mainly the conflict with the father figure, the aggressive struggle between men for power and sex, and passive and submissive attitudes of the sons vis-à-vis the fathers (Erikson, for instance, viewed Hamlet as an expression of identity crisis).

The Italian poet Ludovico Ariosto, who was active mainly at the court of Ferrara, represented madness from an entirely different perspective in his *Orlando Furioso* (Mad Roland, 1516–1532). This work continues the popular medieval theme of a young man who has to overcome all sorts of obstacles and dangerous situations in order to obtain the hand of his beloved. The poem includes an endless series of vicissitudes ranging from the grotesque to the comical, all as background for Orlando’s madness for love.^{150–152} This topic of the so-called “pure fool,” which runs uninterruptedly from the twelfth century Perceval to Wagner’s late nineteenth century *Parsifal*, was receiving increased attention in medical quarters toward the end of the Renaissance. Jacques Ferrand, a graduate from the medical school of Montpellier about whom little is known, published his *De la maladie d’amour, ou melancolie erotique* (The Love Illness or Erotic Melancholia) in 1612, followed by a second edition in 1623 and an English translation in 1640. His book contains the first recorded case of patients gaining insight through medical treatment. Almost exactly a century later, at the same medical school, Francois Boissier de Sauvages, who later authored an influential nosographic treatise along Linnean lines, was dubbed by his colleagues and students “*medecin de l’amour*” for his 1726 thesis entitled *Si l’amour peut être guéri par les remèdes tirés des plantes* (Whether love can be healed through remedies derived from plants).¹⁵³ Wallace notes that Freud himself considered love to be a sort of “psychosis”.

In his 1605 novel *Don Quixote* Cervantes immortalized the personality of the chivalrous man afflicted with delusions of imagination that never reach the psychotic level, who after endless adventures recovers from his madness and regains his common sense.¹⁵⁴ Don Quixote and his counterpart Sancho Panza have become the prototypes for the opposing constitutional types of the asthenic and pyknic personalities, the former related to schizophrenia and the latter to dysthymic disorder, a notion popularized by the German psychiatrist Ernst Kretschmer in his 1921 *Körperbau und Charakter* (Physique and Character).

Finally, Torquato Tasso, Italian poet of the late Renaissance long connected with the court of Alfonso II, Duke of Ferrara, is best known for his 1575 epic poem *Gerusalemme liberata* (Jerusalem Delivered), which dealt with the first crusade and the delivery of the sacred tomb from the infidels. He began in 1577 to present abnormal and dangerous behavior. He was first placed under house arrest in the ducal palace and later committed to the hospital of Sant’ Anna, where he remained for twenty years until his death.

A considerable literature concerning his disease, as well as the relationship between genius and insanity, has ensued. The etiology of his condition remains controversial, although it is generally assumed that he suffered from severe guilt, sexual difficulties, and paranoid ideation.¹⁵⁵

Mental Institutions

In the preceding chapter on mental illness in the Middle Ages mention is made of the early mental hospitals built by the Arabs in the Middle East and in southern Spain, then under their control. Such institutions have been praised in recent times for their enlightened attitude toward the mentally ill.¹⁵⁶ Under their influence a number of mental hospitals were opened in several Spanish cities, and, following their example, the Hospital de San Hipolito was founded in Mexico City in 1567,¹⁵⁷ the first institution exclusively for the mentally ill in the Americas.¹⁵⁸

In the early middle sixteenth century the Portuguese Juan Ciudad Duarte, called John of God, founded an order later called the Brothers of the Charity of San Juan de Dios, which was responsible for opening many hospitals, first in Spain (Granada, 1540; Madrid, 1552), then in many other countries. Although John Ciudad had suffered from a psychotic episode and, therefore, may have been particularly sensitive to emotional problems, it is uncertain whether the order he founded cared for the mentally ill in their hospitals.¹⁵⁹

Of the few facilities for the mentally ill that had by then been opened in other countries, most famous is the “Bethlem Hospital” (also known as “Bethlehem”) in London—hence the word Bedlam. Begun in 1346, there is evidence that already around 1400 some mentally ill, at times in chains or under other forms of restraint, were taken care of there. Following the Act of Dissolution of 1536, all English religious facilities were closed as a result of separation of the Anglican church from the Church of Rome. Bethlem Hospital was closed too, but on petition by the mayor of the city was reopened by King Henry VIII in 1546 exclusively for the mentally ill. A small institution, housing only twenty inmates in 1598, it was rebuilt in 1675 to 1676.¹⁶⁰

We know little about how patients were treated in these facilities. In fact, it was care rather than treatment that was provided: very likely a mixture of humanitarianism and confinement, strictly related to the philosophy of the administrator and his staff. Data are available only for Bethlem, where the “keepers” often took advantage of their authority for their own financial gain, to the neglect of the inmates. They accepted payment from the public to gawk at, and torment, the inmates.

Epilogue

The Renaissance is probably the most complex and contradictory historical period in the history of Western civilization. Among its many patent expressions are the following: the cult of harmonious beauty and the passion for the grotesque; the beginning of the scientific approach to reality and the attachment to the occult and mysterious; the interest in the minuscule as well as in the global cosmological view; the emphasis on individualism and the upsurge of great social and political upheavals by the anonymous masses; the emergence of the symbolic leading to ambiguity, notably in the constant dialogue and opposition between reason and folly; and, last but not least, both the exaltation of women and the misogyny evidenced by the casting of elderly women in the role of witches.

I have discussed all these themes in the various sections of this chapter. Europe was then still a conglomerate of cultures sharing an agricultural foundation of pagan beliefs and customs, while at the top was the shared classical tradition represented by the universality of Latin among intellectuals as well as conformity with or opposition to the Christian tradition of the Church of Rome and, later, the various Protestant churches.

More recently Paul Kristeller and others have viewed the Renaissance as continuing with a new perspective the religious worldview of the Middle Ages, in contrast to the traditional view that emphasized its secular humanism. Another view of the Renaissance as closely tied to occult and mysterious phenomena that

seem to defy rational attempts to understand them has also become important in recent decades. One must situate madness within such mysterious phenomena, which appears to cover a wide area in Renaissance literature and figurative arts, ranging from the creativity of the genius to the horror of the monstrous.¹⁶¹

Witchcraft belongs to this latter category, indeed, and its study has become a fashionable topic among scholars, representing a paradigm of the attitude toward the outcasts of society (personified by old women) and toward the overwhelming and frantic search for a magical solution to the period's immense cultural changes.¹⁶² An entirely new re-assessment of witchcraft and of insanity in the Renaissance has taken place in recent years,¹⁶³ based, as much as possible, on the study of primary sources in well-defined social situations. The difficulties facing those involved in the study of witchcraft, no matter how great, are still less formidable than those involved in the study of mental illness: at least, for witchcraft, some minutes of trials have survived, while for mental illness there are no records, either among clinical cases described by the physicians or in institutional archives (understandably so, as at that time mental illness was not differentiated from physical ailment, nor from social failure).

All this makes the study of Renaissance proto-psychiatry, no matter how frustrating, quite challenging. It is from the background of the Renaissance that modern medicine emerged, eventually leading to the rise of modern psychiatry during the Enlightenment. See D. B. Weiner's next chapters.

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Chapter 6

The Madman in the Light of Reason. Enlightenment Psychiatry

Part I. Custody, Therapy, Theory and the Need for Reform

Dora B. Weiner

Custody without Care

Prelude to Enlightened Psychiatry

During the eighteenth century, western thinkers gradually won the freedom to study human beings and nature without thought-control or censorship by state or church. “Enlightened” reformers argued that the doctrine of natural rights applied to impaired as well as to healthy persons and they strove for decent custody and humane treatment of the insane. Pioneering physicians claimed the nervous and mental diseases as their field of study and intervention. The confluence of these efforts created “psychiatry.” This term did not come into usage until the nineteenth century, but the subject was delineated earlier. We will use it here, for convenience.

The task of presenting Enlightenment psychiatry involves a special challenge because historians of medicine usually assert that “[P]sychiatry as a separate branch of medicine can be regarded as beginning toward the end of the [eighteenth] century, before which time the care of mental patients had been entirely custodial.”¹ What, then, was “Enlightenment psychiatry?”

To answer this question, we need to survey western Europe before the French Revolution in order to ascertain the condition of the men and women considered “in-sane” by the “sane” majority. We need to understand how physicians conceptualized mental illness, how various countries coped with the need to isolate and secure dangerous insane persons, and what therapies they applied. We shall find that the eighteenth century saw mental illnesses as diseases of the nerves and brain, thus delimiting the new field of neurology. This concept permitted the integration of the nervous diseases or “neuroses” into the contemporary nosologic framework. But this approach left physicians perplexed as to the origins and meaning of individual symptoms such as hallucinations, delusions, or deliria, and unsure how clinically to manage a patient’s disturbed behavior. Careful observation of the individual patient, a detailed case history, and a broadly based diagnosis eventually yielded new formulations such as “mental derangement,” “mental alienation,” “*Geistesverirrung*,” that implied the curability of mental illness by a medical expert who could try to guide the deranged, alienated, or confused patient back to normalcy. That hope, in turn, unexpectedly swelled the number of applicants for help, requiring urgent public action to reform and expand the asylum.

A subsequent chapter will discuss important books on psychiatry authored by physicians in the major western countries at the turn of the nineteenth century and compare the differing perceptions and formulations of mental illness, in England and the United States, Spain, Italy, Germany, and France. Excerpts from relevant documents, hitherto unavailable in English, have been included in the text.

It is a daunting challenge to attempt a general overview of the pre-history of European psychiatry in the Enlightenment and no synopsis of the general literature will be attempted here. Fortunately specific building blocks are extant, such as essays in *Discovering the History of Psychiatry* or in the journal *History of Psychiatry*. Roy Porter's *Mind-Forg'd Manacles* stands as a model treatment for eighteenth-century England. Some important secondary sources are G. S. Rousseau's chapter on "Psychology" in *The Ferment of Knowledge*, J. M. López Piñero, *Historical Origins of the Concept of Neurosis*, the contributions of C. Quézel, J. Pigeaud, and J. Postel to the *Nouvelle histoire de la Psychiatrie*, chapter 9 of D. B. Weiner, *The Citizen-Patient in Revolutionary and Imperial Paris*, D. Jetter, *Typologie des Irrenhauses*, and G. Mora's long Introduction to the English translation of Vincenzo Chiarugi's *Della pazzia*. The opening sections of books dealing with the birth of psychiatry around 1800 (to be analyzed in the subsequent chapter), particularly the work of J. Goldstein and G. Swain are important contributions to the field.²

Michel Foucault's brilliant and provocative views in *Madness and Civilization* and *Birth of the Clinic* placed the history of insanity center-stage in the 1960s and 1970s. Much can be learned from his idea of the antagonism between "reason" and "unreason" in the classical age and of the exploitation perpetrated upon the dependent deviant population by the bourgeoisie, including bourgeois physicians. He has stimulated critical writings that would fill a library, much of it by sociologists who are, like Foucault, acerbic in their judgment of the medical profession, and prejudiced against psychiatrists. Foucault has inspired a brilliant book on our topic by Klaus Dörner, *Madmen and the Bourgeoisie*, while another German psychiatrist, Martin Schrenk, offers the best summary from the German point of view in *Über den Umgang mit Geisteskranken*.³

When modern historians speak of Enlightenment psychiatry, they do not minimize national differences, but they emphasize that the Enlightenment was a cosmopolitan age. All university-trained physicians then understood Latin, though on the Continent and in Latin America its place was gradually taken by French, also the preferred idiom of enlightened despots like Frederick and Catherine the "great" and of the cultured élite. More important, the writers of the Enlightenment had all read the same seventeenth-century philosophers: Francis Bacon, René Descartes, John Locke. Medical thinkers, moreover, all drew on one famous model to formulate their ideas concerning human physiology: William Harvey had taught them to think in terms of systems and therefore they learned to perceive the nerves as a network transmitting sensations to the brain and motor impulses to the periphery. Impressed by Morgagni's *De sedibus et causis morborum* (1761), they were so certain that the "seat" of mental illness is in the brain that they dissected that organ, searching for lesions. But clues from dead brains proved elusive while a psychologic approach to live patients provided an intriguing alternative. Psychiatry thus entered the nineteenth century along two parallel avenues that seldom converged: one, physicalist, focused on the nervous system, the other, psychologic, exploring the passions and disturbances of the mind.

A Tradition of Tolerance

Three criteria allow us to circumscribe the existence of the mentally ill in eighteenth century Europe: responsibility for their support according to their wealth and social station, the contemporary religious environment, and involvement of the national governments in their custody and care.

An unknown and possibly large number of peaceable mentally defective or senile men and women lived at home: society held the family responsible for the shelter and care of their demented relatives. The non-violent insane who lacked regular support roamed the village streets, slept in attics or basements, and subsisted on handouts. Medieval and early modern sensibility seem to have tolerated deviant behavior and considered uncleanliness, gross language, or physical deformity as part of everyday life. At the same time town councils routinely expelled non-residents who were perceived as mad: fear and parsimony acted as complementary motives.⁴ The outstanding exception is the town of Geel in the Netherlands where, since the middle ages, the whole community has been caring for mentally ill persons, residents and outsiders, for pay.⁵

Until the age of Louis XIV when their numbers provoked government action, these ostracized men and women left no historic record unless they disturbed the peace, ran afoul of the law, or were perceived as dangerous to self and others. In that case the public authorities intervened. Therefore, specific information about mentally ill individuals often derives from civil, criminal, or heresy trials. Lawsuits also frequently concerned disputes about property and inheritance: thus we know from court proceedings that English law distinguished sharply between “fools” whose mental powers were congenitally impaired and over whose property the king claimed (profitable) supervision, and “lunatics” who might recover their senses and whose possessions were committed to a guardian and carefully protected.⁶

The homeless insane often fled to a church during those centuries when Catholicism, with its emphasis on charitable aid to the poor, was Christian Europe’s only religion. It is surely significant that “*asylum*” still designates the mental hospital today. In these medieval shelters the insane were not perceived as patients and physicians almost never treated them. The Church provided a roof and sustenance while urging believers to proffer alms to feed and clothe the beggars. This charitable attitude led some religious men and women to creative intervention in nursing care, as we shall see shortly.

But not all madmen were harmless. In cases where neither the family nor the community could manage a violent and demented person, the authorities might seize and shackle these individuals and chain them to the walls of dungeons or fortresses—any sturdy building would do. Such insane prisoners could still be found throughout eighteenth-century Europe, for example in Caen, Normandy, where the Chantimoine tower, part of the medieval fortifications, held twenty-one prisoners on 23 July 1766, eleven of them mad. The workers who demolished the tower in 1785 literally extracted the prisoners from holes in the wall and underground.

“... And in the thickness of this tower’s corner,” states the official report, “we found and pulled out ... Jean Heude, called Bame, a tall and strong man incarcerated for twenty years, raving mad, naked and dangerous, whose door had not been opened for so long that the lock had to be knocked off with an iron bar.”⁷

By 1800 the dungeons had been condemned and most of the chains replaced with straitjackets: the Enlightenment can be credited with this improvement.

Early modern Europe thus exhibits a complex attitude toward the insane: municipalities in turn ignored, expelled, or imprisoned the mad, but society also held them in awe, in an age that turned Erasmus’s *Praise of Folly* (1509) into a best-seller and transformed Don Quijote and King Lear into heroic figures. Beginning in the late middle ages, major towns admitted insane patients into their public hospitals, for example those of Paris, Montpellier, London, Munich, Zurich, and Basel. We even read of special hospitals for the insane, in Metz (1100), Milan (1111), Upsala (1310), Bergamo (1352), Florence (1377), Brescia (1380), Cracow (1534), or Gdansk (1542), though what is meant by “hospital” requires careful definition.⁸

Whence this new attitude? The experts, such as Timothy Miller and Michael Dols, discount the role of the returning crusaders who might have seen and admired the bimaristans of the Muslim world, those of Damascus, Aleppo, or Cairo, with their special wards for the mentally ill. Nor do they consider the medical school of Salerno as a likely port of entry for Muslim hospital concepts. Western historians keen on preserving Christian primacy of this charitable enterprise argue convincingly that the Arabs were only intermediaries who learned Greek medicine in Baghdad, Alexandria, and Damascus in the seventh to ninth centuries A.D.; and absorbed Eastern Christian ideas of hospital construction from the Nestorian Christians in Persia, particularly at the Gondeshapur school of medicine. Whether the model of the hospital, and of hospitals for the mentally ill, grew out of the Western European tradition of charity and monasticism or reached Europe with Christian crusaders or—as seems more likely—through Moslems’ bimaristans in Spain thus remains an open and intriguing historical question.⁹

The Catholic Spanish Model

Spain has been called the “cradle” of psychiatry: such an epithet is only acceptable in a narrow sense because of the deep penetration of Arab influence into Spanish culture.¹⁰ True, the kingdom of Aragon created Christian models that provide us with important criteria for the emergence of this medical

specialty. Barcelona's *Hospital General de Santa Cruz*, founded by king Martin the Humane in 1401, admitted insane patients and assigned physicians to their care.¹¹ The priority of Barcelona is contested by neighboring Valencia where the *Hospital de Ignoscents, Folls e Orats* was founded by the same Martin the Humane in 1409. (The dispute involves the exact date when a "hospital" is identifiable.) The initiative in Valencia came from Fray Gilabert Jofré of the Brothers of Mercy, an order dedicated to ransoming Christian slaves from the Muslims and thus acquainted with the institutions of North Africa. The money for the hospital was donated by Don Lorenzo Salmon (a converted Jew) and ten other merchants, in a typical development where the wealth of the middle class financed municipal charitable foundations. Because the Valencia institution was devoted exclusively to the care of the insane, it claims to be the first mental hospital in Europe. But was it a hospital? The records mention no doctors, only custodial care.¹²

The claims of Valencia and Barcelona to the first real hospital within their walls pale before those of Zaragoza, whose *Hospital General de Nuestra Señora de Gracia*, founded in 1425 by king Alonso V of Aragon, carried the inscription "*Domus infirmorum urbis et orbis.*" It admitted all acute and chronic patients, including plague victims and the insane. Doctors diagnosed and admitted the mentally ill and saw them twice daily, "like the other patients." The eighteenth-century émigré Spanish physician J. Iberti, writing in *La médecine éclairée par les sciences physiques* in 1791, described the Zaragoza hospital,¹³ and it became famous when Philippe Pinel depicted it in his *Traité medico-philosophique sur l'aliénation mentale ou la manie* of 1800 where he wrote:

We envy a neighboring nation an institution that should be widely known and it is not England or Germany that sets this example, but Spain. In a Spanish town, Zaragoza, there is an asylum open to patients, and particularly to mental patients, of all countries, regimes, and religions. It carries the simple inscription "*Urbis et orbis.*" The founders of this establishment have not merely provided mechanical work: they tried to restore a sort of counterweight to mental aberration by reviving the attraction and charm man feels when he works the land. They try to strengthen a man's natural inclination to render the soil fertile and provide for his needs with the fruits of his industry. From early morning one can watch the patients fulfill domestic tasks, some go to their several workshops while most divide up into small groups led by a few intelligent and enlightened supervisors. They spread out cheerfully into the various sectors of the hospital's vast lands and share the seasonal tasks in a competitive spirit. They grow wheat, legumes, and vegetables; they harvest, thresh, and pick grapes and olives. In the evening, they recapture calm and quiet sleep in their solitary asylum. Long experience in this hospital has demonstrated that this is the most effective and certain means of regaining one's reason and that the aristocrats who reject any idea of mechanical work with disdain and arrogance reap the sad advantage of perpetuating their insane derangement and their madness.¹⁴

Beyond the quaint personal touches that Pinel adds to the document,¹⁵ he underlines desiderata that Enlightenment psychiatry considered essential, namely kindly treatment and work therapy. These desiderata had thus been identified by the seventeenth century.

The Aragonese influence spread to Castile where the Papal representative founded the *Hospital del Nuncio Viejo* of Toledo (1483), described in detail by a French traveler in the mid-nineteenth century.¹⁶ The Spanish model also traveled to the far-away New World with hundreds of priests and especially with the Catholic nursing orders who dotted Ibero-America with their hospitals. The model crossed national borders and shaped similar institutions in neighboring Provence: thus a *Hôpital des Insensés* was founded in 1681 in the Papal State of Avignon where a doctor's certificate was required for admission,¹⁷ a similar hospital rose at neighboring Manosque,¹⁸ the *Asile de la Trinité* opened in 1694 at Aix-en-Provence,¹⁹ and the *Asile St. Lazare* was established at Marseille in 1699.²⁰ Certain aspects of the Regulations for this asylum are typical for this kind of institution:

Article XV: No one shall be received in this hospital, except on the express order of the mayor or deacons, after inspection and upon information received. Admission is limited to persons born in this town, or domiciled here for ten years completed, having their own, or their father and mother's, house and hearth [*"pot et feu"*] during all this time.

Article XVI: Only persons who are violent and liable to cause public disturbances shall be committed and incarcerated.

Article XX: The rector in charge for the week [*"semainier"*] shall visit the establishment daily and supervise the meal to see if the insane eat all they are offered. ...

Article XXIV: Any violent or demented stranger requiring admission shall be returned to his community, *at its expense*, as prescribed by the ordinances of our kings and decrees of the courts, to feed their own poor and to keep and confine their madmen [emphasis added].²¹

Thus local responsibility for the care of the mentally ill was the rule in Europe, and the burghers kept a concerned eye on the cost of this unwelcome burden. But the lay population's efforts to aid the suffering poor, including the insane, received constant spur and support from the Catholic church. The practice of charity was often coupled with a determination to turn back the tide of Protestantism, whether Huguenot, Calvinist, Lutheran, or Puritan. Thus the extirpation of heresy provided a powerful motive for claiming control over mad, and possibly subversive, persons. In fact, Catholic and Protestant attitudes toward the insane represent differences that warrant attention.

“Madhouse” and “*Maison de Santé*”

The Reformation created striking contrasts between Catholic and Protestant lands when it abolished monasticism. In England, for example, there disappeared all those monasteries and convents, hospices, refuges, and nursing homes that one still finds in Catholic countries on the eve of the French Revolution. The Tudors denied any responsibility for poor dependents, including the insane, and transferred this burden to the towns and parishes. Since 1403 some of the mentally ill had been treated at Bethlem Hospital, but most were dismissed after one year.²² The Elizabethan Poor Law of 1601 ignored medical patients in general and the mentally ill in particular and left them to languish in the workhouse, and the Vagrancy Act of 1714 furthermore empowered justices of the peace to lock up the “furiously mad and dangerous.” We know little regarding the personal lives of the poor in seventeenth-century England, and for good reason: civil war, religious feuding, and frequent changes of government explain the lack of documentation. But among well-to-do and even modest families there was already a trend, intensified in the eighteenth century, to assign their mentally ill relatives to keepers of “madhouses,” for pay.²³

Indeed, a profitable “trade in lunacy” developed from the late seventeenth century on, when Parry-Jones documents the existence of such establishments at Box in Wiltshire, at Glastonbury in Somerset, Clerkenwell and Lambeth in London, and Guilford in Surrey. By the mid-eighteenth century this trade had become a well-established practice. Some madhouses offered comfortable conditions: at Ticehurst House, Sussex, for example, one-hundred-and-fifty domestics cared for a total of seventy-five patients. But most houses were small, with fewer than ten inmates and by the end of the century only three confined several hundred persons, namely Whitmore, Holly, and Hoxton House. They were all located near London; Hoxton had 486 patients in 1815, and the earliest register, in 1798, mentions forty-two proprietors, with 1788 patients, for all of England.²⁴

The English madhouse quickly acquired a bad reputation. The owners were accountable to no one and were widely suspected of corruption. Public concern aroused parliamentary attention. In 1754 the College of Physicians declined a request of Parliament that it assume responsibility for the licensing and inspection of these establishments. The Act of 1774 for Regulating Madhouses eventually led to the Asylum Act of 1808, not really implemented till the mid-nineteenth century.

In England, private initiative for profit found its counterpart in voluntary philanthropic efforts to provide hospital facilities for the poor, including the mentally ill. Westminster, Guy's, London, Middlesex, and St. George's Hospitals opened their doors between 1719 and 1750. In 1728, Guy's added a ward for “chronic lunatics” and, with the founding of St. Luke's in 1751, London boasted two voluntary facilities for the insane. Asylums were established at Norwich (1713), Newcastle (1764), Manchester (1766), York (1777) and Liverpool (1790).²⁵ The London physician instrumental in the founding of St. Luke's, William Battie (1704–1792), author of *Treatise on Madness* (1758), lost no time in sparring with the superintendent of Bethlem Hospital, John Monro (1715–1792), as to who managed his establishment better. Their rivalry attracted medical attention to the asylum. It also gave rise to a persistent rumor on the Continent that the English had a successful treatment for insanity that they kept a secret: Monro refused to discuss his therapeutic method.²⁶ In England insanity became the subject of lively public interest and parliamentary

Table 1. Account of the violent madmen and mad women, imbeciles and epileptics confined in the jails and hospitals of Paris; 1788.

	Agitated Mad		Imbecile (Senile)		Epileptic		Total
	Men	Women	Men	Women	Men	Women	
<i>In municipal hospitals:</i>							
Salpêtrière "General Hospital"		150		150		300	600
Bicêtre "General Hospital"	92		138		15		245
Hôtel-Dieu	42	32					74
Charité of Charenton (Brothers of Charity)	1		77		4		82
Petites Maisons	22	22					44
							(1045)
<i>In the private hospitals of the Faubourg St. Jacques</i>							
M. Massé, Montrouge		2	16	2			20
M. Bardot, rue Neuve Ste. Geneviève			5	4			9
Widow Rolland, route de Villejuif			4	8			12
Mlle Laignel, cul-de-sac des Vignes				36			36
M. des Guerrois, rue Vieille Notre-Dame				17			17
M. Teinon, rue Copeau			5	1			6
							(100)
<i>In the private hospitals of the Faubourg St. Antoine</i>							
Mme Ste. Colombe, rue de Picpus			28				28
M. Esquiros, rue du Chemin Vert			12	9	2		23
Widow Bouqueton, au Petit Charonne		3	10	20			33
M. Belhomme, rue de Charonne	2		15	16			33
M. Picquenot, au Petit Bercy	1		5	1			7
Widow Marcel, au Petit Bercy			2	2	1		5
M. Bertaux, au Petit Bercy	3		2	1			6
Convent for Men, Picpus				3			3
M. Cornillieux, Charonne			1	1			2
							(140)
<i>In the private hospitals of Montmartre</i>							
St. Lazare, Faubourg St. Denis			17				17
Mlle Douay, rue de Bellefonds		5		15			20
M. Huguet, rue des Martyrs			6	3			9
							(46)
Total:	163	214	346	286	22	300	1331

Adapted from J. Tenon, *Mémoires sur les hôpitaux de Paris* (Paris: Pierres, 1788), 218 and J. Postel and C. Quérel eds., *Nouvelle histoire de la psychiatrie* (Toulouse: Privat, 1983), 117.

debate with the "madness" of king George III whose attacks occurred in 1765, 1788, 1801, and 1810. A book, *George III and the Mad Business* and a movie detail the tortures that the doctors inflicted on their king who evidently suffered not from madness but from porphyria.²⁷

A contrasting situation prevailed in France where individual initiative never prospered in this field, undoubtedly because of the quasimonopoly that the religious orders enjoyed. Toward the end of the Enlightenment some privately owned and euphemistically named *maisons de santé* existed, eighteen of them in Paris. But there is little documentation for other towns and none for the countryside. Like the English madhouse, the private Parisian establishment sheltered few persons: the largest had thirty-six inmates, the smallest, two. Almost all were located in the nearby outskirts of town, the modest faubourgs St. Jacques, St. Antoine, and Montmartre. As Table 1 indicates, these private nursing homes account for almost two-fifths of the city's senile elderly who needed to be institutionalized (267 out of 632), whereas the agitated and epileptic patients were cared for in municipal hospitals (with the exception of 16 out of 377 agitated, and 22 out of 322 epileptic patients. One should note the discrepancy in numbers between men and women perceived as "epileptics").

We have some information about two of these establishments because their partial patient registers have recently surfaced and because Philippe Pinel served as physician in both. The first is the *maison* of the carpenter Jacques Belhomme, rue de Charonne, in the eastern suburbs of Paris. The owner evidently had no interest in seeing his paying guests cured and he seems to have sheltered political prisoners during the Terror, declaring them mad and thus saving their lives—in return for large sums of money.²⁸ Not until 1802 did a competent physician, J. E. D. Esquirol (1772–1840), open a private hospital for mental patients in Paris. He usually cared for about twenty patients and Pinel supervised the treatment.²⁹ The total number of persons hospitalized for mental illness in private French establishments remained small. Like most of the English keepers of private madhouses, most French owners of *maisons de santé* lacked medical training; but, in contrast to England, the French do not seem to have mistreated their inmates: the *maisons de santé* were always under close scrutiny by the police and no complaints have come to light.

Protestant and Catholic Traditions in Germany

While private initiative thus remained rare in France, and while the Anglican establishment failed to provide care for the insane, Protestant German governments intervened actively. At the time of the Reformation, the rulers of the small principalities, duchies, electorates, or free cities who chose Protestantism took control of their church as well as state. In Hessen, for instance, the landgrave Philip the Magnanimous turned Lutheran and confiscated the monasteries. Deciding to set a good example, he transformed some of these into hospitals for *all* his people: such institutions were needed because the Catholic establishments had apparently become refuges for the rich who could afford high fees. Three Hessian “*Hohe Landeshospitäler*” admitted mental patients. Haina, formerly Cistercian, opened in 1527 as an institution for men, Merxhausen, formerly Augustinian, became a hospital for sixty-five women in 1533 and Hofheim, a confiscated abbey, opened two years later, with space for about one hundred women.³⁰

Typically, Haina had six divisions, including one for “insane and lunatics” as well as deaf-mutes, and eighteen locked boxes for violent inmates. The maniacs received minimal care: since they seemed impervious to cold, the authorities felt justified to deny them warm clothing. Their cage-like receptacles were placed above running water and the wide interstices between the floor planks obviated cleaning: feces and urine floated away. The only “care” consisted in feeding these violent madmen a meager portion. The documents first mention a surgeon in 1639, a resident surgeon in 1703, and a physician in 1820, and all indications support the assumption that Haina was typical, if not superior to similar establishments. “Psychiatric” attention therefore remained nil throughout the Enlightenment.³¹

The disastrous Thirty Years War killed at least one quarter of the German people and halted hospital building. Only in the eighteenth century, after the wars of Louis XIV ended, did hospitals gradually revive. Hofheim, for example, had only two patients left in 1640; by 1700 there were 74; in 1748, 108; by 1800, 155. A doctor is first mentioned in 1821 and, from 1837 on, Hofheim specialized in mental patients.³²

Catholic Southern Germany took pride in one outstanding facility that dated from the Counter-Reformation: the *Julius-Spital* of Würzburg. The prince-bishop Julius Echter von Mespelbrunn founded this hospital in 1579 and he, too, designated it for all the citizens of his bishopric. Mentally ill patients were probably first admitted in 1589. “Blockhouses” for violent inmates soon appeared. By 1748, the hospital boasted three physicians, one of them for the mentally ill. An encyclopedia article of 1789 describes the two annexes,

intended for demented, idiot, and violent inmates of both sexes, until then crowded into small and disgusting houses and often commingled with the rational inmates. There is room for up to sixty of these unfortunates. Each one has his own bed, surrounded with iron rods and provided with curtains. Eighteen of them live under the constant supervision of a guard in a large and lofty room. There are private rooms for those among the insane who need to be isolated ... because of their birth and station.³³

Indeed, hospitalized persons of rank or eminence received special attention. Money could buy single rooms or even two-room apartments, one for a servant; all the freedom of movement that individual

supervision permitted; good food and clothing; and respectful behavior from domestics. An inventory lists the clothing brought to Celle by distinguished inmates who inhabited a special ward (“*Honoratiorenflügel*”). For example:

Pastor L.’s clothing befitted his station: he brought a cotton cap with a cover, shoes with silver buckles (of which he had lost one), a scarlet overskirt and a black jacket with a blue striped scarf, a grey coat with a bright-red collar and hat, and a pair of old boots.

But it was major von L. who held the record of distinguished elegance: the inventory of his clothing fills four pages of small script. Among many other precious things he brought all his uniforms, blue tails, silk vests, a blue coat trimmed with fur, and several vests of Manchester velvet.³⁴

Jewish patients were ordinarily cared for in their own homes in the ghetto. Since the Jews’ trade as money-lenders and peddlers required travel, the communities built small rooms near the synagogue for strangers who had no friends in town. If the stranger fell ill, even mentally ill, the local charitable brotherhood, *Hevrah Kadishah*, cared for him. In case of need, patients were isolated in a building near the Jewish cemetery, the *Hekdesh*: lack of space and fear of contamination dictated this measure.³⁵ Only in exceptional cases would Jews resort to a German *Zucht- und Tollhaus*, for example Celle, an institution that, in any case, restricted admittance to Jews who enjoyed official protection [“*Schutzjuden*”] and who had faithfully paid the special tax.³⁶

Thus we find that in German lands, fragmented as they were into some 350 quasi-sovereign units, local Protestant or Catholic rulers created custodial institutions for the mentally ill, from the time of the Reformation to the Age of Reason. We shall see that in the eighteenth century the example of Louis XIV’s strong-armed intervention in his own country became more influential in Germany than their native and more flexible tradition.

Brothers of Charity and *Lettres de Cachet*

In the custodial institutions mentioned so far, whether Christian, Jewish, or Arabic, the personnel consisted of locally recruited lay domestics. In contrast stood the hospitals run by professional nursing orders where the Rules of St. Benedict, St. Augustine, the Blessed Raymond du Puy, or St. Vincent de Paul regulated patient care as well as everyone’s behavior. Outstanding among the orders that ministered to the mentally ill were the Brothers of Charity. Their founder, Juan Ciudad (1495–1550), a Portuguese shepherd, came to Granada in the early sixteenth century and the preacher Juan de Avila converted him to a life of active charity. He dedicated himself to the care of the insane, inspired the new order, and earned sainthood as “John of God.” His “Fatebenefratelli” prospered in Italy, and Marie de Medici brought them to France in 1601. By the eighteenth century the motherhouse in Paris, the famous Charity Hospital, trained and supervised the nursing personnel in thirty-seven “*charités*” in France and her colonies. Best-known among the establishments in France were Charenton, Senlis, Cadillac, Château-Thierry, Pontorson, and Romans. The Brothers also staffed civilian and military hospitals in France and founded establishments at Cracow (1609) and Lublin (1650). Though other orders cared for the mentally ill in France as well, for example the Cordeliers, Bons-Fils, and Brothers of the Christian Doctrine, there is general agreement that the Brothers of Charity ran the most numerous and largest, best administered, most orderly, and highly appreciated custodial institutions for mentally ill men in France. They were trained apothecaries and expert lithotomists: litigation by the Paris Company of Surgeons because of unfair competition provides telling proof of the Brothers’ excellence. Their patients received expert care as well as intensive religious attention.³⁷

European historians of the Enlightenment, including historians of medicine, usually pay no attention to Latin America and yet the missionary and health care activities of the Catholic nursing orders in the colonies outpaced their European efforts. In regard to attention to mental health problems of the poor it is the order of St. John of God, known as “Juanitos” that stand out, and hospitals named for San Juan de Dios can be found throughout Ibero-America to this day. An “old Christian” from Seville, Bernardino Alvarez (1514–1584), stands out among remarkable individuals who cared for the ailing poor. He arrived in

New Spain after a life of extravagance and luxury and, in 1566, he founded the *Hospital general de convalescentes y pobres desamparados* [the homeless] mainly for patients abandoned because they were convalescents. He chose Saint Hippolytus as his patron and founded the first Mexican order of hospitaliers, the Hipólitos, sanctioned by the pope in 1700. Many of Bernardino's patients suffered from mental illnesses which leads the historian Somolinos d'Ardois to say that this hospital was the first American institution for the mentally ill. Bernardino had imitators, like the shoemaker José Sayago who, with the help of his wife, converted his house in Mexico City into a refuge for convalescent and homeless women, with special rooms for the mentally ill. With help from the Jesuits, this house became the Hospital Real del Divino Salvador, later the principal asylum in Mexico City, the Castañeda.³⁸

Two French physicians, Paul Sérieux and Lucien Libert, have produced massive evidence to prove the expertise of the Brothers as psychiatric nurses under the old regime. They argue that the much-vaunted innovations of the French Revolution lack originality, and that it was Catholic charity that devised humane treatment and expert psychiatric care.³⁹ They provide detailed information about the management of the Brothers' *charités* in the age of Enlightenment. Inmates of the mental wards were segregated according to the severity of their illness and the degree of freedom they could manage. Those who had voluntarily committed themselves could go out at will; others, in "half-freedom," circulated within the institution and its gardens, used the mails freely, could go out occasionally (accompanied, perhaps) to attend to personal matters, could play chess, checkers, billiards, and read in the library. The management through social constraint that the Quakers inaugurated at the York Retreat in the late 1790s thus has a well-tested, if little acknowledged, Catholic antecedent. Some inmates at the *charités*, it is true, lived on closed wards, some in locked cells—in each case for documented reasons of safety. If one fell ill, he was sent to the infirmary; if unruly, he could be put in solitary confinement, "in a room that was more massive, but not detrimental to health."⁴⁰ The Brothers served as directors, nurses, and apothecaries. Sérieux and Libert conclude:

The management of the mentally ill, usually said to be the work of contemporary civilization, was in reality organized in the eighteenth century, under precise rules and with real guarantees. This organization collapsed at the same time as the old régime, and it took half a century to see it restored. The insane were always, at that time, considered as patients, and as curable.⁴¹

Wealthy patients lived in the better asylums, throughout the eighteenth century. We read with some surprise that the Brothers of Charity admitted no indigents and charged high annual fees, "between 600 and 6,000 livres, according to the degree of comfort one wishes to provide for the patients," writes the authoritative Jacques Tenon.⁴² Sérieux and Libert mention only Tenon's lower figure of 500 *livres*, roughly equivalent to an employe's annual salary, for inmates at Pontorson (Normandy), Cadillac (Guyenne), Poitiers (Poitou), Vezins (Poitou), Romans (Dauphiné) and Effiat (Auvergne).⁴³ In contrast, according to Colin Jones, it cost 200 livres to maintain an indigent insane person at the Hôtel-Dieu St. Eloi in Montpellier.⁴⁴

If we believe the Regulations of 1765, wealthy mental patients in the *charités* ate well, in that age of Brillat-Savarin:

Article 13: Each prisoner may have three meals; at breakfast he may have as much bread as he wishes; at dinner, he shall have half a pint of wine, ... soup, stew, and an entree; for supper, Sundays, Tuesdays, and Thursdays, he shall have roast veal and lamb, or fowl and game; Mondays and Wednesdays, a ragout of meat or poultry, or game.

In the summer there shall be salad on Sundays and Thursdays, but only on Sundays in winter. The same for desserts.

On meatless days they shall be offered fresh- or salt-water fish, or salted fish and, for the evening meal, vegetables or eggs, which shall also be served to *those who do not like the fish* on the menu. [emphasis added]

The wine shall be local, the meat and bread of best quality. The quantity shall depend on the prisoner's appetite, taking care that he not abuse this privilege.

In cider country, the quantity shall be double that of wine.⁴⁵

This attractive picture has a shadier aspect: in eighteenth-century France, the Brothers of Charity held the lion's share of contracts with the royal government to act as guardians of wealthy, mentally deranged,

men committed under a “*lettre de cachet*.”⁴⁶ It was widely assumed that these decrees of imprisonment at the king’s pleasure were often abused. The procedure by which an adult man could attempt to imprison his minor child, wife, creditor, enemy, or an insane relative began with a “placet” followed by an investigation; another legal way was to obtain an “order of justice” from the courts. *Lettres de cachet* were used mainly, if not exclusively, by men because the rights of women were tightly circumscribed by male privilege. Mental derangement or unruly behavior furnished the majority of victims.

Sérieux and Libert argue that a thorough inquiry always preceded internment, so that “animosity or private interest did not motivate the complaint.” A medical certificate was sometimes part of the dossier, but insanity was of course not yet viewed as a medical matter. Only the judicial authorities could pronounce interdiction and careful safeguard of a mental patient’s property was the rule. While these authors are unquestionably correct in their analysis of the laws, they do not claim to have studied the application or effects of these laws on the mentally ill under the old régime. Frenchmen then lived under four competing legal regimes, privilege entailed unequal treatment, and custom riddled the social structure with loopholes. Until we have conclusive evidence, the use of *lettres de cachet* in the confinement of the mentally ill remains an open question.⁴⁷

We have no overall picture that permits us to assess the proportion of mentally ill men and women cared for in religious houses by private arrangement, in France or in any other Catholic country. But we do know that the Revolutionary French National Assembly expected to expose widespread abuses in 1790, when it investigated the use of *lettres de cachet* for interning mental patients. At the Charité de Charenton the site visitors were amazed to encounter only madmen, including the marquis de Sade. They found no victims of political vengeance but only inmates who needed to remain confined.⁴⁸ In the case of Charenton, undoubtedly typical, *lettres de cachet* had been used legally and for good reasons.

But the government had taken arbitrary action against the growing crowds of vagrants and beggars—many of them infirm, acutely ill, senile, or demented—whom the mercantilist and cameralist state perceived as a menace. The “*grand renfermement des pauvres*,” initiated by Louis XIV in 1656 and intensified in the 1670s, has received much attention since Michel Foucault denounced this maneuver in his *Madness and Civilization* of 1961. The vagrants were herded into “general hospitals”—many-purpose custodial institutions that included wards for the mentally ill. By the mid-eighteenth century these establishments were so overcrowded that the government created workhouses or “*dépôts de mendicité*” where indigent vagrants would presumably be forced to work.⁴⁹ Mentally ill indigents soon found themselves segregated within the *dépôt*, as at Soissons, just as they were in the general hospital of Paris, the men at Bicêtre and the women at the Salpêtrière. Tenon, in his famous *Mémoires*, described this women’s institution as

the largest hospital in Paris, perhaps in Europe, serving as a women’s hospital and as a prison. It shelters pregnant women and girls, wet-nurses with their nurslings, male children from seven or eight months to four or five years of age; old women and couples; agitated madwomen, imbeciles, epileptics, paralytics, all kinds of incurables, children with scrofula. ...

In the center of this hospital stands the prison, divided into four sections: the special jail for the most dissolute inmates, the reformatory for less serious offenders, a lock-up for women detained on royal orders, and the maximum security cells for branded criminals.⁵⁰

Official figures listed three hundred mentally ill women. But when Philippe Pinel arrived there as physician-in-chief in 1795, he diagnosed at least double that number.

“Bicêtre looked more horrible, the Salpêtrière more disgusting,” to an inspection team from the national assembly in 1791.⁵¹ The “horror” of Bicêtre derived largely from a repulsive venereal disease clinic and from the violence of many male inmates. But the mental ward formed an astonishing contrast:

“The insane housed at Bicêtre ... seem generally to be treated with kindness,” wrote the site visitors. “Their accommodations consist of 178 cells and a two-storey pavilion where they sleep in single beds with the exception of three double beds. ... an administrator and thirteen employes work in this division. The madmen are locked into their

rooms or dormitories every night, but during the whole day they are free in the courtyards, as long as they are not violent. The number of these is small and varies with the seasons: only ten out of 270 were chained, the day of our visit.”⁵²

A reforming trend was therefore at work in this French public mental institution. The prevalent repression, practiced with varying brutality in public and private institutions, was giving way, here and there, to a more humane attitude.

While we are best informed about the policies and practices of the nursing orders and the national government, we also have information about certain municipal attitudes toward the mentally ill. Colin Jones’ “Prehistory of the Lunatic Asylum in Provincial France” indicates that in the medically sophisticated city of Montpellier, for example, attitudes toward the institutionalized insane changed slowly, under the eventual impact of Hippolyte Pech, a student of Pinel and Esquirol. Only by the end of the Restoration did the cages or *loges* at the Hôtel-Dieu St. Eloi fall into disuse, with mental patients transferred to a new and special section of the local *dépot de mendicité*.⁵³

The Growth of German Custodial Institutions

It comes as no surprise to find that change was just as slow in the Germanies. The Holy Roman Empire did not emulate its own *Hohes Landeshospital* but evolved all-purpose custodial institutions, like France. Dieter Jetter, the ranking expert on hospital history, rightly laments this development, arguing that the German model would have been preferable.⁵⁴ Owing to the plasticity of the German language, these institutions could be called any combination of “*Zucht-, Werk-, Toll-, Armen-, Waisen-, or Findelhaus*” (“reformatory, workhouse, asylum, poorhouse, orphanage, or foundlings home”). In some instances the asylum even evolved from a medieval inn.⁵⁵

The *Zucht-Werk-und Tollhaus* in Celle, Hanover, served as the model for eighteenth-century Germany. The structures housing criminals and insane were contiguous, each forming three sides of a square, closed by a wall to the south. (The plague house at Genova may have served as a model, just as it did for Esquirol at Charenton.)⁵⁶ This arrangement kept prisoners and insane, men and women, strictly separate but under the supervision of one administrator and clergyman. The same kitchen, laundry, pharmacy, and stable served all establishments. The insane lived in forty individual cells; the ubiquitous *Tollkoyen* resembled cages. To what extent the Tollhaus functioned as Werkhaus for the insane is difficult to know, but a tobacco-workshop was intended to supplement the institutional finances. The use of criminals as guards was intended to save money; mainly, it increased the level of brutality.⁵⁷

The daily living experience of the destitute institutionalized mentally ill German, in the era of the Enlightenment, thus resembled that of the incarcerated criminal. And when the population judged deviant, dangerous, and deranged grew to alarming proportions, the number of institutions like Celle increased in the Holy Roman Empire.

The French Revolution brought the disestablishment of the Catholic church in the Germanies, with the result that numerous buildings, confiscated by the governments, became available for medical purposes. This development facilitated the segregation of the mentally ill from criminals, and of curable from incurable patients. Thus arose the “*Heil- and Pflegeanstalt*,” that is, an asylum where patients diagnosed as curable were housed and treated differently from those pronounced incurable and relegated to merely custodial care. But this policy did not come into its own until the nineteenth century.

It is typical of French cultural hegemony in the Enlightenment that, when emperor Joseph II decided to build a new hospital in Vienna, he did not investigate German models but went to the Paris of his sister Marie Antoinette to visit every relevant institution. The sad result was that the *Narrenturm* of the Vienna *Allgemeine Krankenhaus* opened in 1784, resembled the Bastille rather than a *Heil- und Pflegeanstalt*.⁵⁸

German institutions were consulted however, when Catherine II awoke to her obligations as an “enlightened” despot. A member of the Academy of Sciences of St. Petersburg, the historian A. Schlötzer, visited the *Tollhaus* at Lüneburg near Lübeck where he found eleven inmates, treated kindly, fed and kept

decently, able to earn some money by spinning or gardening. His report did little, however, to change the condition of the insane in Russia.⁵⁹

We know very little about their early history. It seems that the insane had traditionally been left to the mercy of their families, the monks, or public kindness. Not until the Romanovs did the lay authorities claim supervision over the insane. The reorganization of public welfare in 1775 eventually resulted in the adaptation or construction of special custodial institutions. Best known is the creation, in 1779, of a *Kranken- und Tollhaus* in the capital, the Obuchov Hospital. It had 33 rooms for the insane; by 1792 it boasted 142 beds, by 1855, 352. (Russia thus skipped the stage of the multi-purpose custodial institution and began with the combined hospital and asylum, a model more desirable for the patients.)⁶⁰ By 1810, fourteen asylums were established, by 1860, forty-three. But efforts to arouse medical attention for mental illness proved arduous. No doctors are mentioned in connection with these institutions until 1847 when Dr. Max Leidesdorf of Vienna (1818–1889) opened the first psychiatric clinic in St. Petersburg, and in the 1860s, when Dr. Frese, trained at Illenau, worked at the Volga asylum in Kazan. The recent *Nouvelle histoire de la psychiatrie* by Postel and Quézel (1983) does not mention Russia at all. These are sparse gleanings. They reflect the paucity of archival research in places remote from the Western centers of intellectual life during the Enlightenment rather than a total lack of attention to the condition of the mentally ill in Eastern Europe.

The preceding attempt to provide some insight into the conditions under which the mentally ill lived during the Enlightenment permits the following generalizations: our information concerns mainly the rich and the very poor and is plentiful only for those men and women who disturbed the peace or disrupted social life. Institutional care varied according to the patient's wealth. Religious observances pervaded most Catholic institutions: daily mass, confession and extreme unction were offered, if not imposed upon, mentally ill persons by Brothers and Sisters anxious for the patients' salvation.⁶¹ In Protestant countries a prayer for the *Landesherr* seemed to suffice while Pietism spurred the administrators' efforts and the emphasis appears to have been on good behavior and work. German and Russian documents often mention the whip. In private and municipal institutions the number of inmates remained small: at the time of the French Revolution the Bon Pasteur at Dijon housed nine mentally ill women,⁶² the Hôtel-Dieu at Montpellier twenty patients of both sexes,⁶³ that of Paris, seventy-four,⁶⁴ of Vienna, 128.⁶⁵ Large agglomerations of mentally ill poor were found only in the national custodial institutions, particularly in the French *hôpitaux généraux* and *dépôts de mendicité*. But the government had incarcerated them because it perceived them as deviant and subversive of the social order. A new perception of many of these prisoners as mentally ill men and women did not emerge till the 1780s.

Enter The Doctor

Medical Therapy

What surprises us most is the virtual absence of the doctor from the documentation reviewed thus far. The rare requirement of a medical diagnosis as a condition of commitment to an asylum indicates that the Enlightenment was unsure whether the insane were criminal, deviant, or sick. When a medical opinion was sought, the doctor's verdict was usually, in the eighteenth century, accompanied by his opinion as to whether the disease was curable or not. We have so far encountered mainly "incurable" cases, relegated to custodial institutions for life: the retarded or mentally defective ("idiots" or "natural fools") and the senile or demented. By Enlightenment standards, these men and women required no medical attention.

The presence of surgeons, rather than physicians, on the staffs of some asylums shows clearly that medical care, when it existed, concerned somatic complaints. Surgeons reduced fractures, pulled teeth, applied bandages for hernias, excised tumors or ulcers, and smeared mercury salves on syphilitic skin eruptions. The services of midwives were sometimes required and we read of a *Bademutter* at Celle who delivered babies.⁶⁶ Contact of doctors with the institutionalized insane remained minimal in the eighteenth century.

The medical profession's diagnostic approach to health and illness had changed little since Hippocrates and Galen. It was still based on the observation of the patient's environment and behavior, and on signs and symptoms interpreted on the basis of humoral pathology. Thus, the ascription of a sanguine, choleric, melancholic, or phlegmatic temperament remained basic, as well as the division of mental illnesses into mania, melancholia, dementia, and idiocy. Treatment for the first two categories was carried out in some hospitals, the Paris Hôtel-Dieu for example. It aimed at restoring balance by the evacuation of "peccant" humors and spirits. This was normally achieved by the administration of purgatives, emetics, sudorifics, and venesection, later replaced by leeches. A variety of rotating machines appeared in the late eighteenth century (advocated by Dr. Erasmus Darwin, Charles' grandfather, among others), a "tranquillizer" chair devised by Benjamin Rush, and shock treatment in the form of surprise "ducking," streams of water directed at the head, or by an electric stimulus.

The drugs used, in an empiric manner, were as varied as the pharmacopoeia, supplemented by a lingering superstitious imagination. Among plant extracts used as calmants, opium ranked first: Thomas Sydenham (1624–1689) liked to administer it in wine, with saffron, canella, and cloves. And "laudanum" was to have a great future. Next to the poppy, the extract of thorn-apple (stramonium) was favored for its calming effect, as was henbane and belladonna which the Viennese Anton Storck (1731–1807) liked to prescribe. Camphor, already known to the Chinese, was favored by Joseph Daquin (1732–1815), evidently as a sedative (it would later be used for shock treatment). Drugs used as antispasmodics included castoreum and musk, asafetida, valerian, mistletoe and peony. As purgatives, doctors counselled rhubarb, senna and jalap; as emetics, ipecac and tartar. Given the pre-scientific state of pharmacy, it is not surprising to find favorite remedies such as theriaca Andromachi (or Venice treacle, made of over seventy ingredients!) and either hellebore or mandrake, prescribed for multiple and contradictory purposes. The Paracelsian iatro-chemists favored copper ammoniate and zinc oxide as antispasmodics, tartar emetic, and mercury preparations in every form against the ubiquitous syphilis. Further to stimulate evacuation and restore mental health, doctors recommended irritant procedures, namely moxibustion, cauterization, and blistering; the application of setons and cups, preferably as close to the brain as possible to favor discharge after producing inflammation and "laudable" pus. One concludes that the absence of doctors from eighteenth-century asylums may in fact have promoted the patients' recovery.⁶⁷

Theories of Mental Illness

Doctors, of course, not only prescribed medication, they also reflected and theorized about insanity. How did the mind deal with bodily disturbance? how did mind and brain interact? These problems preoccupied Enlightenment scientists and physicians as different as Immanuel Kant in *Versuch Ober die Krankheiten des Kopfes*,⁶⁸ Dr. Julien Offray de La Mettrie in *L'Homme machine*,⁶⁹ or Dr. P. J. G. Cabanis in *Rapports du physique et du moral de l'homme*.⁷⁰

Physicians tended to focus on two syndromes, hysteria and hypochondriasis. These were considered specific to women (whose uterus was believed to wander about the body), and to men (whose obsessional complaints concerned symptoms in their belly); the English clinician Thomas Sydenham (1624–1689) saw them as closely related manifestations.⁷¹ The great Dutch clinician Herman Boerhaave (1668–1738) contributed an important distinction to theorizing about hypochondriasis when he observed that this could occur in two ways, either "*cum materia*," when black bile caused melancholy, or "*sine materia*," when hypochondriacal preoccupation with a painful body part could cause nervous illness without depression and thus without the intervention of a material substance, black bile.⁷²

But how did the painful sensation reach the brain? The Scottish doctor George Cheyne (1671–1743) offered some answers, largely based on self-observation. In a popular book, *The English Malady: A Treatise of Nervous Diseases of all Kinds, as Spleens, Vapours, Lowness of Spirits, Hypochondriacal and Hysterical Distempers* (1733), Cheyne attributed the "English malady" to

the moisture of our air, the variableness of our weather (from our situation amidst the ocean), the rankness and fertility of our soil, the richness and heaviness of our food, the wealth and abundance of the inhabitants (from their universal

trade), the inactivity and sedentary occupations of the better sort (among whom this evil mostly rages), and the humor of living in great, populous and consequently unhealthy towns.⁷³

It was widely believed that this affliction was transmitted to the brain by “vapors,” and books such as Pierre Pomme, *Traité des affections vaporeuses des deux sexes* (1765) gained a wide audience.⁷⁴

That vapors or a nervous fluid passed through the nerves along the paths of a nervous “system” was a concept owed to Harvey, of course. It was a belief shared by the most influential British author on the subject, the Scottish physician Robert Whytt (1714–1766), in *Observations on the Nature, Causes, and Cure of those Disorders which have been called Nervous, Hypochondriac, or Hysterical, and to which are prefixed some Remarks on the Sympathy of the Nerves*.⁷⁵ He specifically attributes to the nervous system the role of conductor of painful or distressing sensations.

But how could the brain transform a nervous sensation into an impulse affecting nerves and muscles, and thus behavior? A fruitful avenue of research had been initiated by Francis Glisson (1597–1633) when he proposed “irritability” as the distinguishing characteristic of living beings. Albert von Haller (1708–1777) demonstrated in numerous experiments that nerves are sensitive and muscles irritable, and Georg Stahl (1660–1734) taught that an *anima* coordinated and protected each living person. The resulting “vitalist” theory was widely favored, particularly at Montpellier.⁷⁶

More specific research about the anatomic substrates of sensation was meanwhile pioneered in England by Thomas Willis (1621–1675) who contributed essays on the *Anatomy of the Brain* (1664) and the *Pathology of the Brain* (1667). He discovered the eleventh cranial nerve and the circle of arteries at the base of the brain that bears his name. He also coined the terms “neurology” and “psycheology” (derived from the medieval “psychologia” or knowledge of the soul). Willis gave one of the most extensive accounts of the whole field of mental illness, including melancholia, mania, and idiocy.⁷⁷

The concept of a nervous system in a command position over behavior appeared to receive confirmation from research on the sensory organs. In *De aere humane* (1704), for example, Antonio Maria Valsalva (1666–1723) used hundreds of dissections to detail the functions of the ear drum, ossicles, and semicircular canal. He subdivided the ear into outer, middle, and inner and described the external auditory canal that bears his name.⁷⁸ The eye and the study of sight also attracted a great deal of attention, spurred, no doubt, by Newton’s *Opticks*. As for illnesses of the organs of perception, physicians conceived them in terms of localized lesions, particularly after the publication of *De sedibus et causis morborum, per anatomen indagatis* (1761) by Giovanni Battista Morgagni (1682–1771). Researchers were thus using the study of organs to explain the normal or abnormal functioning of the senses.⁷⁹

Steeped as the Enlightenment was in the study of physics, it easily assumed that perceptions or physical stimuli “caused” emotional disturbances and that, conversely, psychologic upset caused physiologic illness. Parallel events were here interpreted as causally connected, thus bridging the mind-body chasm. Modern psychosomatic medicine does not confirm that view.⁸⁰

What remained to be done in the Enlightenment was to integrate abnormal behavior into the general framework of illness, that is, into nosology. The inspiration to do so came from the natural sciences where the seventeenth and early eighteenth century had been an era of collecting specimens and information in the best Baconian tradition: flora, fauna, minerals, and facts. Zoological and botanical gardens now held a pair of each kind of exotic bird, mammal, and flower. The question before the mid-eighteenth century was how to organize this plethora of information into a coherent system. Carl von Linné (1707–1778) achieved this for the animal, plant, and mineral kingdoms in his *Systema naturae* (1735).⁸¹ Could similar order be achieved for diseases and where would mental illness fit in?

It was William Cullen (1710–1790) who responded to this challenge, heeding Thomas Sydenham’s injunction that diseases should be classified “*more botanico*.” He was not the first nosologist of the Enlightenment, of course: his forerunners included Francois Boissier Sauvages de la Croix (1706–1767) of Montpellier whose five volume *Nosologia methodica* appeared in 1763,⁸² Linnaeus himself, with *Genera morborum in auditorum usu* (1763),⁸³ and the Göttingen professor R. A. Vogel (1724–1774) who published *Definitiones genera morborum* in 1764.⁸⁴ But it was Cullen who defined nervous illnesses as

diseases of the nervous system or “neuroses” in his *Synopsis Nosologiae Methodicae* of 1769.⁸⁵ Here the neuroses figure for the first time as a separate class of diseases and as one of the four major divisions of the whole classificatory scheme.⁸⁶

The integrative principle underlying Cullen’s nosology of mental illness is neuropathology: he reduced all diseases to alterations in the normal physiology of the nervous system. Following Newton and others, he posited an ethereal fluid that transmits sensations through the nerves to the brain. Cullen subdivided the class of neuroses into four orders: *comata* or reduced voluntary movements; *adynamiae*, or reduced involuntary movements; *spasmi*, or abnormal movements of muscles; and *vesaniae*, or altered judgments without coma or pyrexia [fever]. It was this classification, and specifically the terms “*névroses*” and “*vésanies*,” that Philippe Pinel brought to France when he translated the four-volume fourth edition of Cullen’s *First Lines of the Practice of Physic* in 1785. The book also quickly reached the medical schools of Göttingen, Halle, Vienna, and Copenhagen. Mental illness now had a definition and a conceptual scheme that physicians could apply to patients.

Man’s Right to Health Care

The preceding analysis of “Enlightenment psychiatry,” of the custodial care bestowed upon the insane in the eighteenth century, the therapy they endured and the theories of mental illness they occasioned, cannot alone explain why radical changes transformed this field at the end of the century. For an explanation we must rather turn to the humanitarianism of the Enlightenment, to the political doctrine of the “rights of man,” and to the democratic revolutionary fervor that swept through the western world in those years.

Humanitarianism and democracy were the decisive influences that improved the lot of the insane in the eighteenth century. True, Christian charity had for a millennium provided succor to the needy and the sick. In Catholic countries, and particularly in France, this impulse was now diverted to secular causes. A considerable segment of the enlightened public was strongly anticlerical, intent on supporting reforms approved by modern science and medicine. Thus, the Philanthropic Society of Paris financed a school for blind children, aided aged workers, and supported impoverished mothers with large families who agreed to breastfeed a new baby. Poor people afflicted with insanity represented an equally worthy and secular cause.

The political reformers argued that every citizen had an equal, inalienable right to health protection. In this sense, better care for the insane was seen as part of the broad goals that the democratic movement of the eighteenth century pursued.⁸⁷ Paradoxically, one of the earliest and most influential documents that clearly spelled out this goal was written by Louis XVI’s own inspectors of hospitals and prisons, the doctors Jean Colombier (1736–1789) and François Doublet (1751–1795).⁸⁸

In the 1780s they published a series of “Observations on Civilian Hospitals” one of which was to have a nation-wide impact, namely “Instructions on the Manner of Governing the Insane and Working for their Cure, in the Asylums Created for them” (1785). Part I, written by Colombier, “Concerns the Manner of Placing, Supervising, and Directing the Insane,” and reads in part:

[The poor should be cared for *as well as* the rich.] The poor are in special need of these laws [for committing the violent insane] because they lack the means for the confinement, care, and therapy of these *patients* [emphasis added]. ... But this precaution is neglected and insane vagrants are often not even arrested for lack of places to confine them or because the communities, obliged to pay the cost of capture and maintenance, are in no hurry to alert the public powers or even neglect doing so. [Once the insane vagrant is apprehended] special attention is called for. ... If restraints are sometimes necessary, they should be used without cruelty nor humiliation; but harsh treatment, and especially blows, should be considered an outrage demanding exemplary punishment. [Agitated, calm and convalescent patients] should be separately housed, sleep in single beds, kept by strong, humane, intelligent and adroit guards. Treatment is urgent for recent cases, but even when the illness is a prolonged one must not assume it to be incurable. ...

[All patients should have clean water, frequent baths, fresh air, good food, decent clothing.] The health officers shall visit twice a day to prescribe the diet and medication appropriate for each patient and to select those whom they judge ready for intensive therapy.⁸⁹

Louis XVI was being enjoined by his own inspectors to provide decent living conditions and treatment for the insane. And had not the Revolution overthrown the monarchy, it is unquestionable that the king, who supported humanitarian progress wherever he could, would have aided the much-needed reforms.

New conditions, ideas, and forces thus circumscribe Enlightenment psychiatry on the eve of the French Revolution. Indigent mad men and women no longer roamed the streets or the woods because society had become aware of an obligation for their welfare. They were apprehended, questioned, and institutionalized as before, but not as easily pronounced incurable and abandoned. Medical men had developed an interest in their fate and attempted to transform the madman into a medical patient while political reformers posited a “natural right” of every person to health care. New theories of mental illness and new nosologic concepts attracted medical thinkers to the discussion of the nascent specialty while debate arose as to optimal management of the mentally ill without resort to cruelty. A lively international debate would spur reform in the care and cure of mental patients and lead to the emergence of a new medical field, psychiatry.

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5. On Geel, see A. J. Kilgour, "Colony Gheel," *American Journal of Psychiatry*, 1936, 92: 959–965 [the modern spelling is "Geel"]; E. Roosens, *Mental Patients in Town Life: Geel, Europe's First Therapeutic Community* (Beverly Hills, CA: Sage Publication, 1979), W. L. Parry-Jones, "The Model of the Geel Lunatic Colony and its Influence on the Nineteenth-Century Asylum System in Britain," in A. Scull, ed., *Mad-houses, Mad-Doctors, and Madmen* (Philadelphia, PA: University of Pennsylvania Press, 1981), 201–217, J. Webster. "Notes on Belgian Lunatic Asylums, including the Insane Colony of Gheel," *Journal of Psychological Medicine and Mental Pathology*, 1857, 10: 50–78, M. P. Dumont and C. Knight Aldrich, "Family Care after a Thousand Years—a Crisis in the Tradition of St. Dymphna," *American Journal of Psychiatry*, 1962, 119: 116–121, K. Dieckhöfer, "Geel, Überliefertes Konzept psychiatrischer Familienpflege," *Fortschrittliche Medizin*, 1981, 99: 319–320, 338–339.
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 7. C. Quétel and P. Morel, *Les fous et leurs médecines, de la renaissance au vingtième siècle* (Paris: Hachette, 1979), 146.
 8. Timothy Miller defines a "hospital" as an institution with beds, nursing care, and medical personnel. (Miller, *Birth of the Hospital in the Byzantine Empire* (Baltimore, MD: The Johns Hopkins University Press, 1985) 4. On medieval hospitalization of the insane, see G. Rosen, *Madness in Society*, *loc. cit.*, and *idem*, "The Hospital: Historical Sociology of a Community Institution," in E. Freidson, ed., *The Hospital in Modern Society* (New York: Free Press, 1963), 1–36, E. Padovani, "Appunti di storia dell' assistenza ospedaliera degli infermi di mente con particolare riguardo a quella italiana," *Archivo Iberoamericano de historia de la medicina y antropologia medica*, 1957, 9: 383–394, E. H. Ackerknecht, *A Short History of Psychiatry* (New York: Hafner, 1959), chaps. 3–5, P. Benassi, "I più antichi ospedali psichiatrici italiani," *Atti del primo congresso italiano di storia ospitaliera* (Reggio Emilia: Centro italiano di storia ospitaliera, 1957), 14–50, T. Bilikiewicz and M. Lyskanowski, "Humanitarian Traditions of Treatment of the Mentally Ill Patients in Poland in the Sixteenth and Eighteenth Centuries," *Proceedings of the XXIII International Congress of the History of Medicine* (London: 1972) 2: 427–429.
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The relevant sections of the original charter of Zaragoza Hospital are found in Fuster, “Origen y evolución,” *Anales*:

ROYAL AND GENERAL HOSPITAL OF OUR LADY OF GRACE

Zaragoza, 1656 Ordinances, by the bishop of Lérida

.... We decree and command that physicians be chosen by the administrators. They shall be assigned to the infirmaries, with the obligation and duty to visit the patients on their ward punctually twice a day. (p. 37)

We also decree that insane men and women who are poor and helpless be admitted. The administrators shall first gather information from the neighbors at their place of birth, and have the patients examined to ascertain whether or not they are insane. ... Once they have been admitted they shall be examined by doctors to see whether any remedy can be offered them and whether there is any hope for their recovery. Only then shall they don hospital clothing. And if there is no remedy they shall then be housed with the other incurables. (p. 81)

They are patients like the others and it is just to offer them the needful remedies. [emphasis added]

Therefore we decree that the administrators assemble a council of doctors of the institution and consult with them about the therapy and the remedies and the times at which these should be provided. Because the variety of illnesses and of fiery or melancholic humors seem to require remedies at specific times.

The administrators shall order that these recommendations be followed, that insane patients be lodged in a special infirmary where they shall be confined, so as to do no damage, and where they shall be provided with all the medicines and remedies that the physicians may prescribe (p. 82).

15. The “intelligent and enlightened supervisors” surely reflect Pinel’s esteem for Jean Baptiste Pussin, his own hospital administrator; the “competitive spirit” in the insane workers may be a pale image of the *Société d’émulation médicale*, so dear to Pinel; his effusive advocacy of cultivating the earth is an echo of his childhood in the village of St. Paul Cap-de-Joux near Toulouse. [He makes one inconsequential mistake in translating “trillia” as “trellis work;” this should read “threshing”]. The disdainful Spanish grandees who perpetuate their own madness by refusing to work surely personify Pinel’s agreement with French Revolutionary criticism of aristocratic idleness.
16. Dr. Desmaisons, *Des asiles d’aliénés en Espagne: Recherches historiques et médicales* (Paris: Baillière, 1859). See also A. Lopez-Fando and R. Sancho de San Roman, “Los antiguos hospitales de la ciudad de Toledo,” *Atti del primo congresso europeo di storia ospitaliera* (Roma: Centro di storia ospitaliera, 1962), 696–701.

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 20. J. B. Lautard, *La maison des fous à Marseille; Essai historique et statistique sur cet établissement depuis sa fondation en 1699 jusqu'en 1837* (Marseille: Achard, 1840), and J. Alliez and J. P. Huber, "L'assistance aux malades mentaux au XVIIIème siècle à Marseille," *Histoire des sciences médicales*, 1976, 10: 60–71, and *idem*, "Un asile psychiatrique avant la loi de 1838: l'Asile St. Lazare de Marseille," *Comptes-rendus du LXXV congrès de psychiatrie et de neurologie de langue française*, Limoges, 27 juin–2 juillet 1977, 2nd series (Paris: Masson, 1977), 357–369. Other neighbouring asylums evidently began to accept mentally ill residents in the mid-eighteenth century: see J. Alliez, J. R. Cain, and Ph. Thermo, "L'assistance aux malades mentaux dans le sud-est méditerranéen aux 17ème et 18ème siècles: les "asiles" de Saint Paul de Maussole et de Saint Pierre de Canon, à Saint Remy et à Aurons, en Provence," *Annales médico-psychologiques*, 1982, 140: 1122–1128.
 21. P. Sérieux and L. Libert, "Règlements de quelques maisons d'aliénés. Documents pour servir à l'histoire de la psychiatrie en France," *Bulletin de la Société de médecine mentale de Belgique*, 1914, 172: 214–215.
 22. On Bethlem see, for example, Michael Macdonald, *Mystical Bedlam: Madness, Anxiety and Healing in 17th-Century England* (New York: Cambridge University Press, 1983) and M. Byrd, *Visits to Bedlam: Madness and Literature in the Eighteenth Century* (Columbia, SC: University of South Carolina Press, 1974).
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 25. Porter, *Mind-Forg'd Manacles*, 129–131.
 26. W. Battie, *A Treatise on Madness* (London: Whiston & White, 1758) and J. Monro, *Remarks on Dr. Battie's Treatise on Madness* (London: Clarke, 1758). On Monro, see J. Andrews and A. Scull, *Undertaker of the Mind: John Monro and Mad-Doctoring in Eighteenth-Century England* (Berkeley, CA: University of California Press, 2001).
 27. I. Macalpine and R. Hunter, *George III and the Mad Business* (London: Penguin, 1969). These authors' somatic explanation for the king's illness has in turn been challenged: see J. H. Plumb, "The Wolf's Clothing," *New York Review of Books*, December 14, 1972. [I owe this reference to my colleague Dr. Saul Friedlander, *History and Psychoanalysis* (New York: Holmes & Meier, 1978, 136, n. 7)]. See also M. S. Guttmacher, *America's Last King. An Interpretation of the Madness of George III* (New York: Scribner's, 1941).
 28. A register of Belhomme's establishment was recently acquired by the Louise M. Darling Biomedical Library at UCLA and a study of the document is forthcoming. See R. Benard, "Une maison de santé psychiatrique sous la révolution," *Semaine des hôpitaux*, 1956, 32: 3990–4000, A. Ferroni, *Une maison de santé pour le traitement des aliénés à la fin du 18ème siècle* (Paris Thesis, 1964), E. H. Ackerknecht, "Wechselnde Formen der Unterbringung von Geisteskranken," *Schweizer Medizinische Wochenschrift*, 1964, 93: 250–255, J. Postel, "Les premières expériences psychiatriques de Philippe Pinel à la maison de santé Belhomme," *Revue canadienne de psychiatrie*, 1983, 28: 571–576, Forzinetti Motet, "L'Hôtel Colbert et les débuts de la maison Belhomme," *Histoire de la médecine*, 1952, 2: 27–32 and *idem*, "La maison Belhomme," *Ibid.*, 1953, 3: 47–64 and Olivier Vinciennes, "La maison de santé Belhomme: Légende et réalité," *Mémoires de la Fédération de sociétés historiques et archéologiques de Paris et de l'Île de France*, 1985, 31: 135–208.
- In "Political Prisoners in French Mental Institutions," *Medical History*, 1975, 19: 250–255, Ackerknecht argues that Belhomme sheltered political prisoners for high fees and only as long as they could pay. There is no convincing corroboration of this assertion.

29. Information about J. E. D. Esquirol's patients during the first six years of his private hospital are analyzed in D. B. Weiner, "Esquirol's Patient Register, 1802–1808: The First Private Psychiatric Hospital in Paris," *Bulletin of the History of Medicine*, 1989, 63: 110–120. The register of Esquirol's establishment for the years 1802–1808 has also been acquired by the Louise M. Darling Biomedical Library at UCLA.
30. On Merxhausen, see D. Malcus, "Zum vierhundertjährigen Bestehen der Landesheilanstalt Merxhausen," *Psychiatrisch-Neurologische Wochenschrift*, 1935, 35: 404–407. For general background, see D. Jetter, *Zur Typologie des Irrenhauses*, *idem*, "Die psychiatrischen Krankenhäuser als Anstalten besonderer Art: Beiträge zur Typologie der französischen und deutschen Irrenanstalten," *Confinia psychiatrica*, 1966, 9: 198–222 and *idem*, *Grundzüge der Geschichte des Irrenhauses* (Darmstadt: Wissenschaftliche Buchgesellschaft, 1981).
31. On Haina, see A. Martin, "Die Pflege der Kranken, im besonderen der Geisteskranken und Aussätzigen im Landehospital Haina zu Ende des 16. Jahrhunderts," *Psychiatrisch-Neurologische Wochenschrift*, 1920, 22: 5–6, and O. V. Nickel, "Landesheilanstalt Haina (Kloster), Regierungsbezirk Kassel, vierhundert Jahre alt," *Ibid.*, 1933, 35: 397–403.
32. Jetter, *Zur Typologie*, 90.
33. Cited in Jetter, *Zur Typologie*, 91. On the Julius Hospital in Würzburg, see K. Rieger, "Über die Irrenabteilung des Juliushospitals zu Würzburg und die Verhältnisse der Geisteskranken in Unterfranken überhaupt," *Allgemeine Zeitschrift für Psychiatric*, 1883, 39: 577–600, and R. Herrlinger, "Der mediterrane Einfluss bei der Gründung des Würzburger Juliushospitals, 1576," *Atti del primo congresso europeo di storia ospitaliera* (Rome: Centro di storia ospitaliera, 1962), 590–599. On the later history, see J. Bleker, E. Brinkschulte and P. Grosse, *Kranke und Krankheiten im Juliusspital zu Würzburg, 1819–1829* (Husum: Matthiesen Verlag, 1995).
34. On Celle, see the astonishingly favorable description by Dr. Monkemüller, a physician at Hildesheim, "Das Zucht- und Tollhaus von Celle," *Allgemeine Zeitschrift für Psychiatrie und psychisch-gerichtliche Medizin*, 1911, 68: 188–189.
35. S. S. Kottke, "The Hospital in Jewish History," *Reviews of Infectious Diseases*, 1981, 3: 636–639, and R. R. Marcus, *Communal Sick-Care in the German Ghetto* (Cincinnati: Hebrew Union College Press, 1947), esp. chapters 8 and 9. The author wishes to thank Professors Samuel Kottke and Joshua Leibowitz of Jerusalem for help with the bibliography of Jewish medicine.
36. See also Jetter, *Zur Typologie*, 93–95. The remarks about the Jewish Patients appear in Monkemüller, *Das Zucht- und Tollhaus*, p. 189.
37. See especially the official histories of the order of Saint John of God: Russotto, Gabriele, *Saint Jean de Dieu et son ordre hospitalier* (Paris: Cure provinciale, 1982), 2 vols, recently translated into French. For background, see Weiner, Dora B., "The Brothers of Charity and the Mentally Ill in Pre-Revolutionary France," *Social History of Medicine*, 1989, 2: 321–337, Marc L. Masson, *Soins et assistance prodigués aux aliénés par les Frères de St. Jean de Dieu dans la France du 18^{ème} siècle. Pour une contribution à la réflexion sur la place de l'humanisme dans la pratique psychiatrique*, (Thèse, Bordeaux, 1999), G. Goldin, "Juan de Dios and the Hospital of Christian Charity," *Journal of the History of Medicine and Allied Sciences*, 1978, 33: 6–34.
- The literature on this order is large but not recent, often local, and rarely in English. A comprehensive overview is found in A. Pazzini, *Assistenza e ospedali nella storia dei Fatebenefratelli* (Rome: Marietti, 1956). See also A. Chagny, *L'ordre hospitalier de St. Jean de Dieu en France* (Lyon: Frères de la charité, 1951), P. A. Chatagnon and A. Morel, "L'ancien régime et l'assistance aux malades mentaux," *Annales médico-psychologiques*, 1960, 118: 437–446, S. Clavijo y Clavijo, *Breve historia de la Orden hospitalaria de San Juan de Dios* (Madrid: Pradera, 1950). A general claim for the excellence and ubiquity of Catholic care for asylum inmates is made by G. Aldegheri, "Asistenza religiosa negli ospedali psichiatrici," *Atti del primo congresso europeo di storia ospitaliera* (Reggio Emilia: Centro italiano di storia ospitaliera, 1960), 1–8.
- Local concerns prevail in M. Fosseyeux, "Le service médical à l'Hôpital de la Charité au 17^{ème} et 18^{ème} siècles," *Aesculape*, 1913, 3: 117–121, 150–152, M. L. Fracard, "L'organisation hospitalière des Frères de St. Jean de Dieu à Niort (Poitou) dans la seconde moitié du 18^{ème} siècle," *97^{ème} congrès national des sociétés savantes* (Nantes, 1972), 299–327, G. Gentili, "Opera degli ospedalieri di S. Giovanni di Dio a Bologna ed in Emilia," *Atti del primo congresso*, 518–529; H. Bonnafous-Serieux, *Une maison d'aliénés et correctionnaires au 18^{ème} siècle: La charité de Senlis* (Paris: Presses universitaires, 1936), D. Wahl, "Un asile d'aliénés au dix-huitième siècle (Pontorson)," *Annales médico-psychologiques*, 1912, 70: 688–707.
38. For the Brothers in Ibero-America, see Ortega Lazaro, Fray Luis, *Para la historia de la Orden Hospitalaria de San Juan de Dios en Hispanoamerica y Filipinas* (Madrid: Fundación Juan Ciudad, 1992). For more details see Somolinos d'Ardois, G., *Historia de la psiquiatria en Mexico* (Mexico: Sepsetentas, 1976). See also J. Alvarez-Sierra, "La orden de San Juan de Dios lleve la medicina y la hospitalidad por el Continente americano," *Archivo Iberoamericano de historia de la medicina y antropologia medica*, 1957, 9: 23–32,

39. P. Sérieux, *Le quartier d'aliénés du dépôt de mendicité à Soissons au 18ème siècle d'après des documents inédits*, (Soissons: d'Acrosse), 1934, *idem*, P. Sérieux "Le traitement des maladies mentales à la Bastille," *Archives internationales de neurologie*, 1922, 41 (1): 137–150, 177, 186, (2): 12–23, 51–62, 96–107, 121–130, 161–180, *idem*, "Le traitement des maladies mentales dans les maisons d'aliénés du 18ème siècle," *Ibid.*, 1924, 43 (2): 97–119, 145–154, 191–203, 1925, 44 (1): 21–31, 50–63, 90–104, 121–133.
- P. Serieux and L. Libert, "Le régime des aliénés en France au 18ème siècle d'après des documents inédits," *Annales médico-psychologiques*, 1914, 10ème série, 6: 43–76, 196–219, 311–324, 470–497, 598–627, 1916, 7: 74–98, *idem*, "Règlements de quelques maisons d'aliénés (Documents pour servir à l'histoire de la psychiatrie en France)," *Bulletin de la Société de médecine mentale de Belgique*, 1914, 172 209–250. See also P. Chatelin, *Contribution à l'étude du régime des aliénés et anormaux au 17ème et 18ème siècles: L'élimination des 'anti-sociaux'—Le donjon de Vincennes et ses prisonniers* (Paris: Thèse médecine, 1921), and J. Vié, *Les aliénés et les correctionnaires à St. Lazare au 17ème et 18ème siècles* (Paris: Alcan, 1930).
40. Sérieux et Libert, "Le régime des aliénés en France," 6: 319.
41. Sérieux et Libert, "Le régime des aliénés en France," 7: 75–76.
42. Jacques Tenon, *Mémoires sur les hôpitaux de Paris* (Paris: Pierres, 1788), 4. See also *Jacques Tenon's Memoirs on Paris Hospitals*, D. B. Weiner intro. and ed. (Camden, MA: Science History Publications, 1996).
43. Sérieux and Libert, "Reglements," 237.
44. C. Jones, "The Treatment of the Insane in eighteenth- and early nineteenth-century Montpellier," *Medical History*, 1980, 24: 371–390, p. 374. His *The Charitable Imperative: Hospitals and Nursing in Ancien Regime and Revolutionary France* (London: Routledge, 1989) barely mentions the Brothers of Charity.
45. Archives hospitalières de Romans, III F¹ 35, cited in Sérieux and Libert, "Reglements," 232–233.
46. Claude Quétel, *De par le roy: Essai sur les lettres de cachet* (Toulouse: Privat, 1981). See also A. Farge and M. Foucault, eds. *Le désordre des familles: Lettres de cachet des archives de la Bastille* (Paris: Gallimard, Julliard, 1982).
47. See especially P. Sérieux, "L'internement par 'ordre de justice' des aliénés et des correctionnaires sous l'ancien régime, d'après des documents inédits," 1932, 77: 413–462, *idem*, "Le parlement de Paris et la surveillance des maisons d'aliénés et de correctionnaires au 17ème et 18ème siècle," *Revue historique du droit français et étranger*, 1938, 83: 404–459.
48. "Rapport fait au nom des commissaires nommés pour visiter les maisons des Frères de la Charité de Charenton et du Val d'Osne, par M. Regnault, l'un des commissaires," November 1790, Archives nationales, DV1, no. 7.
49. For argument along Foucaultian lines, see, e.g. H. Mitchell, "Rationality and Control in French Eighteenth-Century Medical Views of the Peasantry," *Comparative Studies in Society and History*, 1979, 21: 82–112, and *idem*, "Politics in the Service of Knowledge: The Debate over the Administration of Medicine and Welfare in late Eighteenth-Century France," *Social History*, 1981, 6: 185–207.
- For work on confinement, see T. M. Adams, *Bureaucrats and Beggars: French Social Policy in the Age of Enlightenment* (New York: Oxford University Press, 1990) and *idem*, "Mendicity and Moral Alchemy: Work as Rehabilitation," *Studies on Voltaire and the Eighteenth Century*, 1976, 151: 47–76 and *idem*, "Niveau de vie et correction dans les dépôts de mendicité au 18ème siècle," *Bulletin de la Société française d'histoire des hôpitaux*, 1976, 33: 53–70. See also Philippe Grand and Jean Marie Jenn, *Les prisons et Paris et de l'ancien département de la Seine* (Département de Paris: Direction des Affaires Culturelles, 1996), Jacques Beaud and Georges Bouchart, "Le dépôt des pauvres de St. Denis 1768–1792," *Annales de Démographie Historique*, 1974, 127–143, and Beck, Theodore Romeyn, *Elements of Medical Jurisprudence*, 2 vols. (Albany: Webster & Skinner, 1823).
50. Tenon, *Memoires*, 85. See also D. B. Weiner, "Les femmes de la Salpêtrière: trois siècles d'histoire hospitalière parisienne" *Gesnerus: Swiss Journal of the History of Medicine and Sciences* (1995), 52: 20–39.
51. C. Bloch and A. Tuetey, eds., *Procès-verbaux et rapports du Comité de mendicité de la Constituante, 1790–1791* (Paris: Imprimerie nationale, 1911), 629.
52. C. Bloch and A. Tuetey, eds., *Procès-verbaux et rapports du Comité de mendicité de la Constituante, 1790–1791* (Paris: Imprimerie nationale, 1911), 604.
53. Colin Jones, "Prehistory of the Lunatic Asylum in Provincial France: The Treatment of the Insane in Eighteenth- and Early Nineteenth-Century Montpellier," *Medical History*, 1980, 24: 371–390. In contrast, other studies of municipal charity barely mention the mentally ill. See, e.g., K. Norberg, *Rich and Poor in Grenoble* (Los Angeles: University of California Press, 1985).
54. Jetter suggests, however, that the study of hospitals supported by prince-bishops who were freemasons (Salzburg, Würzburg, Bamberg) may yield information on genuinely German developments. [Personal communication].

- French cultural influence on Germany did not end with the eighteenth century: in the nineteenth, Pinel's nosology and therapy, and Esquirol's asylum architecture remained models for several decades. Among numerous examples to substantiate this point, see H. J. Rodrega, "Die Anfänge der stationären Behandlung von Geisteskrankheiten in Hamburg zu Anfang des 19. Jahrhunderts," *Historia hospitalium*, 1976, 11: 149–178.
55. See K. Gimpel, "Das Gast- and Irrenhaus in Münster," *Historia hospitalium*, 1982, 14: 57–77, and W. Stemmer, "Zur Geschichte des Waisen-, Toll-, und Krankenhauses sowie Zucht- und Arbeitshauses in Pforzheim," in *Festnummer der Allgemeinen Zeitschrift der Psychiatrisch-Gerichtlichen Medizin*, 1913.
 56. Whether Esquirol knew of Celle remains to be established. Both German and French asylum architecture may have been influenced independently by the model of the Genova pesthouse.
 57. Jetter, *Zur Typologie*, especially Part 2, chapter 1, section 2, *passim*.
 58. W. Lorenz, "Der Wiener Irrenthurm," *Psychiatrisch-Neurologische Wochenschrift*, 1902, 4: 273–277.
 59. A. von Rothe, *Geschichte der Psychiatrie in Russland* (Leipzig: Deuticke, 1985). The only source in English that I have located is K. S. Dix, *Madness in Russia, 1775–1864: Official Attitudes and Institutions for its Care* (Los Angeles, CA: UCLA Unpublished Ph.D. Dissertation, 1977). [I owe this reference to my late colleague Hans Rogger].
 60. Dix, *Madness in Russia*, 112.
 61. See, e.g., G. Aldegheri, "Assistenza religiosa negli ospedali psichiatrici," *Atti del primo congresso*, 1–8.
 62. A. Bigorre, *L'admission du malade mental dans les établissements de soins, 1789–1838* (Dijon: Thèse médecine, 1967), 17.
 63. C. Jones, "The Treatment of the Insane," 374.
 64. Tenon, *Mémoires*, 211.
 65. Lorenz, "Der Wiener Irrenthurm," 274.
 66. Mönkemuller, "Das Zucht- und Tollhaus von Celle," 170.
 67. Quétel and Morel, *Les fous et leurs médecines*, esp. chapter 2 "Drogues et moyens physiques," *passim*. Most helpful in puzzling out early modern medications has been J. Worth Estes, *Dictionary of Protopharmacology: Therapeutic Practices, 1700–1850* (Canton, MA: Science History Publications, 1990).
 68. This essay appeared in five installments in February 1764 in Hamann's *Königsbergsche Gelehrte und Politische Zeitungen*.
 69. First published in Leiden in 1748.
 70. Paris: Crapart, Caille Ravier, An XIII [1804–1805]. This work has recently been translated into English as *On the Relations Between the Physical and Moral Aspects of Man*, 2 vols. (Baltimore, MD: The Johns Hopkins University Press, 1981). The translation, done in Tunis, is frequently awkward. The Introductions, by Sergio Moravia and George Mora, are excellent.
 71. See, for example, I. Veith, *Hysteria: The History of a Disease* (Chicago, IL: University of Chicago Press, 1965), ch. 7.; see also E. Trillat, *Histoire de l'hystérie* (Paris: Seghers, 1986).
 72. On depression see T. H. Jobe, "Medical Theories of Melancholia in the 17th and 18th Centuries," *Clio Medica*, 1976, 11: 217–231 and especially S. W. Jackson, *Melancholia and Depression From Hippocratic Times to Modern Times* (New Haven: Yale University Press, 1986).
 73. Sixth ed., London, Strahan Leake, 1739, 260. Quoted in R. Hunter and I. Macalpine, *Three Hundred Years of Psychiatry, 1535–1860* (Hartsdale, NY: Carlisle, 1982), 352. On George Cheyne, see Anita Guerrini, *Obesity and Depression in the Enlightenment: The Life and Times of George Cheyne* (Norman, OK: University of Oklahoma Press, 2000).
 74. Lyon: Duplain, 1765; translated into English (Edinburgh: Becket & Du Hondt, 1765) and Spanish (Madrid: Barco Lopez, 1794).
 75. Edinburgh and London: Becket & Du Hondt, 1765.
 76. Regarding the movement of vapors and nervous fluid, see E. Clarke, "The Doctrine of the Hollow Nerve in the 17th and 18th Centuries," in L. G. Stevenson and R. P. Multhauf, eds., *Medicine, Science and Culture: Essays in Honor of Owsei Temkin*, 124–141. On vitalism, particularly in 18th-century Montpellier, see Elizabeth A. Williams, *The Physical and the Moral: Anthropology, Physiology, and Philosophical Medicine in France, 1750–1850* (Cambridge University Press, 1994); see also P. H. Reill, *Vitalizing Nature in the Enlightenment* (Berkeley, CA: University of California Press, 2005).
 77. Thomas Willis, *Cerebri anatome: cui accessit nervorum descriptio et usus* (London: Martyn Allestry, 1664) and *Pathologiae cerebri et nervosi generis specimen. In quo agitur de morbis convulsis et de scorbuto* (London: Allestry, 1667).

78. M. Valsalva, *De aere humana* (Bologna: Pisarius, 1704). See also G. Bilancioni, "Valsalva precursore di Chiarugi e di Pinel," *Il Cesalpino (Arezzo)*, 1913, 9: 41–44.
79. Morgagni's book was first printed at Venice: Remondini, 1761.
80. See, e.g., H. Weiner, "Some Comments on the Transduction of Experience by the Brain: Implications for our Understanding of the Relationship of Mind to Body," *Psychosomatic Medicine*, 1972, 34: 355–380, and J. E. Ledoux, "Cortical Pathways of Emotional Plasticity," in H. Weiner, I. Florin, R. Munson, and D. Hellhammer, *Frontiers in Stress Research* (Toronto: Huber, 1989), 122–136.
81. *Systema naturae, sive Regna tria naturae systematice preposita per classes, ordines, genera, et species* (Leiden: Haak, 1735).
82. Published at Amsterdam: De Tournes, 1763. See L. Dulled, "Boissier de Sauvages," *Revue d'histoire des sciences*, 1969, 22: 303–322.
83. Upsala: Steinert, 1763.
84. Göttingen: Schulz, 1764.
85. The definitive and often reprinted edition is *Editio altera, in quarta parte emendata* (Edinburgh and London: Kincaid & Creech and Cadell, 1772). See also W. Cullen, *A Synopsis and Nosology, the first Translation from the Latin into English* (Worcester, MA: Thomas, 1792).
86. On eighteenth-century nosology, see J. M. Lopez-Piñero, "Los sistemas nosologicos del siglo XVIII," *Archivo Iberoamericano de Historia de la Medicina Y Antropologia medica*, 1961, 13: 65–93, and E. Fischer-Homberger, "Eighteenth Century Nosology and its Survivors," *Medical History*, 1970, 14: 397–403.
87. See D. B. Weiner, "Le droit de l'homme à la santé: Une belle idée devant l'Assemblée constituante, 1790–1791," *Clio Medica*, 1970, 5: 209–233 and *idem*, *The Citizen-Patient in Revolutionary and Imperial Paris* (Baltimore, MD: The Johns Hopkins University Press, 1993).
88. On Colombier, see P. L. M. J. Gallot-Lavallée, *Un hygiéniste au 18ème siècle: Jean Colombier* (Paris: Thèse médecine, 1913), A. Des Cilleuls, "Un réformateur de l'hygiène militaire sous l'ancien régime: Jean Colombier, inspecteur général des hôpitaux, 1736–1789," *La France médicale* Nov. 10, 1907, 409–411, and L. S. Greenbaum, "Science, Medicine, Religion: Three Views of Health Care in France on the Eve of the French Revolution" *Studies in 18th-Century Culture*, 1981, 10: 373–392.
On Doublet, see P. Carrette, "François Doublet et la psychiatrie au temps de Louis XVI," *Annales médico-psychologiques*, 1926, 2: 119–131.
89. Colombier, "Instructions," Part 1, 538, 539, 541, 550.

The Growth of Psychiatry as a Medical Specialty

Chapter 7

The Madman in the Light of Reason. Enlightenment Psychiatry

Part II. Alienists, Treatises, and the Psychologic Approach in the Era of Pinel

Dora B. Weiner

The Myth of Pinel, the Chain-Breaker

It has been customary among Continental European historians of psychiatry to call the turn of the nineteenth century the “era of Pinel.” Indeed, Philippe Pinel’s long life (1745–1826) spanned the Enlightenment, the French Revolution, Napoleon’s reign, and the early Romantic era. More important, he exemplifies the broad, humanistic learning that the best eighteenth century doctors brought to the study of medicine as well as the scientists’ consistent adherence to observation and experiment as the sources of their data. He personifies adherence to humanitarianism and the rights of man as well as the belief that mental patients are susceptible to therapy—a therapy totally different from bleeding, purging, and whirling about, therapy that is nonphysical and thus psychologic. The confusing and poorly translated term “moral management” should be dropped.¹

Pinel’s famous gesture of freeing the insane from their shackles is now judged to be a myth.² According to this story, Pinel confronted the paraplegic, malevolent Georges Couthon, a member of the Committee of Public Safety, at Bicêtre Hospice during the Terror and fearlessly struck the chains off the violent maniacal patients. This event never occurred,³ yet the legend has lived for two hundred years and most textbooks repeat it.⁴ Thus, Garrison’s *History of Medicine* states that “at the risk of his own life and liberty, Pinel initiated the reform of striking off the chains from forty-nine insane patients”⁵; according to Castiglioni, the feat occurred in 1796;⁶ according to Guthrie, “it was in 1798 that noble-minded Philippe Pinel boldly advised the removal of the chains.”⁷ In a quaint modern version, the event occurred “in a Parisian madhouse known as the *ménagerie*.”⁸ Yet a document proves that it was not Pinel but his mentor, the uneducated, humane, and resourceful supervisor of the insane at Bicêtre, Jean Baptiste Pussin (1745–1811), who took it upon himself quietly to remove those shackles.⁹ In 1797 Pussin wrote a revealing statement from which a long excerpt seems worth quoting *in extenso*:

I have had as many as three hundred madmen under my supervision, and many of them have always been violent and very dangerous, especially during the hot season. To control them I have never used anything but repressive measures without mistreatment, and I have never permitted them to be beaten in any way. And yet I have always managed not only to overawe them but even to gain their confidence to such a point that they are the first to protect me. They even help maintain order and calm among themselves and the regulations are so well observed that most of the time one does not seem surrounded by madmen. Strangers have often told me of their surprise. It is true that very active supervision is required to achieve this.

I have tried so hard to improve the condition of these unfortunates that in the month of Prairial of the Year V [May–June 1797] I managed to eliminate their chains (used until then to restrain the furious) and to replace them with straitjackets that permit freedom of movement and the enjoyment of all possible liberty without any added danger...

My experience has shown, and shows daily, that to further the cure of these unfortunates one must treat them with as much kindness as possible, impose authority but not misuse it, gain their confidence, fight the cause of their illness and make them envision a happier future. I have always fought this illness by psychologic means [*“moyens moraux”*] and have thus known the happiness of some favorable results.¹⁰

Pinel repeatedly acknowledged his considerable indebtedness to Pussin, and he did remove the chains from the women at the Salpêtrière in 1800. But he never claimed to have done this at Bicêtre. So why perpetuate the myth?

This question was elucidated by the late Dr. Gladys Swain, who showed that Pinel's eldest son, Dr. Scipion Pinel (1795–1856), and his professional heir, Dr. J. E. D. Esquirol (1772–1840), fabricated the legend of Pinel the “liberator” in order to minimize the creative achievements that, as we shall see, constitute his original contribution to psychiatry.¹¹ Scipion and Esquirol found Pinel's psychology as embarrassing as his good relations with both the Republic and Napoleon. In contrast to the famous alienist, they both favored solidism and searched for the “seat” of mental disease in the brain. In politics, they shared royalist sympathies. Their stratagem to obscure Pinel's importance succeeded. Only now, almost two centuries later, is a reassessment taking shape.¹²

Historians of psychiatry now ask: Was Pinel's “gesture” unique to Revolutionary Paris? Or was he but an “eponym,” as Jacques Postel and G. Lanteri-Laura have argued?¹³ Indeed, the humanitarianism and reforming spirit characteristic of the Enlightenment suggest that Pinel and Pussin were not alone in treating the insane with respect and kindness. Thus, in 1796, the Quaker William Tuke (1732–1822) founded the York “Retreat,” where patients, albeit paying patients, lived without shackles, though under strict supervision.¹⁴ In Geneva, Dr. Abraham Joly (1748–1812) “abolished the use of chains and other barbaric means of coercion at the city hospital,”¹⁵ as did Gaspar Ch. de la Rive, also of Geneva¹⁶; and the same humanitarian intervention is attributed to Dr. Gastaldy at the Providence in Avignon,¹⁷ the physician at St. Lazare in Marseilles,¹⁸ and Johann Theobald Held in Prague.¹⁹ Nonmedical professionals did not lag behind: we have mentioned the Brothers of Charity²⁰ and Father Pouthion at Manosque.²¹ A conscientious scholar could undoubtedly uncover similar humane treatment in scores of places throughout the Western world. The “Zeitgeist” championed reform.

Famous books kept prodding the public conscience. Ever since the publication of Cesare Beccaria's *Of Crimes and Punishments* in 1764 and Voltaire's propaganda for the book, penal reform had been fashionable. Then Jacques Tenon's *Mémoires sur les hôpitaux* (1788) popularized hospital reform. A year later John Howard published *An Account of the Principal Lazarettos in Europe ... Together with Further Observations on some Foreign Prisons and Hospitals* (1789), closely followed by Johann Peter Frank's multivolume *Versuch einer vollständigen medizinischen Polizei* (1779–1819). Reform of the mental hospital was inescapable.

We may well ask why physicians should now emphasize humane and psychologic treatment of the insane when previously they had been advocating purging, bleeding, vomiting, and rotating in chairs. To answer this question, we must look at all Western countries where leading physicians turned their attention to the insane and claimed the study and treatment of insanity as a field for medical activity.

The “Enlightened” Literature on Mental Illness

In the vast literature on the history of psychiatry, two studies by German psychiatrist-historians are of particular interest: Klaus Dörner's *Madmen and the Bourgeoisie* and Martin Schrenk's *Über den Umgang mit Geisteskranken*.²² Equally important is Jan Goldstein's *Console and Classify: The French Psychiatric Profession in the Nineteenth Century*; we shall not discuss it here because the Enlightenment and Pinel are peripheral to Goldstein's argument which focuses on Esquirol and his disciples.²³ Dörner argues in the structuralist, Marxist, and Foucaultian tradition that the industrialized middle class hospitalized the dependent insane in order to use them for the production of medical knowledge and put them to work for society's profit. Decent treatment was thus advantageous for the bourgeoisie. Schrenk offers a more dispassionate account, placing German Enlightenment psychiatry in an international context. His book abounds in finely tuned and well-documented insights that explain national attitudes toward native and foreign ideas and practices. Our

approach will differ from theirs and focus on an analysis of the major writings. We shall single out ten important physician-alienists active at the end of the eighteenth century, including two forerunners, William Battie (1703–1776) of London and Andrés Piquer (1722–1772) of Valencia and Madrid. From among the numerous British authors who wrote about insanity during the Enlightenment—“madhouse” owners, hospital doctors, learned polymaths, and “mad-doctors”—we choose two: Thomas Arnold (1742–1816) because he wrote the first comprehensive text on psychiatry in England, and Alexander Crichton (1763–1856) because he emphasized psychology and influenced medical thought in Germany, Russia, and France.

This may be an invidious selection, for numerous other British practitioners soon followed Battie’s example and published their views and recommendations regarding insanity, as Roy Porter’s *Mind-Forg’d Manacles* has recently shown. They included proprietors of madhouses such as William Perfect (1737–1809), owner of an asylum at West Malling, Kent,²⁴ and experienced practitioners such as John Haslam (1764–1844), for many years apothecary at Bethlem Hospital,²⁵ and the physician of that institution, John Monro (1715–1791).²⁶ These writers included two men involved with the British armed forces, William Pargeter (1760–1810), a physician at Oxford and London and, late in life, a naval chaplain,²⁷ and Andrew Harper (1790), a noncommissioned surgeon with the Royal Garrison Battalion of Foot at Fort Nassau in the Bahamas.²⁸ They also include some learned men with many interests, psychiatry among them, such as Erasmus Darwin (1731–1802),²⁹ and John Ferriar (1761–1815), physician to the Manchester Infirmary, Dispensary, Lunatic Hospital and Asylum.³⁰

After a look at the two forerunners, Battie and Piquer, we turn to the acknowledged protagonists in the major Western countries: Joseph Daquin (1732–1815) of Chambéry and Vincenzo Chiarugi (1759–1820) of Florence [whom we shall compare to the Englishman Thomas Arnold and to the American Benjamin Rush (1745–1813), for the three men shared similar attitudes and convictions]. We shall analyze the complicated medical philosophy of Johann Christian Reil (1759–1813) of Halle and Berlin, with an aside for the practical achievements of his compatriot Johann Gottfried Langermann (1768–1832) in Bayreuth and Berlin. In Pinel’s work we emphasize his *Traité médico-philosophique sur l’aliénation mentale ou la manie* of 1800, underscoring the pivotal importance he allotted to Alexander Crichton. Both Pinel and Crichton influenced the theoretical formulations and practical policies of Pinel’s prize student Esquirol.

The analysis and comparison of these founders’ work reveals common traits and differences. All of them adhered to William Cullen’s nosologic framework and considered the “*vesaniae*” as a special order of diseases. All advocated the removal of the mentally ill from their accustomed social environment to an asylum. All believed in humane treatment but realized that the director of an asylum needs authority. Some, like Reil, were not above terrorizing patients into subjection; others, like Pinel, emphasized observation, diagnosis, and the classification of mental illnesses. Arnold and Chiarugi quite lost themselves in nosologic subtleties. Some were solidists and dissected brains, hoping to find the “seat” of a disease in that organ. Some were therapeutic activists, while others relied on Nature. All emphasized the influence of the environment and believed in the healing power of work.

While Reil outclassed Pinel as a medical investigator, Pinel stands out as an advocate of natural history and a researcher in psychiatry who used long-term observation of the same patient and applied the statistical and comparative methods. These doctors’ relationship to the hospital differed: only Langermann, Pinel, and Chiarugi established their own residences inside the asylum and served as administrators as well as physicians-in-chief. (Chiarugi had lodgings at Bonifazio Hospital, but there is no evidence that these were his real home.) Most of these doctors had some students, but only Pinel and Reil—and, to a lesser extent, Chiarugi and Rush—can be called professors of clinical medicine, including involvement in the scientific life of their academic communities. Only Pinel served as president of a research society that concerned itself seriously with psychologic illness. In fact, the most important difference among these men lies in the role that psychology played in their concept of psychiatry: they fall into two groups, those who adopted John Locke’s ideas and those who ignored them. Whether these doctors read English turns out to be an important criterion in their professional outlook. It indicates their openness to Baconian and Lockean concepts and to British associationist psychology, which, in turn, suggests an emphasis on mind, rather than brain, in the study of mental illness.

Of Language and Prejudice

The perusal of psychiatric writings at the turn of the nineteenth century makes one lament the decay of Latin as the common language of the learned world. These contemporaries, who shared so many interests and attitudes, usually read each other's writings only in translation. And translations are full of pitfalls. Physicians' use of foreign languages for serious scholarly work was as rare then as it is now. Pinel read English fluently. Judging from Reil's thorough coverage of French scientific activity in *Archiv für Physiologie*, which he edited, we can assume that he read French; whether he knew English, we cannot tell. Daquin knew Italian, Crichton mastered German, and all Frenchmen, Italians, and Spaniards could at least scan each other's work to obtain a knowledgeable impression of the contents.

The fate of Cullen's work illustrates the problem well. It was the fourth edition of *First Lines of the Practice of Physick, for the Use of Students*, first published in 1774, that was translated twice into French, by Pinel and by E. F. M. Bosquillon. The latter version served as the basis for a translation into Italian, by Dr. Niccolò Olivari. Similar treatment befell Cullen's *Treatise on materia medica*, translated from French into Spanish: the two translators obviously did not know English.³¹ And the enterprising Dutchman A. B. Beerenbroek undertook, as early as 1779, to produce a Latin version of Cullen's book, to be published at Leyden. This was no isolated instance: Cullen himself first produced his *Nosology* in Latin, in 1769: only in 1800 was the work turned into English.

Not unexpectedly, it was German translators who excelled in diligence: within one year of the original publication they made Chiarugi, Crichton, and Pinel available in the German language. The French do not appear to have translated anybody, neither Chiarugi, nor Crichton, nor Reil—whose idiomatic and Romantic German presents, it must be admitted, well-nigh-unsurmountable difficulties.

Let us examine one, crucial, example that illustrates the profound linguistic and conceptual gulf that lies between the French and German languages in psychiatry, Pinel's term *aliénation mentale*. *Aliénation* implies that the mental patient feels foreign to the "normal" world, a stranger (*alienus*) in the land of sanity. Samuel Tuke liked this term; he wrote in *Description of The Retreat*: "I adopt this term from an opinion that the *aliéné* of the French conveys a more just idea of this disorder than those expressions which imply, in any degree, the 'abolition of the thinking faculty.'" ³² A sympathetic therapist might well journey into that land of "alienation," learn the language of "insanity," understand the "alienated" and, possibly, lead the patient back into society. (It is, indeed, along this path, as will be seen, that Pinel made his most original contribution.) Pinel's excellent Austrian translator, Dr. Michael Wagner, found a pertinent equivalent, namely *Geistesverirrung*, a term that conveys the image of a patient who has lost his way.³³

With Reil and most other Germans, the terms *Geistesverwirrung* and *Geisteszerrüttung* are the most current. These imply a totally different image. *Verwirrung* conveys an image of tangled and snagged threads that an expert might disengage. *Zerrüttung* evokes a strong physical commotion that shakes and deranges the mind, unhinges and fractures the structure and its furnishings. The therapist must help to reconstruct the disturbed arrangements, help make order. It is a practical task, congenial to the Anglo-Saxon empirical approach and adequately translated by Crichton's title, "derangement." But the real problem derives from the unique plasticity of the German language that permits the apposition of the tangible notions of *Verwirrung* and *Zerrüttung* to the spiritual and vague terms *Geist* and *Seele*. Can the "mind" get entangled and the "soul" be deranged? This mixture of psyche and soma, though congenial and suggestive to German ears and current in the contemporary Romantic literature and philosophy, remains impenetrable to scientific analysis. No wonder the percipient Martin Schrenk writes

English and French history of medicine seems to have special problems in understanding German psychiatry at the beginning of the nineteenth century. This can be explained by the specifically German development of intellectual history in the eighteenth and early nineteenth century: it is German idealism and especially German Romanticism that French and Anglo-American historians of medicine find it difficult to approach. Therefore the history of German psychiatry remains limited, in standard non-German works, to a few rough sketches and some generally known names.³⁴

In the history of psychiatry, the Rhine and the English Channel remain wide bodies of water.

If we now assume acquaintance with the important foreign professional literature, whether read in the original or in translation, we must ask how these early “psychiatrists” judged the work of their contemporaries. Alas, these doctors did not think much of their colleagues beyond national frontiers. The events of the French Revolution and the conquests of French armies proved divisive, especially in Franco-German relations. Reil calls Pinel’s book a “cock-and-bull” story,

prolific in some parts but sick in general conception, without principles nor originality, even though his nationalistic illusions lead him to claim these.. The second great nation on earth [the English], too modest to express what, like the French, it believes about itself, has produced many, mostly ordinary, pieces about insanity.³⁵

His negative verdict does not prevent Reil from quoting Pinel over forty times in his book, published three years after Pinel’s *Traité*.

As for Pinel, he dismissed his own predecessor, Chiarugi:

Always follow the beaten path, speak of madness in general in a dogmatic tone, then consider madness in particular and resort once again to the old scholastic order of causes, diagnosis, prognosis, and indications to follow, that is the task Chiarugi has accomplished. The spirit of research is evident in his work only in a hundred published observations, though few among them permit conclusive inductions.³⁶

Pinel might at least have acknowledged Chiarugi as a learned man and a good observer, even though the Italian was an unregenerate solidist and old-fashioned humoralist. As for Daquin, who dedicated the second edition of his *Philosophie de la folie* to Pinel in 1804, he waited in vain for the famous professor publicly to acknowledge the honor. No one has offered an explanation for such churlish behavior.

Biographers have followed this parochial pattern. “Who first broke the chains of the insane?,” asks the Italian historian of medicine Spezzaferri. Of course the honor goes to Chiarugi, not out of any “*spirito campanilistico*,” the author avers.³⁷ Padovani, for his part, considers Daquin as Italian, despite the fact that Chambéry is located north of the Alps in a French-speaking region and that Daquin wrote in French.³⁸ Many other historians of medicine, sad to say, follow the same path. We learn more about an author’s compatriots, even if they were only obscure French, German, English, or Italian doctors with a psychologic bent, than about cross-currents in the Enlightenment and the Romantic era. To cite but two examples: when Th. Kirchoff discusses the “theoretical development of psychiatry,” he dealt almost exclusively with Germany.³⁹ Across the Channel, in England, Macalpine and Hunter, presenting “three hundred years of psychiatry” to the English-reading public, filled their scholarly and useful 1100 pages well-nigh exclusively with British contributions.⁴⁰

Two Forerunners: William Battie and Andrés Piquer

It was an Englishman, William Battie, who wrote the first volume by a practicing “psychiatrist” devoted entirely to mental illness. *A Treatise on Madness*, published in 1758, was based on seven years’ experience at St. Luke’s Hospital for Lunatics, after Battie co-founded it in 1751. He believed that “madness” was an illness different from others and needed special hospitals. Emphasizing abstract psychologic concepts borrowed from Locke, Battie divided madness into “original” and “consequential” to some precipitating event, and offered numerous observations based on his experience. A long section on therapy shows Battie to be an activist. He was also a practical man who believed that “management did much more than medicine.”⁴¹ He invited “young Physicians well recommended to visit with me in the Hospital and freely to observe the treatment of the patients there confined.”⁴² Battie’s book remained untranslated; Pinel mentioned it,⁴³ so did Chiarugi, but only in a string of names among the “great English luminaries.”⁴⁴ Crichton called it “a wild romance.”⁴⁵

The psychiatric work of the Spaniard Andrés Piquer remained completely isolated. A professor of anatomy who also served as town physician of Valencia, Piquer wrote half a dozen books on medicine and philosophy, two of them relevant to psychiatry, namely *Logica moderna* (1747) and *Filosofía moral para la juventud española* (Madrid, 1755). But his teaching remained totally theoretical.

He was called to Madrid to serve as personal physician to King Ferdinand VI, who died after a year's manic-depressive illness. It is Piquer's "Discurso sobre la enfermedad del Rey Nuestro Señor, Don Fernando VI (que Dios guarde)" of 1759 that leads us to include him among the founders of "psychiatry." Piquer's approach was eclectic, his judgment based on observation, his medication conservative. He cited all the classical doctors, from Hippocrates to Celsus, but also the moderns, from Sydenham and Boerhaave to van Swieten and Haller. His royal patient suffered from "melancholic madness," would not eat, slept on a "wretched cot," refused to go out, and rejected medication, baths, good counsel. In contrast to the British physicians in charge of George III, Piquer and his colleagues never manhandled or mistreated their patient nor failed in their "respect for his Royal Person." Though he "did none of the things they prescribed ... [m]elancholics must be treated with great gentleness and kindness," wrote Piquer, "and the hotchpotch of medications belongs to quacks rather than physicians who try to know and imitate nature."⁴⁶

According to Piquer's diagnosis, the king's melancholia was caused by black bile, and yet Piquer knew better, for he began his Discourse with this statement: "The king stayed at Aranjuez in 1758 until the 27th of August, when his wife the Queen, our Lady, died." Within a year, Piquer's "atrabillious" patient was dead as well, and we can be sure the physician was well aware of the role that grief played in the king's decline and demise.

Spanish medicine, and care of the mentally ill, sank to a nadir at the turn of the nineteenth century. The emigration of many forward-looking physicians depleted medical practice and impoverished medical education.⁴⁷ In 1798, the government nationalized the hospitals and confiscated their endowments. Spain acted in imitation of her French neighbors but lacked the wealth and innovative spirit that helped French hospitals survive. The heroic war of independence against Napoleon further depleted Spain. The famous insane asylum at Zaragoza, for example, became a battleground and burned, and its inmates and manuscripts perished.⁴⁸ Piquer's Discourse remained in manuscript, in the private library of the Duke of Osuna, until 1851, when it appeared in a collection of historic documents.

The examples of Spain and England may, in fact, illustrate how history fashions the fate of psychiatry. When King George III became "mad" in episodes of 1765, 1788–1789, 1801, 1804, and 1810, his illness provided a major topic for parliamentary debate: it was seen as a political problem.⁴⁹ The king's insanity raised questions not only about his recovery, but also about his capacity to rule and the need for a regency. Parliament repeatedly questioned the king's physicians, Sir George Baker, Richard Warren, Francis Willis, and Anthony Addington, and the public eagerly read accounts such as a "Report from the Committee appointed to examine the Physicians who have attended his Majesty, during his Illness, touching the State of His Majesty's Health." Psychiatry, and "Persons who have made this Branch of Medicine their particular Study," moved to center stage in England in the 1780s. Indeed, by the end of the eighteenth century, power had shifted from Buckingham Palace to Westminster.⁵⁰ This accounts for the proliferation of English books on psychiatry during this epoch, of establishments for the private and public custodial care of the mentally ill, and for several parliamentary inquiries.

While parliamentary government turned the British sovereign's health into a topic of public debate, Spanish absolutism favored secrecy, like in the days of Philip II. Dr. Andrés Piquer's expert analysis of King Ferdinand VI's manic-depressive psychosis remained the jealously guarded secret of the Spanish court.

Joseph Daquin of Savoy

While Piquer remained at Valencia during his youth and the major part of his professional life until summoned to Madrid, his younger colleague Joseph Daquin was a peripatetic scholar. From medical school at Turin, he moved to Montpellier for further training, some twenty years before Pinel's post-doctoral studies at that ancient university. Thus Daquin was also exposed to the competing notions of iatro-mechanism and vitalism and to the nosology of Boissier de Sauvages. Daquin studied in Paris and then settled in his native Chambéry in Savoy, where he served as physician of the municipal hospital. After twenty years he transferred

to Ste. Marie l’Egyptienne, the local hospital for incurables, with seventy-five inmates, about half of whom were insane. Having served there as attending physician for “three or four years,” he published *La philosophie de la folie* in 1791.⁵¹

Daquin’s *Philosophie* is an autobiographic essay about his experience as “psychiatrist” rather than an analytic or expository treatise. It is filled with humanitarian sentiment and contains an explanation of the humane method he favored, the treatments and medications he advocated, and his reflections about a number of case histories included in the text. It reminds one of the *Confessions* of his countryman and friend Jean Jacques Rousseau then recently published. Daquin mixed traditional and modern attitudes: a humoralist, he spoke of “hot” and “cold” brains⁵²; he believed in the influence of the moon on “lunatics.” Yet, to establish this thesis, he pursued the scientific method: he examined ten patients regularly, five men and five women, for sixteen years; he kept notes on his findings, at full and new moon, “lunistiche,” apogee, and perigee during a total of over eight hundred visits. The result was his manuscript, *Plan du journal sur les fous tenu depuis le 1er janvier 1790, et visités à chaque phase de la lune, afin d’observer si cette planète influe sur eux*. Out of discretion and respect for his patients, and unfortunately for us, he decided against publishing his journal.⁵³

Daquin advocated therapeutic skepticism and humane methods, arguing that

it is not likely that the large number of medications will cure mental illness: rather, diet, exercise, freedom of movement, some kind of work, all sorts of distractions, and mainly gentle words and the kindly behavior of others constitute a much more reliable and reasonable therapeutic method.⁵⁴

An advocate of therapeutic bathing, he drew attention to the mineral waters at Aix-les-Bains⁵⁵; electric therapy intrigued him, and he urged that new remedies be tested.⁵⁶ He argued for asylums in the country, and termed the filthy and damp cells a “crime against humanity.”⁵⁷ It is sobering to find that, despite his cogent and timely views, Daquin’s book did not create much of a stir among contemporaries. He had neither students nor followers.

Traditional Theory, Innovative Action: Vincenzo Chiarugi, Thomas Arnold, Benjamin Rush

Psychiatry fared better where an enlightened government supported change. An outstanding example is Florence, where Archduke Peter Leopold (1747–1792), one of Empress Maria Theresa’s sixteen children, ruled from 1765 until his brief reign as Holy Roman Emperor from 1790 to 1792. Peter Leopold was eighteen years old when he took power in Florence. He felt a youthful enthusiasm for enlightened reform. His achievements were spectacular: he instituted progressive economic and social measures, drafted a political constitution, modernized the hospital of Santa Maria Nuova, and introduced a “law on the insane” in 1774. This led to transforming a wing of Bonifazio Hospital into a well-equipped modern facility to accommodate the mentally ill. In 1789 Peter Leopold’s government issued a detailed and humane *Regolamento* for the administration of both hospitals.⁵⁸ Two-thirds of the *Regolamento* concerned Santa Maria Nuova, mainly because the “Surgical-Medical School” (“*Scuola medico-chirurgica*”) was located there.⁵⁹

While considering construction of the new Bonifazio, Peter Leopold sought the advice of a twenty-six-year-old physician at Santa Maria Nuova, Vincenzo Chiarugi (1759–1820). When the hospital opened in 1788, he appointed Chiarugi to head its medical staff.⁶⁰ Bonifazio then housed “patients curable and incurable, insane, invalid, and subject to skin diseases,” a total population of about one thousand.⁶¹ Bonifazio itself consisted of two wings: the larger part housed dermatologic patients—undoubtedly secondary and tertiary syphilitics among them. Only ten pages of the *Regolamento* (pp. 361–370) dealt with psychiatric patients: men and women lived in separate pavilions, of course, and violent inmates inhabited single cells. Calm patients, most of them undoubtedly retarded or senile, could walk in the spacious gardens. Possibly they undertook simple manual labor. There were generous provisions for bathing, and Chiarugi’s humoralism

led him to favor physical therapy. The *Regolamento* enjoined the servants to treat the inmates decently, without ever resorting to blows or the use of heavy chains. If violent patients needed to be restrained, the straitjacket or padded cotton straps would serve the purpose. Chiarugi used restraints at night and justified the practice because of the inadequacy of staffing.

We do not know Peter Leopold's role in writing the *Regolamento*; Chiarugi surely shared in its composition, but there is no justification for listing the volume under Chiarugi's name, which is the practice in our libraries. He only carried out the new prescriptions as physician-in-chief (*primo infermiere*) at Bonifazio after 1788. From that experience, according to an excellent recent profile by Baldini, derived his parallel interests in dermatologic and psychiatric patients. These interests are evident in his work on "sordid" skin diseases and on human physics. The main importance of the *Regolamento*, argues this author, was that it presents the mental patient as a "modern public person."⁶²

In 1793, Chiarugi published his three-volume treatise *Della pazzia in genere ed in specie. Trattato medico-analitico con una centuria di osservazioni*.⁶³ This learned book cites over fifty ancient, German, Swiss, French, British, and Italian authorities.⁶⁴ Chiarugi evidently had access to some contemporary journals: he discounted Mesmer's animal magnetism, but admired the recent chemical experiments with oxygen and hydrogen that Lavoisier had performed.⁶⁵ *Della pazzia* does not primarily concern treatment, but rather the conceptualization, diagnosis, and classification of mental illness.

Though learned, Chiarugi's three volumes were traditional in content and outlook. Volume one dealt with the nature, cause, course, and general treatment of madness; volume two dealt with signs, causes, and effects; volume three dealt with nosology. Appended were one hundred case histories, and in sixty-two of these Chiarugi reported on his dissections of the brain. He studied the body because it alone is changeable: the soul is immutable, but it influences the body, particularly through the action of the "nervous fluid." This substance circulates with the blood and penetrates the nervous system through the brain. Body and soul meet in the "*sensorium commune*" (that invention of Aristotle's), located in the medulla oblongata.

Chiarugi's definition of madness excluded many kinds of pathologic behaviors: children and the aged should not be judged by the ordinary standards of sanity, nor drunks, nor sleepwalkers; neither hysteria, satyriasis, nor nymphomania qualified.⁶⁶ Madness, he wrote, "proceeds from errors of judgment and reasoning caused by an *ideopathic affection* of the *sensorium commune*, without fever or comatose affections [emphasis added]."⁶⁷ His definition was thus based on unprovable, vague concepts. For diagnosis, he adhered to the traditional four temperaments and the three categories of melancholia, mania, and amentia, but he also incorporated John Brown's concept of nervous excitation. One might well sympathize with Pinel's exasperation, for Chiarugi's writing lay, indeed, along "the beaten path."

Chiarugi tried to find physical causes, so as to use physical therapy. "The cure of madness from psychologic causes is more difficult than if the cause is physical," he wrote. But whenever "an insane person develops varicose veins in the legs, hemorrhoids, nasal hemorrhages, the return of menstruation, skin eruptions, hydropsy, or diarrhoea, these announce favorable changes in the animal economy and give reasonable hope of cure."⁶⁸

Being a confirmed "solidist," Chiarugi searched for physical alterations. If, on dissecting the brain of a deceased mental patient, he found it unaltered, he consoled himself, for "even if a substantial lesion is not evidently perceptible, who assures us that it might not have been sufficient to disturb the functions of the brain?"⁶⁹ Since he was well informed, it is significant that he never mentioned John Locke, the Abbé de Condillac, nor anyone in the sensationalist or associationist school. Chiarugi must have known of Locke's innovative ideas on education, government, and psychology, for these were widely discussed, and frequently attacked, in eighteenth century Italy.⁷⁰ That Catholic country could not accept Locke's denial of innate ideas: inborn values of good and evil are fundamental to Catholic theology. Chiarugi never mentioned the metaphor of the human mind as a *tabula rasa* at birth, nor the concepts of sensation and reflection, nor primary and secondary qualities. He spoke of the brain as "soft" in children, and stressed the importance of the environment and of talented teachers. These were conventional notions.⁷¹

Nor does he seem to have been impressed by innovation closer to home, for he did not mention the hospital of Santa Maria dell' Umiltà in Florence that the Brothers of Charity had taken over in 1588 and

enlarged in 1735. Peter Leopold tried to subordinate this hospital to Santa Maria Nuova in 1785, but the outcry from the Brothers of Charity and the Holy See dissuaded him.⁷² Chiarugi must thus have known of the Brothers' excellent custodial care for the mentally ill.

These comments leave Chiarugi less original than is often claimed. The German critic A. Boldt, for example, finds his nosology full of a "confusing multiplication of psychologic disturbances," and concludes

Neither Chiarugi nor his contemporaries practiced a psychology that tested the psychic capabilities of the patient. Psychiatric diagnostics did not require it at that time. Despite the close connection that still existed among the sciences, alienists did not borrow from psychology the tools that would have permitted a psychologic analysis of a clinical picture.

Chiarugi was "not a scientific revolutionary, like Pinel."⁷³

Nor was Chiarugi alone in promoting psychiatric reform in Italy: we have testimony of efforts to hospitalize and treat the mentally ill in Naples, where Antonio Sementini (1743–1814) served as director of the Holy Home for Incurables; but the stimulus for real change did not come to Naples until the early nineteenth century, under the rule of Napoleon's brother-in-law Joachim Murat. That is also when Baron Pisani managed the Casa dei matti in Palermo, and similar efforts prevailed in Reggio Emilia, Parma, and other Italian municipalities.⁷⁴

Before leaving Chiarugi, it is instructive to compare him to his slightly younger contemporaries, the Englishman Thomas Arnold and the American Benjamin Rush. Arnold, the owner of a private asylum, Belle Grove, the third largest in England, served, like Chiarugi, as attending "alienist," at the Leicester Lunatic Asylum, which he helped found in 1794.⁷⁵ Both men were thus experienced practitioners. The title of Arnold's *Observations on the Nature, Kinds, Causes, and Prevention of Insanity* (1782 and 1786) indicates the directions of his inquiry. Volume I is a nosologic treatise so idiosyncratic as to create confusion unless everyone adopted his vocabulary. He divided insanity into "ideal" and "notional," corresponding to Locke's sensations and reflections, and then proposed four "ideal" species of insanity: phrenitic, incoherent, maniacal, and sensitive; and nine "notional" species: delusive, whimsical, fanciful, impulsive, scheming, vain or self-important, hypochondriacal, pathetic, appetitive. One might well agree with Alexander Crichton, who decried this work as unscientific.

And yet Arnold was groping for categories that would accommodate the abundant variety of his personal observations both in his own private establishment and in the public Leicester asylum. It is in the section of Volume II entitled "Mental Causes" that the wealth of his observations and his genuine interest in the patient become evident. This is also true of a subsequent volume, *Observations on the Management of the Insane* (1809).

Both Chiarugi and Arnold evidently felt an overarching need for clear categories that facilitated diagnosis. Chiarugi held on to the traditional divisions of mania, melancholia, and amentia, but in his nosologic table he mentioned over two hundred subcategories of mental illness. Arnold created his own nomenclature. Neither succeeded in establishing a framework that contemporaries adopted for their own use.

Both men attempted to convert their colleagues to a particular way of conceptualizing mental illness, but they remained isolated. Arnold offered novel formulations, illustrating these with overabundant references to Latin authors. Like Chiarugi, Arnold asserted that harmful excitations reached the brain through the bloodstream; to prevent this from happening, the answer was to bleed.⁷⁶

Both the concept and the therapy suggest a comparison with Benjamin Rush, whose professional life began with private practice in Philadelphia and appointment as the first professor of chemistry in the American colonies and led to the professorship of the institutes of medicine and clinical practice at the University of Pennsylvania. He served as surgeon general of the Continental Army and as clinician at the Philadelphia hospital for thirty years, helped found the first medical dispensary in America, and fought against the abuse of alcohol and tobacco. In the United States, he is admired as the pioneer of psychiatry. Compared to his European contemporaries he was a generation behind the times.

At the outset of *Medical Inquiries and Observations upon the Diseases of the Mind* (1812), Rush invoked the Almighty, counting a "sense of Deity" among the mental faculties.⁷⁷ He played with nosology

and proposed new, idiosyncratic terms such as “tristimania” for hypochondriasis and three subdivisions: mania, manacula, and manalgia. This kind of “botanizing” had been advocated by Sydenham in the seventeenth century; by 1812 it had ceased to interest the experts. Though he owned a copy of Crichton’s book,⁷⁸ Rush does not seem to have profited from reading it because he writes, for example, that “madness from emotions of the mind, such as anger, joy, and terror, is more easily cured than when it arises from the passions. From the former causes it comes on suddenly, from the latter, gradually.”⁷⁹ If anger, joy and terror are not “passions,” what are they?

Rush took from his sources what suited his preconceived purpose. He mentioned Pinel often, but always for case histories and facts that supported his solidist notions. Rush believed that “the cause of madness is seated primarily in the blood vessels of the brain and ... madness is a chronic form [of fever], affecting that part of the brain which is the seat of the mind.”⁸⁰ Since there is one cause, there is one cure, bleeding, but Rush also used a restraining chair, the “tranquillizer,” which he invented. The patients’ social station determined the form of their illness, Rush believed. Thus the rich expose “a larger surface of sensibility to all remote and exciting cause.” The poor don’t have time for madness because “the disease is prevented ... by the constant pressure of bodily suffering, from labor, cold and hunger.”⁸¹ George Cheyne had already pointed to such distinctions in his *English Malady* of 1733.

Of these three contemporaries who had so much in common, Chiarugi, Arnold, and Rush, it was only the Englishman who appreciated the importance of John Locke’s psychology for psychiatry. At the very end of Arnold’s *Observations* there occurs this remarkable passage:

When these ideal and notional vibrations [Locke’s sensations and reflections] occur to the mind in their natural order, and retain their original, natural, and rational associations, and the mind can regard, or accelerate, their progress, to a certain degree, at pleasure, and can deliberately consider them, and compare the past with the present; when, of course, memory holds her seat, then connecting consciousness, as Hartley termed it, is unimpaired, and the associations of truth, and decency and propriety, and virtue, remain uninjured; in short, when the mind can regulate properly all its operations, it is then in a sound, and rational state; but in proportion as the reverse of this takes place, in such proportion is it in a state of unsoundness, or insanity.⁸²

This kind of entirely psychological appraisal of normal and abnormal mental activity belonged, from Chiarugi’s and Rush’s point of view, to a future age.

The German Approach to Psychiatry: Johann Christian Reil and Johann Gottfried Langermann

In the Germanies, the outstanding early work in psychiatry was Johann Christian Reil’s *Rhapsodien über die Anwendung der psychischen Curmethode auf Geisteszerrüttungen* (“Rhapsodies on the Use of Psychologic Therapy in Mental Illness”) (1803),⁸³ “one of the strangest books in world literature,” according to the great historian of medicine, Max Neuburger.⁸⁴ It was the work of a medical philosopher, university professor, and famous neuroanatomist and clinician, but not of a practicing alienist. Trained at Göttingen and Halle, Reil rose to professor, director of the clinic, and town physician of Halle within two years of obtaining the M.D. in 1787. He taught at the university for over twenty years, served as dean, and actively furthered public health. Among his friends were the philosophers Friedrich D. E. Schleiermacher and Johann Gottlieb Fichte, the naturalist Alexander von Humboldt, and Johann Wolfgang von Goethe, who was his patient. When, after the crushing defeat by Napoleon, King Frederick William III of Prussia founded the University of Berlin, he called Reil to the chair of clinical medicine. “Fichte and Reil were, in many ways, the most tragic persons in the capital,” wrote the poet Börne in his diary, “because of the incredible passion with which they experienced events, and the burning hatred that Reil, even more than Fichte, felt toward the French.”⁸⁵ Reil died of typhus, after the battle of Leipzig in 1813, while heading the Prussian military hospitals on the left bank of the Elbe.

Reil’s anatomic discoveries concerning the brain still bear his name: Reil’s band, sulcus, and island. In psychiatry, his fame stemmed from his contribution to medical journalism, from his books on fevers and

on psychologic therapy, and from his rousing advocacy of reform for the mentally ill.⁸⁶ His work bore the imprint of the Romantic era, and his personality, wrote Neuburger, revealed many traits that “distinguish the Romantics among researchers: the many-sidedness, the reforming zeal, the constant, Faustian striving toward greater self-development, the rejection of all dogmatism.”⁸⁷ Reil began with physiology and ended with *Naturphilosophie*.

Formulated in 1799 by Friedrich Wilhelm Joseph von Schelling (1775–1854), *Naturphilosophie* was then attempting to give German medicine a vitalistic and Romantic bent.⁸⁸ Schelling reminded philosophers and psychologists that man’s body and mind were part of ever-changing Nature and that physicians, adapting to Nature, had the power to heal. Reil, like many contemporary German philosophers and physicians, pursued broad interests ranging from anthropology to physiology and natural history.

Even though Reil, like most scientific researchers, tried to resist this “spiritualistic” development, his first important essay, “Von der Lebenskraft,” is also vitalistic; it appeared as the lead article in his new *Archiv für Physiologie*, which he edited, alone from 1795 to 1805 and then, for another ten years, together with Johann H. F. von Autenrieth (1772–1835).⁸⁹ Psychologic therapy no doubt came to his attention through the *Zeitschrift für empirische Psychologie* or through the *Magazin für Erfahrungsseelenkunde*, both of which began in 1783. The latter was edited by Karl Philip Moritz (1757–1793) and Salomon Maimon (1754–1800). Moritz was a friend of Goethe’s and a well-published esthete, Maimon a protégé of Lessing’s and Moses Mendelsohn’s, and a philosopher of whom Kant thought highly. Reil published his own short-lived *Magazin für psychische Heilkunde* together with the Naturphilosoph A. B. Kaysler, followed by the equally ephemeral *Beyträge zur Beförderung einer Kurmethode auf psychischem Weg* with the psychologist and philosopher Johann Christoph Hoffbauer.⁹⁰ The *Beyträge* consisted of only two volumes (1808–1812). From this brief effort, however, stemmed the first German journal aimed exclusively at the emerging specialist, the physician whose field was psychiatry: the *Zeitschrift für psychische Aerzte*, edited by Reil’s student Friedrich Nasse (1772–1851). In the meantime, Reil’s book *On the Knowledge and Cure of Fevers* had spread his fame.⁹¹

German psychiatry is discussed in detail elsewhere in this volume, and therefore this chapter will be restricted to general remarks germane to the present argument. It comes as no surprise that Reil’s philosophy of medicine mixes the scientific with the spiritualistic approach. It is most fully set forth in Volume 4 of the book on fevers. Here Reil argues that the basic property of matter is irritability, and life arises from the combinations and forms of matter (*Mischung und Form*).⁹² From living matter (*Lebensstoff*) arises vitality (*Lebenskraft*), which can be studied because it occasions constant metabolic changes in living creatures. When such changes result in abnormal combinations or forms, illness results. Reil conceptualized neurologic or psychologic illness as disturbances in the composition and form of the nervous system, seat of the *Seele*. This word can mean both “soul” and “mind,” and, at the risk of sounding too modern, we shall say that Reil considered the brain as the seat of the mind. Together, brain and mind receive a gamut of internal impressions, and, collectively, these constitute an individual’s sensitivity (*Gemeingefühl*), sometimes called “*coenesthesia*.”⁹³ This consists of sensory messages, bodily representations, drives, emotions, and the products of memory and imagination. Though material, this personal sensitivity is also “animated by a life-stream” that may be partly galvanic.⁹⁴ It goes without saying that excessive stimuli or disharmonious combinations may produce psychologic derangement (*Seelenzerrüttungen*).⁹⁵

Reil adhered to the traditional categories of mania and melancholia, amentia and dementia. His illustrations derived from his own experience at the hospital in Halle, but his detailed case histories are usually borrowed, often from Pinel. One must not forget that Reil never worked in a mental hospital, so that his direct experience was mainly with the psychologic concomitants of somatic illness, not with mental patients.

Reil wrote his *Rhapsodien* of 1803 with the original intention of contributing a short piece to the journal of his friend, Pastor Wagnitz. This clergyman had recently written a denunciation of German workhouses,⁹⁶ emulating John Howard’s *Account of the Principal Lazarettos in Europe*. In a similar vein, Christoph Wilhelm Hufeland’s *Journal* of the 1790s called upon doctors to become medical missionaries to the poor. Reil’s Preface conveys a sense of mission that *Naturphilosophie* tried to impart to humanitarians of all nations. It exemplifies

the broad undercurrent of evangelical religiosity in the German attitude toward insanity, a tendency to equate insanity with sin and recovery with salvation.

The Introduction to *Rhapsodien*, with its vituperative judgment of the French and English, is a manifesto that should be read separately from the main text, in cultural and political context, as an expression of German “storm and stress.” Wagnitz, to whom the book is dedicated, had alerted Reil to the horrible conditions in which the insane languished. Reil now depicted the dank, rat-infested cellars, the despair of abandoned humans, their rotting flesh lacerated by heavy iron shackles, and the cruelty of their jailers. In an impassioned appeal to philosophers, physicians, rulers, and civic leaders, he called for a concerted effort to transform those prisoners into patients and provide them with care and therapy. He envisioned an international collaborative enterprise suffused with the spirit of *Naturphilosophie*:

An intrepid generation ventures to face the gigantic idea, dizzying for ordinary humans, to extirpate one of the most deadly scourges on earth. And it really seems to be approaching its port. Above it all, there soars, like an eagle, a sublime group of speculative *Naturphilosophen*, assimilating their prey in the purest ether and rendering it as beautiful poetry. May each of us believe and teach with impartiality, seek truth without injustice toward the merit of neighbors, mindful that many hands must build the great temple of human happiness and welfare.⁹⁷

This burst of emotion and fancy and Reil’s advocacy of cruel therapy have bewildered readers and distracted them from his systematic analysis of human psychologic health and illness and from his wise theoretical insights into the interactions of body and mind.

It might be worth adding here that Germany also produced an outstanding reformer of clinical psychiatric therapy. He was Johann Gottlieb Langermann (1768–1832). Called to Bayreuth by Prince von Hardenberg in 1805, he undertook to transform the St. Georgen “Narren- und Tollhaus” into an asylum for treatment of the mentally ill. In 1810, he joined Reil in Berlin as councilor for medical affairs. He was instrumental in the foundation of new asylums at Leubus and Siegburg. As for Reil, he never got involved in such practical pursuits; his contribution to psychiatry was a combination of theory and a passionate appeal for psychologic therapy.⁹⁸

Alexander Crichton and the Transmission of German Learning to France

Reil found confirmation of his views on reading Alexander Crichton’s *Inquiry into the Nature and Origins of Mental Derangement*, which was published in 1798 and translated into German the same year.⁹⁹ This virtually unknown Scottish surgeon-turned-physician, who spent fifteen years in the service of two tsars, was a well-connected and much-decorated socialite who wrote an innovative and engrossing book on psychiatry and then never touched the subject again.

Alexander Crichton—*Sir* Alexander Crichton—was born in Edinburgh in 1763. He served an apprenticeship with an Edinburgh surgeon, Alexander Wood, but also studied at the city’s distinguished medical faculty—with Joseph Black, and Alexander Monro, *secundus*, and James Gregory. Being an inquisitive and eager young man, he undoubtedly also “walked the wards” of the Royal Infirmary in his native town.¹⁰⁰ William Cullen had retired from active teaching by the time Crichton reached young manhood, but his presence, teachings, and fame pervaded Edinburgh. It was obviously James Gregory, however, who exerted the most profound influence on Crichton: one has but to scan the contents of Gregory’s book to find striking similarities with Crichton’s approach.

Moving to London at the age of twenty-one, Crichton spent one year with another surgeon, William Fordyce, while also attending the hospitals. Then he embarked for the Continent, for our purposes the most intriguing part of his intellectual biography. After acquiring a Leiden M.D. with a thesis titled *De vermibus intestinorum*¹⁰¹ he stopped briefly in Paris and then undertook a four-year tour visiting Stuttgart, Vienna, Halle, Berlin, and Göttingen, returning to England late in 1788. Having joined the Royal College of Physicians as licentiate on 1 June 1791, he worked at a dispensary in Holborn, where he gave clinical

lectures “upon a plan similar to that of Göttingen University.” In 1794 he was elected physician to Westminster Hospital, where he taught “The Theory and Practice of Physic,” as we learn from advertisements in the London *Times*.¹⁰² Crichton became a consulting physician at Westminster Hospital in 1801 and retained that affiliation to the end of his life. While serving as personal physician to the Duke of Cambridge, he met Tsar Alexander I, who lured him to St. Petersburg. There Crichton rose to be the tsar’s personal physician and head of the civilian medical department, imperial councilor, and physician to the general staff. Active in fighting a typhus epidemic in southeastern Russia, he co-authored a *Pharmacopoeia pauperum* and helped to edit the *Russische Sammlung für Naturwissenschaften* (1815 ff). He returned to England in 1819, was knighted by King George IV, and died in 1856.

To turn from Piquer, Daquin, Chiarugi, and Reil to Crichton is to enter a different world. Gone are the references to ancient humors and texts, to spirits and religious healing. Crichton’s reach into history usually extended no further than to Glisson and Locke. The watchword was “observation,” and the authorities he adduced were case histories from renowned scientists and physicians. He wrote his remarkable book on mental derangement as a text for his lectures at the hospital. One can well imagine each of the three parts as notes for a course: part one, “Inquiry into the Physical Causes of Delirium,” part two, “The Natural and Morbid History of the Mental Faculties,” part three, “On the Passions, considered as Causes of Mental Derangement, and on their Modifications, and Corporeal Effects.” The volumes consist of five, eight, and six chapters, respectively—each chapter could well have formed the subject matter for one classroom presentation. We may assume that he presented the mentally ill patients at the Westminster Hospital to his students, and possibly even the psychologic manifestations of somatic illness.

Crichton had undoubtedly been introduced to medical psychology at Edinburgh. We need only remind ourselves that the “*vesaniae*” formed one of four classes of diseases in William Cullen’s nosology. An inquisitive Edinburgh student would also have absorbed three deeply influential British traditions: Baconian empiricism, Lockean associationist psychology, and Scottish “common sense” philosophy. This was so obvious to Crichton that he wrote in his Preface, “The most useful of these authors, and their works, I shall now enumerate. . . . Those of our British Psychologists, such as Locke, Hartley, Reid, Priestley, Stewart, and Kaims [*sic*] need not be mentioned.”¹⁰³ Indeed, in his book, Crichton refers repeatedly to these authors in a casual and familiar manner.

His most numerous references and quotations, however, cite German physicians, scientists, and philosophers. In opening his book, one is immediately convinced that it was during his three years’ stay in Germany and Austria in the late 1780s that Crichton encountered that special German approach to the philosophy of the life sciences during the Enlightenment, a combination of anthropology, natural history, psychology, and pietism. This German approach goes back at least as far as Immanuel Kant, whose *Versuch über die Krankheiten des Kopfes* first appeared in 1764, in five installments, in the *Königsberger Gelehrte und Politische Zeitung*, edited by Hamann. Eventually he incorporated his brilliant, though abstract, classification of mental disorders into his *Anthropologie*.¹⁰⁴ For Kant, the distinctive human trait was reason, and he stressed the power of the rational mind over the emotions. Crichton adhered to this contrast of reason and the “passions,” and Esquirol would use it, but in a special way.

During Crichton’s short stay in Stuttgart to learn German, he was attracted to the famous Karlsschule: among its teachers was Karl Friedrich Kielmeyer, one of the originators of *Naturphilosophie*, and Georges Cuvier was a student at that time.¹⁰⁵ Six months in Vienna in the winter 1786–1787 gave Crichton an acquaintance with the reforms being introduced by Emperor Joseph II, particularly the Allgemeine Krankenhaus and the Narrenturm. He spent three months in Halle, where he lived with the family of the distinguished anatomist Philip Friedrich Theodor Meckel, and the winter of 1787–1788 in Berlin (of which we have no record), ending up in Göttingen in March 1788 for a stay of six months.

That is where the famous Johann Friedrich Blumenbach (1752–1840) was then teaching, surrounded by an active circle of students, including Christian Girtanner, Karl Friedrich Kielmeyer, Alexander von Humboldt, Gottfried Reinhold Treviranus, and Heinrich Friedrich Link.

Blumenbach influenced Crichton profoundly. This German scientist studied the development of the human organism as a whole. He had a keen curiosity about primitive peoples and voyages of exploration and

owned a unique collection of skulls. He evidently inspired a number of young explorers, and Crichton fell under his spell.¹⁰⁶ Blumenbach coined the concept of the “*Bildungstrieb*” as an innate biologic drive in 1781. Obviously, this concept held broad implications for mental illness, in which drives and irrational impulses could be viewed as forces animating healthy or harmful behavior. Crichton translated this brief essay into English under the title “On generation,” a poor equivalent of the German.¹⁰⁷ It should have read “On the developmental drive.” For indeed, Blumenbach dealt with the central problem of contemporary physiology, *development*, and assumed a stance that Timothy Lenoir has called “vital materialism.”¹⁰⁸

Crichton was too keen an observer of human behavior to let himself be carried away by Romantic impulses, including his own. In his Preface, we read his promise of objectivity, “abstracting his own mind from himself, and placing it before him as it were, so as to examine it with the freedom and impartiality of a natural historian.”¹⁰⁹ A rather amazing statement, in 1798!¹¹⁰

Crichton realized the crucial importance of the emotions for the physician who wished to understand a patient’s mind by observing his or her bodily behavior in the clinic. He therefore wrote detailed analyses of joy, grief, fear, anger, and love and of the ways in which these emotions can become evident to an attentive and skilled medical observer. An example will best illustrate the quality of his perception:

When a person is suddenly terrified, the motion of the heart is generally quickened; a kind of spasmodic contraction seizes all the arteries, especially the extreme ones, causing an accumulation of blood in the larger vessels. The sudden and forcible distention of the heart makes it move on its basis, and produces that peculiar sensation which most people endeavor to express by saying that their heart seems to jump to their throat. A kind of spasm seems to seize the muscles about the glottis, for respiration is always suddenly interrupted, but this is of very short duration. A death-like paleness overspreads the countenance, the features shrink, the legs and whole body are thrown into a state of tremor, and the arms hang motionless. In some cases, the debility which is produced is so great as to render it impossible for the person to support himself in an erect posture, and he, therefore, falls down, apparently senseless and speechless, on the ground. In this way the strongest man is often deprived, in a few seconds, of almost the whole of his natural strength.¹¹¹

This parallel analysis of physiology and behavior is quite similar to the method that Pinel used in his case histories.

Pinel expressed extraordinarily high regard for Crichton in the Introduction to his *Traité médico-philosophique sur l’aliénation mentale ou la manie* of 1800.¹¹² Having made short shrift of the ancient writers on the subject and heaped scorn on most contemporaries, Pinel continued,

I except the research of Crichton, a profound work full of new observations based on the principles of modern physiology. It focuses on the pathogenesis of mental alienation rather than on its history or therapy. I believe I should now give an exact idea of the origins, development, and effects of the human passions on the animal economy, as this author has presented them, and as they should be known, namely as the most usual cause of derangement of our psychologic functions.¹¹³

Pinel then used eighteen pages—one-third of his Introduction—to paraphrase Part III of Crichton’s book: *History of the Passions and their Effects*. That is how French readers at the turn of the century learned about Crichton and his enthusiasm for German learning.

We may well ask why Pinel found Crichton’s book so extraordinary. There are, I believe, two answers. The first lies in Crichton’s reliance on physiology; the second stems from the careful observation of patients. Crichton excelled in a vivid description of men and women gripped by passion and in an analysis of the physiologic and psychologic effects of such passion. Crichton evidently believed, as did Pinel, that it is by studying the behavior of mental patients that one arrives at an understanding of their minds. The physician must watch, and record, a patient’s habits, demeanor, and relationships with others; gestures and gesticulations; mood and mood swings; and affects as expressed in face and body language. Pinel was impressed by Crichton’s acute powers of observation, his scientific objectivity and precise recording of patient behavior, and his vivid descriptions.

When Crichton’s and Pinel’s books appeared, Esquirol was a medical student at the Salpêtrière, attending Pinel’s famed clinical rounds. A native of the Toulouse region, like Pinel, and, like he, educated at the clerical Collège de l’Esquille, Esquirol was also originally destined for a career in the Church. The

Revolution changed his direction. Esquirol served in the army and observed human behavior under stress. By the time he entered the medical profession, Pinel had delineated the new psychiatric specialty. Esquirol quickly became Pinel's principal disciple. It is natural that he should have asked Pinel to sponsor his medical thesis, and that he dedicated this work to his mentor.

This thesis bears the revealing title *On the Passions, as Causes, Symptoms, and Curative Means of Mental Alienation*.¹¹⁴ In the seven years that elapsed between Crichton's book and the publication of Esquirol's thesis, the French psychiatrist had time to ponder the Scottish author's arguments. He studied Crichton's volumes on the passions and the mental functions. The apposition and contrast became fundamental to Esquirol's theory, and to his practice of using certain passions and mental powers as *means of cure*. He was struck by the large number of important German scholars whose works Crichton cited and quoted at length throughout his book. That this broadened Esquirol's horizon is evident from the documentation and arguments in his article "Maisons d'aliénés," published in 1818 in the *Dictionnaire des sciences médicales*, and in his numerous articles on mental illness for this dictionary, later reissued as Esquirol's major work, *Des maladies mentales considérées sous les rapports médical, hygiénique, et médico-légal*.¹¹⁵ Esquirol developed a special relationship with Johann Christoph Hoffbauer (1766–1827), professor of law and philosophy at Halle, the friend and collaborator of Johann Christian Reil. Hoffbauer added extensive notes to the second German translation of Crichton's book in 1810.¹¹⁶ In turn, Esquirol and Jean Marc Gaspard Itard, the child psychiatrist, contributed notes to the French translation of Hoffbauer's treatise on legal medicine concerning the mentally ill and the deaf-mute.¹¹⁷ For his part Reil, in his *Rhapsodies*, granted Crichton, "in passing, his highest regard."¹¹⁸

Crichton, in contrast, did not know about Pinel's extraordinary praise. He read the *Treatise* in its guillotined English version of 1806, without the Introduction in which Pinel expressed his admiration. The English translator, Dr. D. D. Davis, had substituted his own Introduction for Pinel's. While he kept, or paraphrased, numerous parts of Pinel's lengthy presentation, he shrank the section on Crichton to one colorless sentence that reads "The psychological work of Dr. Crichton exhibits some curious facts illustrative of the morbid influence of the passions upon the functions of the intellectual faculties" (p. 1). Crichton would surely have mentioned the famous Frenchman's endorsement when, in 1842, at the age of eighty, he reminisced about psychiatry and praised "two witnesses who, for long and extensive experience in the treatment of mental derangement, and for fidelity in their narrations, have not as yet been surpassed—I mean Pinel and Esquirol."¹¹⁹ It is significant that he should mention Esquirol in the same breath with Pinel, for it is Esquirol who provides us with evidence of Crichton's impact on French psychiatric thought.

Philippe Pinel

In contrast to Crichton, whose clinical experience was thin, Pinel felt a lifelong and compelling urge to care for and study the individual patient, particularly the mentally ill.¹²⁰ He began writing case histories as a student at Montpellier, in the 1770s, when he "faithfully attended the daily medical rounds in the main hospital, ... took written notes at the sickbed and ... wrote case histories of the entire course of acute illnesses; that was my general plan for four years."¹²¹

He sought a career in Paris in 1778, but this eluded him because he was a shy man and his Toulouse medical degree precluded a Parisian practice. Eventually the French Revolution emancipated this provincial physician. He secured an appointment as "physician of the infirmaries" at the Bicêtre hospice in the fall of 1793.¹²² He learned about mentally ill women upon his transfer, in 1795, to the Salpêtrière hospice, where he served as physician-in-chief for thirty years.

Appointed professor of internal medicine ("medical pathology" in the contemporary idiom) at the Paris Health School, Pinel filled his oral and written lessons with case histories of the thousands of patients he had seen and with constant reference to the psychological parameters of bodily illness.¹²³ Conversely, he never failed to explain the physical substrate of mental disorders if these were apparent in the patient. We know this from the case histories of patients seen on this teaching ward, recorded by Pinel's assistants, and

published as *La médecine clinique rendue plus précise et plus exacte par l'application de l'analyse ou Recueil on et résultat d'observations sur les maladies aiguës, faites à la Salpêtrière*.¹²⁴ He thus taught what we call psychosomatic medicine; the teaching of psychiatry was initiated by Esquirol, at the Salpêtrière, in 1817. Pinel also used his data for research and, with that goal in mind and with help from his administrator, Jean Baptiste Pussin, he reorganized the wards, particularly the mental ward. In 1802 he wrote, "A hospital destined for sick women and as large as the Salpêtrière, opens a great career for new research on women's diseases that have always and rightly been considered as the most difficult and complicated of all."¹²⁵

He conducted a unique experiment when he applied a novel "general treatment" to the curable mentally ill women at the hospital in 1802 to 1805.¹²⁶ He exerted a profound influence on his young colleagues. Elected to the Academy of Sciences in 1803,¹²⁷ he actively participated in the academy's peer review program for twenty years. It was thus a learned, experienced, and highly regarded French medical scientist who bestowed extraordinary praise upon Crichton's book. In 1800, Pinel spoke for France, in the nascent medical specialty, psychiatry.

The foremost leaders of the Enlightenment and early Romantic era reviewed in this chapter thus shared a common interest in mental illness, but each followed his own approach: the Englishman Tuke created a model asylum, the German Reil elaborated a detailed philosophic system. The Frenchman Pinel combined expertise in the lecture hall and at the sickbed with success as chief of a huge hospital. But it is Pinel's *Traité*, a literary classic with its widely quoted case histories, that provides the clue to his persistent international fame: he told the histories of simple people—a tailor, a clockmaker, a father—whose acute distress undermined their reason. He depicted Everyman, and thus the *Traité* is a democratic book. That is why we persist in speaking of an "era of Pinel."

Notes and References

1. For sensitive explorations of this complex issue, see, for example, E. T. Carlson and N. Dain, "The Psychotherapy That Was Moral Treatment," *American Journal of Psychiatry*, 1960, 117: 519–524; L. Sederer, "Moral Therapy and the Problem of Morale," *American Journal of Psychiatry*, 1977, 134: 267–272. The relationship of pastoral medicine to psychotherapy is explored in H. Pompey, "Pastoralmedizin: Der Beitrag der Seelsorge zur psychophysischen Gesundheit. Eine bibliographisch-historische Analyse," *Mensch und Gesundheit in der Geschichte: Abhandlungen zur Geschichte der Medizin und der Naturwissenschaften*, 1978, 39: 115–134.
2. Two well-known paintings commemorate the event. "Pinel at Bicêtre," painted in 1849 by Charles Muller, dominates the foyer of the Paris Academy of Medicine. "Pinel removes the Chains of the Insane Women at the Salpêtrière," painted in 1878 by Tony Robert-Fleury, hangs in the Charcot Library of the Salpêtrière Hospital.
3. For a succinct summary of the "myth" and its exposure, see D. B. Weiner, "Le geste de Pinel: The History of a Psychiatric Myth," in M. S. Micale and R. Porter, eds., *Discovering the History of Psychiatry* (New York: Oxford University Press, 1994), 232–247.
4. The following references originated with John C. Nemiah, M.D., in an unpublished manuscript on "Pinel's Superintendent."
5. F. H. Garrison, *An Introduction to the History of Medicine*, 4th ed. rev. and enl. (Philadelphia: Saunders, 1929), 402.
6. A. Castiglioni, *History of Medicine*, E. B. Krumbhaar, tr. (New York: Knopf, 1947), 635.
7. D. Guthrie, *A History of Medicine* (London: Nelson, 1945), 372.
8. E. Bendiner, "Philippe Pinel: Reason for the Unreasoning," *Hospital Practice*, 1981, 16: 76 E.
9. See D. B. Weiner, "The Apprenticeship of Philippe Pinel: A New Document, 'Observations of Citizen Pussin on the Insane,'" *American Journal of Psychiatry*, 1979, 136: 1128–1134.
10. The original document is in Archives Nationales, 27 AP 8. The passage here quoted occurs on fol. 7.
11. The myth of Pinel the "chain-breaker" was brilliantly exposed by Gladys Swain in *Le sujet de la folie* (Toulouse: Privat, 1977); see especially part 3, "Les chaînes qu'on enlève."
12. For an analysis of Pinel's relationship with his sons, see D. B. Weiner, "Philippe Pinel, père: Deux générations en conflit," *Perspectives psychiatriques*, 1984, 96: 100–103. Pinel's descendant, Dr. René Semelaigne, also alludes to Scipion's shortcomings in *Aliénistes et philanthropes: Les Pinel et les Tuke* (Paris: Steinheil, 1912), *passim*.

13. See J. Postel, *Genèse de la psychiatrie: Les premiers écrits de Philippe Pinel* (Paris: Le sycomore, 1981), 45, and G. Lantéri-Laura, s.v. “psychiatrie” in *Encyclopédia universalis*, 13: 750.
14. S. Tuke, *Description of the Retreat, an Institution near York for Insane Persons of the Society of Friends* (York: W. Alexander, 1813).
15. L. Gautier, *La médecine à Genève* (Geneva: Jullien, 1906), 346. On Switzerland, see also W. Morgenthaler, *Bernisches Irrenwesen, von den Anfängen bis zur Eröffnung des Tollhauses, 1749* (Bern: Grunau, 1915).
16. De la Rive (1770–1834) mentioned the removal of chains in *Bibliothèque britannique*, vol. 8, as cited by P. Pinel, *Traité médico-philosophique sur l’aliénation mentale ou la manie* (Paris: Richard, Caille et Ravier, 1800), 99, n.
17. J. P. Huber, J. P. Macher, and J. Alliez, “L’hospitalisation “forcée” des insensés à Avignon au 18ème siècle,” *Information psychiatrique*, 1980, 56: 1257–1266.
18. J. Alliez and J. P. Huber, “Un asile psychiatrique avant la loi de 1838: l’Asile St. Lazare de Marseille,” *Comptes-rendus du LXXV congrès de psychiatrie et de neurologie de langue française (Limoges, 27 juin–2 juillet 1977)*, 2nd series (Paris: Masson, 1977), 357–369.
19. Johann Theobald Held (1770–1851) received the M.D. degree in Prague in 1797 and became physician at the Brothers of Charity’s hospital in that city, where he served from 1799 until 1824. In 1806 he added one section of the municipal hospital to his duties. After the battle of Leipzig in 1813 he took over a service of the Ursuline monastery and the mental asylum of the Brothers of Charity, where he became physician-in-chief in 1822. It was there that he introduced humane treatment for the mentally ill. He was elected dean of the university five times and rector magnificus, and was made an imperial councillor in 1841. He left only minor writings.
20. See Chapter 6, pp. 262–265.
21. M. J. Alliez, “Un précurseur de l’assistance moderne aux aliénés dans notre région, le R. P. Pouttion [sic] de Manosque,” *Bulletin de la société de psychiatrie de Marseille et du sud-est méditerranéen*, 1966–1967, 6: 36–47.
22. K. Dörner, *Madmen and the Bourgeoisie. A Social History of Insanity* (Oxford: Basil Blackwell, 1981), a translation of *Bürger und Irre: Zur Sozialgeschichte und Wissenschaftssoziologie der Psychiatrie* (Frankfurt: Europäische Verlagsanstalt, 1969); and M. Schrenk, *Über den Umgang mit Geisteskranken: Die Entwicklung der psychiatrischen Therapie vom ‘moralischen Regime’ in England und Frankreich zu den ‘psychischen Curmethoden’ in Deutschland* (Heidelberg: Springer, 1973).
23. Jan Goldstein, *Console and Classify: The French Psychiatric Profession in the Nineteenth Century* (New York: Cambridge University Press, 1988). Goldstein seems to me to use Pinel as a springboard and a foil, characterizing him as a “charlatan” who legitimized his specialty when he discovered the paradigm of moral treatment. The characterization of Pussin as a “concierge” also seems tendentious. Goldstein seems to me to force Pinel into the mold of Esquirol for the sake of the neatness of her argument. Under the rubric of “The Politics of Patronage,” for example, we hear of a “Pinel circle,” whereas Pinel really had no circle.
24. W. Perfect, *Select Cases in the Different Species of Insanity, Lunacy, or Madness, with the Modes of Practice as adopted in the Treatment of each* (Rochester: Gillman, 1797).
25. J. Haslam, *Observations on Insanity* (London: Rivington, 1798); J. Haslam, *Observations on Madness and Melancholy, including practical Remarks on these Diseases; together with Cases; and an Account of the Morbid Appearances on Dissection*, 2nd ed. enl. (London: Callow, 1809), reissued, with an Introduction by Roy Porter, in the Tavistock Classics in Psychiatry Series (London: Routledge, 1988).
26. J. Monro, *Remarks on Dr. Battie’s Treatise on Madness* (London: Clarke, 1758).
27. W. Pargeter, *Observations on Maniacal Disorders* (Reading: for the Author, 1792), reissued, with an excellent Introduction by Stanley W. Jackson, in the Tavistock Classics in Psychiatry Series (London: Routledge, 1988).
28. A. Harper, *A Treatise on the Real Cause and Cure of Insanity in which the Nature and Distinctions of this Disease are fully explained, and the Treatment established on New Principles* (London: Stalker and Walter, 1789).
29. E. Darwin, *Zoonomia; or the Laws of Organic Life*, 2 vols. (London: Johnson, 1796).
30. J. Ferriar, *Medical Histories and Reflections*, 3 vols. (London: Cadell and Davies, 1792–1798).
31. *Sulla maniera di studiare la medicina practica ... , traduzione dall’inglese in francese del D. Bousquillon [sic] e dal francese in italiano del professore Olivari, Niccolò* (Genoa: n.p., 1789); and *Tratado de materia medica traducido al frances por Mr. Bosquillon et de este al castellano por B. Piñera y Siles* (Madrid: Cano, 1794).
32. Tuke, *Description of the Retreat*, 137, n.
33. Philippe Pinel, *Philosophisch-medizinische Abhandlung über Geistesverirrungen oder Manie*, Michael Wagner, tr. (Vienna: Schaumburg, 1801).
34. Schrenk, *Über den Umgang*, 16.
35. J. Chr. Reil, *Rhapsodien über die Anwendung der psychischen Curmethode auf Geisteszerrüttungen* (Halle: Curt, 1803), 31.

36. P. Pinel, *Traité médico-philosophique sur l'aliénation mentale ou la manie* (Paris: Richard, Caille et Ravier, An VIII [1800]), Introduction, xli.
37. F. Spezzaferri, "Chi per primo spezzo la catena degli alienati: Pinel Chiarugi?" *Pagine di storia della medicina*, 1962, 6: 44–48.
38. Savoy then belonged to the king of Sardinia and was, in fact, an Italian possession when Daquin's book was published, though four years later, in 1795, France annexed the province for good. E. Padovani, "Pinel e il rinnovamento dell'assistenza degli alienati; il suoi precedessori italiani: Giuseppe Daquin e Vincenzo Chiarugi," *Giornale di psichiatria e di neuropatologia*, 1927, 55: 69–124.
39. Th. Kirckhoff, *Geschichte der Psychiatrie* (Leipzig and Vienna: Deuticke, 1912), 1–48, Part A, Vol. I of G. Aschaffenburg, *Handbuch der Psychiatrie*. The same is true for E. Kräpelin, "Hundert Jahre Psychiatrie," *Zeitschrift für die gesammte Neurologie und Psychiatrie*, 1918, 38: 161–275. His focus is on the nineteenth century and thus only tangentially relevant to this chapter.
40. I. Macalpine and R. Hunter, *Three Hundred Years of Psychiatry* (Hartsdale, NY: Carlisle Publishing, 1982).
41. W. Battie, *A Treatise on Madness* (London: Whiston & White, 1758), 68.
42. *Ibid.*, vi.
43. Pinel, *Traité*, 1st ed., Introduction, xx.
44. Chiarugi, *Della pazzia*, I, 89.
45. Crichton, *An Inquiry*, 157.
46. A. Piquer, "Discurso sobre la enfermedad del Rey nuestro Señor Don Fernando VI (que Dios guarde) escrito por Don Andrés Piquer, médico de camara de S. M.," in *Colección de documentos ineditos para la Historia de España*, Vol. 18 (Madrid: Viuda de Clavero, 1851), 156–221.
47. For example, the Spanish physician Iberti, author of *Observations générales sur les hôpitaux, suivies d'un projet d'hôpital* (London: n.p., 1788).
48. The best brief general account of eighteenth century psychiatry in Spain is J. E. Iborra, "La asistencia al enfermo mental en España durante la Ilustración y el reinado de Fernando VII," *Cuadernos de historia de la medicina española*, 1966, 5: 181–215.
On Piquer, see J. L. Belinchon, "La psicología medica en la filosofía moral de Piquer (1755)," in *III Congreso nacional de historia de la medicina*, Vol. 2 (Madrid, 1969), 261–266, and V. Ll. Peset, "Andrés Piquer y la psiquiatría de la Ilustración," in *XV Congreso internacional de historia de la medicina*, Vol. 2 (1956), 433–439, published as Vol. 8 of *Archivo Ibero-Americano de historia de la medicina y antropología*.
- A very old German textbook was recently brought up to date: J. B. Ullersperger, *Die Geschichte der Psychologie und der Psychiatrik in Spanien von den ältesten Zeiten bis zur Gegenwart* (Würzburg: Stuber, 1871); tr. by V. Ll. Peset as *La historia de la psicología y de la psiquiatría en España desde los mas remotos tiempos hasta la actualidad* (Madrid: Alhambra, 1954).
49. The first bout, in 1765, was hushed up.
50. I. Macalpine and R. Hunter, *George III and the Mad-Business* (London: Penguin, 1969), and Macalpine and Hunter, *Three Hundred Years*, 509–511; see also M. S. Guttmacher, *America's Last King: An Interpretation of the Madness of George III* (New York: Scribner's, 1941).
51. J. Daquin, *Philosophie de la folie* (Chambéry: Gorrin, 1791), 2nd ed. (Chambéry: Cléaz, 1804).
52. *Ibid.*, 53. [I have used the second edition.]
53. *Ibid.*, 207–241, *passim*. Gladys Swain discovered the manuscript of this journal, evidently sent to Michel Augustin Thouret, the dean of the Paris medical school, on 9 June 1801, it would seem at the dean's request. Since the manuscript is found in the dossier of the Société de l'École de médecine [carton D], it is possible that this society discussed Daquin's views. See M. Gauchet and G. Swain, *La pratique de l'esprit humain: L'institution asilaire et la révolution démocratique* (Paris: Gallimard, 1980), 420.
54. Daquin, *Philosophie de la folie*, 106.
55. Daquin, *Philosophie de la folie*, 197–199. See also J. Daquin, *Analyse des eaux thermales d'Aix-en-Savoie, dans laquelle on expose les diverses manières d'user de ces eaux, la méthode et le régime de vivre qu'il convient de suivre pendant leur usage, et les différentes maladies pour lesquelles elles sont employées, avec plusieurs observations qui y sont relatives pour en constater les propriétés* (Chambéry: Gorrin, 1773); a translation of the abbé G. Toaldo's *Della vera influenza degli astri* into *Essai météorologique sur la véritable influence des astres, des saisons, et changements de temps ...* (Chambéry: Gorrin, 1784), and *Mémoire sur la recherche des causes qui entretiennent les fièvres putrides* (Chambéry: n.p., 1774).

On Daquin, see C. Caron, *Joseph Daquin et les malades mentaux en Savoie à la fin du 18ème siècle*, Thèse médecine, Lyon (1964), and “Les malades mentaux en Savoie à la fin du dix-huitième siècle,” *Information psychiatrique*, 1975, 51: 887–896, L. Ferrio, “Un pioniere dell’assistenza psichiatrica: Giuseppe Daquin,” *Rivista di storia delle scienze mediche e naturali*, 1954, 45: 156–171, and especially J. R. Nyffeler von Huttwil, *Joseph Daquin und seine “Philosophie de la Folie”* (Zürich: Bucher, 1961). See also A. Palluel and D. Peyron, “Un grand chambérien: le docteur Joseph Daquin,” *Bulletin de la Société des amis du vieux Chambéry*, 1981, 20: 52–56 and A. Buttin, “Science et pouvoir sous la révolution et l’empire: L’exemple du Dr. Daquin,” in “Culture et pouvoir dans les états de Savoie: Colloque Annecy-Chambéry-Turin,” *Cahiers de civilisation alpine* 1990, 4: 275–284.

56. Daquin, *Philosophie de la folie*, 189–195.
57. Daquin, *Philosophie de la folie*, 185. Daquin was well read, and alluded to the work of Sydenham, Cullen, Pringle, and Howard among English writers; De Haen, Van Swieten, Lavater, and Blumenbach among German and Austrian authors; and Cabanis, Lamarck, and Daubenton among the French. He won a medal from the Royal Society of Medicine for an essay on the medical topography of Chambéry.
58. *Regolamento dei regi spedali di Santa Maria Nuova e di Bonifazio* (Firenze: Cambiagi, 1789).
59. A. Filippi, “La storia della scuola medico-chirurgica fiorentina,” *Rivista di storia medica e naturale*, 1923, 14: 7–4, 86–90, 257–267, continued into the nineteenth and twentieth centuries in subsequent volumes. See also L. Stroppiana, “La riforma degli ospedali psichiatrici di Chiarugi nel quadro del riformismo Toscano ed Europeo,” *Rivista di storia della medicina*, 1976, 20: 168–179.
60. The best scholarly essay on Chiarugi in English is the introduction to the translation of *Della pazzia* as *On Insanity and its Classification*, tr., with a Foreword and Introduction by George Mora (Canton, MA: Science History Publications, 1987). (The author wishes to thank George Mora for permitting her to read his Introduction in manuscript.) Mora is in command of the secondary literature in all the relevant languages. As he points out, no one seems ever to have done archival research about Chiarugi, so that we do not even know whether he lived at the hospital or had a home in town.
The innovative role of Chiarugi, in comparison with Daquin and Pinel, is discussed, in addition to Spezzaferri and Padovani, already mentioned, by U. Baldini, *Dizionario biografico degli Italiani*, s.v. “Chiarugi”; D. Barduzzi, “Vincenzo Chiarugi,” *Rivista di storia critica delle scienze mediche e naturali*, 1921, 12: 49–50; G. B. Bock, “Ancora su Vincenzo Chiarugi: Revisione bibliografica e breve analisi critica del suo pensiero,” *Acta medicae historiae pataviana*, 1971–1972, 18: 17–37; E. Coturri, “Le sostanziali innovazioni introdotte in psichiatria da Vincenzo Chiarugi,” *Episteme*, 1972, 6: 251–265; G. Mora, “Vincenzo Chiarugi and his Psychiatric Reform in Florence in the Late Eighteenth Century,” *Journal of the History of Medicine and Allied Sciences*, 1959, 14: 424–433; G. Mora, “Bicentenary of the Birth of Vincenzo Chiarugi, a Pioneer of the Modern Mental Hospital Treatment,” *American Journal of Psychiatry*, 1959, 116: 267–271, A. Scapini, *La pazzia nell’interpretazione di Vincenzo Chiarugi* (Pisa: Giardini, 1966).
61. *Regolamento*, v.
62. Baldini, “V. Chiarugi,” 610. The relevant works by Chiarugi were *Delle malattie cutanee sordide osservate nel Real Ospedale Bonifazio di Firenze, in genere e in specie; Trattato teoretico-pratico*, 2 vols. (Florence: Pagani, 1799; 2nd ed. 1807) *La fisica dell’uomo, ossia Corso completo di medicina ad uso degli ufficiali di sanità*, 3 vols. (Florence: n.p., 1811–1813) and *Saggio di ricerche sulla pellagra* (Florence: Allegrini, 1814).
63. Florence: Carlieri, 1793–1794. There is a second edition of the first volume only (Florence: Pagani, 1808), and a translation into German by Weigel (Leipzig: Meyer, 1795).
64. Chiarugi particularly admired the nosologies of David Macbride (1726–1778) and William Cullen (1710–1790), the Comte G. L. de Buffon’s (1707–1788) *Natural History*, the works of S. A. Tissot (1728–1797), “a great man,” and, of course, his countryman Giambattista Morgagni (1682–1781), the famous localizer.
65. The scope of Chiarugi’s learning, particularly his openness to foreign thought that the Catholic Church considered subversive, remains a crucial and unexplored point. An investigation of what journals were available to him in Florentine libraries would be helpful.
66. Chiarugi, *Della pazzia*, I, 24–27.
67. *Ibid.*, I, 32.
68. *Ibid.*, I, 188–189.
69. *Ibid.*, I, 50–51.

70. See, e.g., G. C. Braga, *La filosofia francese e italiana del settecento* (Padua: Milani, 1947), Part I, 60–67. The first Italian translation of Locke's *Essay on Education* (1690) seems to have been made from the French and published in 1735. The *Essay on Government* (1690) was first published in Italian in Amsterdam in 1773. Thus these works were available to Chiarugi in the 1780s. The first Italian translation of the *Essay Concerning the Human Understanding*—the book at issue in this chapter—did not appear until 1775, but a Latin version was published in London as early as 1701. See *Saggio filosofico sull'umano intelletto, compendiato dal Dr. Winne*, [John Winne, bishop of Bath and Wells], *tradotto e commentato da Francesco Soave* 3 vols. (Milan: Motta, 1775; 2nd ed. Venice: Baglioni, 1790), and *De intellectu humano. In Quatuor libri. Editio quarta aucta et emendata, et nunc primum Latine reddita* (London: Aunshami & Johan, 1701).
71. See especially *Della pazzia*, I, 162–168.
72. A. Pazzini, *Assistenza e ospedali nella storia dei Fatebenefratelli* (Turin: Marietti, 1956), 143–146.
73. A. Boldt, "Über die Stellung and Bedeutung der *Rhapsodien über die Anwendung der psychischen Curmethode auf Geisteszerrüttungen*" von J. Ch. Reil (1759–1813) in der Geschichte der Psychiatrie," *Abhandlungen zur Geschichte der Medizin und Naturwissenschaften*, 1936, 12: 1–120. The quotations are found on pp. 41, 34, 32.
74. G. Mora, "Biagio Miraglia and the Development of Psychiatry in Naples in the 18th and 19th Centuries," *Journal of the History of Medicine and Allied Sciences*, 1958, 13: 504–523; see also A. Romano, "La seconda fase del pensiero psichiatrico nel secolo XVIII a Napoli," *Gli incurabili*, 1902, 17: 347–371; G. Agnetti and A. Barbato, *Il barone Pisani e la real Casa dei Matti* (Palermo: Sellerio, 1987); C. Coconcelli, "Rilievi statistici sul movimento degli ammalati nell'istituto psichiatrico San Lazzaro di Reggio Emilia, dal 1810 at 1959," in *Atti del primo congresso europeo di storia ospitaliera* (Rome: Centro di storia ospitaliera, 1962), 306–317; and M. Dall'Acqua, M. Miglioli, and M. Bergomi, "Con gli opportuni rimedi: Vicende di folli a Parma dall'antico regime all'età napoleonica," *Quaderni storici*, 1983, 18(2): 553–577. For the nineteenth century see P. Guarnieri, "The History of Psychiatry in Italy: A Century of Studies," *Discovering the History of Psychiatry*, 248–259.
75. Th. Arnold, *Observations on the Nature, Kinds, Causes, and Prevention of Insanity, Lunacy, or Madness*, 2 vols. (Leicester: Robinson & Cadell, 1782–1876).
76. *Ibid.*, II, 277.
77. Rush, *Medical Inquiries*, 10.
78. See *Benjamin's Rush's Lectures on the Mind*, E. T. Carlson, J. L. Wollock, and P. S. Noel, eds. (Philadelphia: American Philosophical Society, 1981), 151, n. 2.
79. Rush, *Medical Inquiries*, 252. On Rush's place in the history of psychiatry, in addition to the "General Introduction" to *Benjamin Rush's Lectures on the Mind*, see E. T. Carlson and M. M. Simpson, "The Definition of Mental Illness: Benjamin Rush (1745–1813)," *American Journal of Psychiatry*, 1964, 121: 209–214; P. S. Noel and E. T. Carlson, "The Faculty Psychology of Benjamin Rush," *Journal of the History of the Behavioral Sciences*, 1973, 9: 369–377; J. M. Schneck, "The Thomas Sydenham–Benjamin Rush Transition in the History of Psychiatry," *Medical History*, 1962, 6: 389–391; R. H. Shryock, "The Psychiatry of Benjamin Rush," *American Journal of Psychiatry*, 1944, 10: 429–432; C. Holmes, "A Somatic Interpretation of the Psychiatry of Benjamin Rush," *American Journal of Psychiatry*, 1967, 124: 825–831; F. Wittels, "The Contribution of Benjamin Rush to Psychiatry," *Bulletin of the History of Medicine*, 1946, 20: 157–166; and E. Kahn, "Benjamin Rush, the Founder of American Psychiatry," *Confinia psichiatrica*, 1967, 10, 61–72.
80. Rush, *Medical Inquiries*, 17–18.
81. *Ibid.*, 62.
82. Arnold, *Observations*, II, 284–285.
83. Halle: Curt, 1803, 2nd ed., 1818.
84. M. Neuburger, *Johann Christian Reil Gedenkrede* (Stuttgart: Enke, 1913), 27.
85. *Ibid.*, 92.
86. Apart from the excellent memorial address by Neuburger, already cited, three critical articles stand out: A. Boldt, "Ueber die Stellung und Bedeutung der 'Rhapsodien über die Anwendung der psychischen Curmethode auf Geisteszerrüttungen' von J. Ch. Reil (1759–1813) in der Geschichte der Psychiatrie," *Abhandlungen zur Geschichte der Medizin und Naturwissenschaften*, 1936, 12: 1–120; I. Petzold, "Johann Christian Reil, Begründer der modernen Psychotherapie?," *Sudhoff's Archiv für Geschichte der Medizin und Naturwissenschaften*, 1957, 41: 157–179; and D. Gregor, "Johann Christian Reil," in *Deutsche Irrenärzte, Einzelbilder ihres Lebens*, Th. Kirchhoff, ed. (Berlin: Springer, 1921), I, 28–42.
- W. A. White, "Reil's 'Rhapsodien': Critical Historical Review," *Journal of Nervous and Mental Diseases*, 1916, 43: 1–22, is full of poor translations and offers no new insights.

For an appreciative treatment by modern psychoanalysts, see Chapters 12 and 13 of E. Harms, *Origins of Modern Psychiatry* (Springfield, IL: Charles C. Thomas, 1967) (Harms's bias is obvious: there is no chapter on Pinel in his book); see also Sir A. Lewis, "J.D. Reil, Innovator and Battler," *Journal of the History of the Behavioral Sciences*, 1965, 1: 178–190.

87. Neuburger, *Reil*, 11.
88. See F. W. J. von Schelling, *Erster Entwurf eines Systems der Naturphilosophie*, in *Sämmtliche Werke*, Vol. 3, Part 1 (Stuttgart/Augsburg: 1799).
89. *Archiv für Physiologie*, 12 vols., 1795–1815, evolved into *Deutsches Archiv für Physiologie*, 1815–1823, edited by Johann Friedrich Meckel, then *Archiv für Anatomie und Physiologie*, 1826–1832, and, finally, *Archiv für Anatomie, Physiologie und wissenschaftliche Medizin*, edited by Johannes P. von Müller, from 1834 on. For a suggestive discussion of the German background, see T. Lenoir, "Kant, Blumenbach, and Vital Materialism in German Biology," *Isis*, 1980, 71: 77–108.
90. That journal lasted from 1818 to 1822, and led eventually to *Allgemeine Zeitschrift für Psychiatrie und psychische-gerichtliche Medizin*, edited by Damerow, from 1841 on, and continuing to this day.
91. *Ueber die Erkenntniss und Kur der Fieber*, 5 vols. (Halle: Curt, 1797–1815).
92. It is obvious that the recent discoveries in chemistry and the work of John Brown influenced Reil's thought.
93. F. Schiller, "Coenesthesia," *Bulletin of the History of Medicine*, 1984, 58: 496–515.
94. *Ibid.*, 114.
95. Awareness of self forms the personality. It integrates stimuli and drives. Disorder in this integration causes mental illness. A person suffering from such disorder will, typically, reveal weak nerves, lack objectivity, voice doubts about what is real and unreal about him, be uncertain whether past experiences happened to him or someone else, have deficient memory, be disoriented as to time, place, or persons, suffer from self-delusions. In our terms, Reil offers a good description of psychosis. See *Rhapsodien*, par. 9, 53–98.
96. Heinrich Balthasar Wagnitz, *Historische Nachrichten und Bemerkungen über die merkwürdigsten Zuchthäuser in Deutschland, nebst einem Anhang über die zweckmässigste Einrichtung der Gefängnisse und Irrenanstalten*, 2 vols. in 3 (Halle: Gebauer, 1791–1794).
97. *Ibid.*, 52–53.
98. Langermann published little. His dissertation and one newspaper article are relevant to our topic: *De methodo cognoscendi curandique animi morbus stabilienda* (Jena, 1797) and "Ueber den gegenwärtigen Zustand der psychischen Heilmethoden der Geisteskrankheiten und über die erste zu Bayreuth errichtete psychische Heilanstalt," *Medizinisch-chirurgische Zeitung*, 1805.
99. Alexander Crichton, *An Inquiry into the Nature and Origin of Mental Derangement. Comprehending a Concise System of the Physiology and Pathology of the Human Mind. And a History of the Passions and their Effects* (London: Cadell and Davies, 1798); German translation, Leipzig, 1798, and Leipzig, 1810, with notes and additions by Johann Christoph Hoffbauer; Dutch translation, L. Bicker, Rotterdam, 1802.
On this topic, see D. B. Weiner "Mind and Body in the Clinic: Philippe Pinel, Alexander Crichton, Dominique Esquirol and the Birth of Psychiatry," in G. S. Rousseau, ed., *The Languages of Psyche: Mind and Body in Enlightenment Thought* (Los Angeles: University of California Press, 1990), 331–404. That chapter includes complete bibliographies of Crichton, Pinel, and Esquirol. Only works relating to the present essay will be listed here.
The only secondary works on Crichton in the medico-historical literature are E. M. Tansey, "The Life and Works of Sir Alexander Crichton, F.R.S. (1763–1856): A Scottish Physician to the Imperial Russian Court," *Royal Society of London: Records and Proceedings*, 1983–1984, 38: 241–259. This paper gives a detailed account of Crichton's Scottish background and lifelong connections. It offers some new information on Crichton's London practice and on his Continental experience. See also H. Hopf, *Leben und Werk Alexander Crichtons (1763–1856)*, Medical thesis, Munich (1962).
100. Guenter B. Risse, in *Hospital Life in Enlightenment Scotland: Care and Teaching at the Royal Infirmary of Edinburgh* (Cambridge: Cambridge University Press, 1986), indicates that surgeons lectured there, beginning in 1770, and their students were admitted to clinical rounds and to surgical procedures (pp. 266–271).
101. Leiden: Haak and Co., 1785. The thesis itself is barely eighteen pages long, conventional, and superficial. Crichton himself calls it a "*dissertatiunculus*" (p. 2). It is dedicated to his teachers Alexander Wood and William Fordyce, both of them surgeons. One might take this as a small token of the fact that the distinctions between the two specialties were indeed narrowing.
102. 15 April 1794, 17 September 1794, and 15 September 1797.
103. Crichton, Introduction, *An Inquiry*, xxvii.

104. I. Kant, "Versuch über die Krankheiten des Kopfes," in *Gesammelte Schriften*, Vol. 2 (Berlin: Reimer, 1902), 359–371. See also R. Töllner, "Kant und die Evolutionstheorie," *Clio Medica*, 1968, 3: 243–249; G. B. Risse, "Kant, Schelling and the Early Search of a Philosophical 'Science' of Medicine in Germany," *Journal of the History of Medicine and Allied Sciences*, 1972, 27: 145–158; N. Tsouyopoulos, "Schellings Krankheitsbegriff und die Begriffsbildung der Modernen Medizin," in R. Heckmann, H. Krings, and R. W. Meyer, eds., *Natur und Subjektivität: Zur Auseinandersetzung mit der Naturphilosophie des jungen Schelling. Referate, Voten und Protokolle der II. Internationalen Schelling-Tagung* (Zürich 1983), 265–290.
105. W. Coleman, *Cuvier Zoologist* (Cambridge MA: Harvard University Press, 1964), 7.
106. H. Plischke, *Johann Friedrich Blumenbachs Einfluss auf die Entdeckungsreisenden seiner Zeit* (Abhandlungen der Gesellschaft der Wissenschaften zu Göttingen. Philologisch-historische Klasse, 3rd series, No. 20) (Göttingen: Vandenhoeck & Ruprecht, 1937).
107. J. F. Blumenbach, *Über den Bildungstrieb und das Zeugungsgeschäfte* (Göttingen: Dieterich, 1791), translated under the title *An Essay on Generation* (London: Cadell, 1792).
108. T. Lenoir, "Kant, Blumenbach, and Vital Materialism in German Biology," *Isis*, 1980, 71: 77–108.
109. Crichton, *Inquiry*, Preface, x.
110. Hunter and Macalpine are so impressed with this capacity of self-analysis that they suggest a comparison to Sigmund Freud. See *Three Hundred Years*, 559.
111. Crichton, *Inquiry*, Book III, Chapter 4, 260.
112. *Traité médico-philosophique sur l'aliénation mentale ou la manie* (Paris: Caille et Ravier, 1800). Pinel published a second, much enlarged, edition entitled *Traité médico-philosophique sur l'aliénation mentale* (Paris: Brosson, 1809). The title page states that it is "totally revised and enlarged." The phrase "ou la manie" has been dropped from the title, indicating that Pinel had chosen "aliénation" as the best term to represent his field of inquiry.
Pinel's *Traité* was translated into German by the Hungarian physician Michael Wagner as *Philosophisch-medizinische Abhandlung über Geistesverirrungen oder Manie* (Vienna: Schaumburg, 1801), into Spanish by Dr. Guarnerio y Allavena, *Tratado medico-filosofico de la enagenación del alma o mania* (Madrid: Imprenta real, 1804), into English by Dr. D. D. Davis under the unsatisfactory title *A Treatise on Insanity* (London: Cadell and Davies, 1806), and into Italian by Dr. C. Vaghi as *Trattato medico-filosofico sopra l'alienazione mentale* (Lodi: Orcasi, 1830).
113. Pinel, *Traité*, Introduction, xxi–xxii.
114. Paris: Didot jeune, 1805.
115. J. E. D. Esquirol, "Des établissements des aliénés en France, et des moyens d'améliorer le sort de ces infortunés," *Mémoire présenté à Son Excellence le ministre de l'intérieur en septembre 1818* (Paris: Huzard, 1819), republished as "Maisons d'aliénés" in the authoritative *Dictionnaire des sciences médicales*, 1818, 30: 46–94, and J. E. D. Esquirol, *Des maladies mentales considérées sous les rapports médical, hygiénique, et médico-légal*, 2 vols. (Paris: Baillière, 1838). For details, see the Bibliographic Note in Weiner, "Mind and Body in the Clinic."
116. Hoffbauer was himself an expert in the nascent psychiatry from a philosophical and legal point of view. He published the following works: *Untersuchungen über die Krankheiten der Seele and die verwandten Zustände* (Halle: 1803), *Psychologische Untersuchungen über den Wahnsinn und die übrigen Arten der Verrückung und ihrer Behandlung* (Halle: 1807), *Die Psychologie nach ihren Hauptanwendungen auf die Rechtspflege oder die sogenannte gerichtliche Arzneiwissenschaft nach ihrem psychologischen Teile* (Halle: 1808; 1823), *Médecine légale relative aux aliénés et aux sourds-muets, ou Les lois appliquées aux désordres de l'intelligence*, tr. A. M. Chambeyron, M.D., *interne de la Salpêtrière, avec des notes par MM. Esquirol et Itard* (Paris: Baillière, 1827). Together with Reil, Hoffbauer co-edited the influential, though short-lived, *Beyträge zur Beförderung einer Curmethode auf psychischem Wege*, 2 vols. (Halle: Curt, 1808). It is intriguing to find, in this journal, the review of a thesis by Lenhossek, published in Pest in 1804, entitled "Untersuchungen über die Leidenschaften und Gemütsaffecten als Ursachen und Heilmittel der Krankheiten." It is unlikely that Esquirol knew this thesis.
117. *Médecine légale relative aux aliénés et aux sourds-muets*.
118. Reil, *Rhapsodies*, 31.
119. Crichton, *Commentaries on some Doctrines*, 179.
120. See D. B. Weiner, *Comprendre of soigner: Philippe Pinel et la médecine de l'esprit* (Paris: Fayard, 1999), Spanish tr. (Mexico: Fondo de cultura economica, 2002). (Paris: Fayard, 1998). An English translation is forthcoming.
121. Chabbert, "Les années d'études," 22.

122. He probably earned this position because of an essay he submitted to a prize essay contest of the Royal Society of Medicine, entitled “Mémoire sur cette question proposée pour sujet d’un prix par la Société de médecine: ‘Déterminer quelle est la meilleure manière d’enseigner la médecine pratique dans un hopital.’” See D. B. Weiner, ed. and tr., *The Clinical Training of Doctors: An Essay of 1793* (Baltimore, MD: The Johns Hopkins UP, 1986), and *idem*, and “Pinel et Pussin à Bicêtre: Causes et conséquences méthodologiques d’une rencontre,” in *Pinel*, Jean Garrabé, M.D., ed. (Paris: Les empêcheurs de penser en rond, 1994), 95–116.
123. The case histories from Bicêtre and the Salpêtrière appear in all of Pinel’s books and articles to construct his *Philosophic Nosography*, a textbook that went through six editions in twenty years and became every French medical student’s guide to diagnosis: *Nosographie philosophique, ou Méthode de l’analyse appliquée à la médecine* (Paris: Brosson, 1798, 2nd ed., 3 vols., 1802–1803, 3rd ed., 1807, 4th ed. 1810, 5th ed., 1813, 6th ed., 1818). See Weiner, *Comprendre et soigner*, “Bibliographie chronologique de Philippe Pinel,” 386–399.
124. Paris: Brosson, Gabon et Cie., 1802.
125. Pinel, *La médecine clinique*, 1st ed., Introduction, xxxiv.
126. See Chapter 7 of *DBW Comprendre soigner*; and especially *idem*, “Observe and Heal: Philippe Pinel’s Experiment at Salpêtrière Hospice, 1802-1805,” in Eric J. Engstrom, Matthias Weber and Paul Hoff, eds., *Knowledge and power: Perspectives in the History of Psychiatry* (Berlin: Verlag für Wissenschaft und Bildung, 1999), 25–43.
127. Pinel succeeded Georges Cuvier (1773–1838), who became permanent secretary.

Chapter 8

Philippe Pinel in the Twenty-First Century

The Myth and the Message

Dora B. Weiner

The Myth

The myth of Pinel, the Revolutionary republican “chainbreaker,” has been definitively discredited by historians.¹ Yet today it is alive and well in France and abroad. Two novels have recently appeared that show the persistent hold of this myth on the French imagination. In *Dans la nuit de Bicêtre* [*In the Darkness of Bicêtre*] (Paris: Gallimard, 2006) Marie Didier invents an intimate relationship between Jean Baptiste Pussin, the “governor” of Pinel’s mental ward at Bicêtre Hospice and Dr. Jean Colombier, the royal inspector of hospitals and prisons. The only documented fact of a relationship between Colombier and Pussin is the presence of the inspector as Pussin’s sponsor at his marriage in 1786—indeed a surprising and hitherto unexplained discovery. Colombier’s humane *Instructions* for the management and treatment of the mentally ill, issued by Louis XVI’s government in 1785, are here said to have been devised—possibly dictated—by the unschooled but talented keeper of the 200 madmen on Pinel’s service. Didier even suggests that it was Pussin who single-handedly created “moral treatment” for the insane. This interpretation has unfortunately been anchored in Anglo-American history of medicine by Jan Goldstein’s characterization of Pinel (in an otherwise excellent book) as a “charlatan” using methods unworthy of a physician and scientist.² Thus the claim to fame continues: Pussin performed the first physical act; Pinel heralded a world-wide emancipation. One intriguing sub-text of this controversy is the current championship of the nursing profession as the real caregivers of hospitalized patients, far out-performing the doctors who only appear for brief visits on the wards and never get to know the patient as a person.³ One might add that no one, in early nineteenth-century France, thought of creating a lay nursing profession: Catholics were so used to the free services of the religious orders that organized professional nursing had to wait until the arrival of “nightingales” at the end of the century.⁴

Another recent book, frankly called a “novel,” by François Lelord, also focuses on the theme of liberation of the mentally ill. *Liberté pour les insensés: Le roman de Philippe Pinel* [*Freedom for the Insane: The Tale of Philippe Pinel*] (Paris: Odile Jacob, 2000) explores the relationship between Pinel and his friend, the famous philosopher, the marquis de Condorcet. We know that Pinel found safe lodgings for his friend in Paris, to shield him from the persecution of the Committee of Public Safety. According to Lelord, Condorcet found shelter within the walls of Bicêtre and we even learn from this tale that the doctor provided the fatal poison that allowed Condorcet to commit suicide. Was there a need to invent a “gentle Mathilda” to spice up the story?

A third author, the Paris psychiatrist Thierry Gineste, proposes the likely thought that we decorate our homes and offices in ways that reveal our personality. From the inventories after death required by French law he culled a list of the paintings and engravings that Pinel and his student Jean Marc Gaspard Itard, the teacher of the “Wild Boy of Aveyron,” affixed to their walls. Gineste analyzes these in *Le lion de Florence: Sur l’imaginaire des fondateurs de la psychiatrie, Pinel et Itard* [*The Lion of Florence: The Fantasy-World of the Founders of Psychiatry, Pinel and Itard*] (Paris: Albin Michel, 2004). We are not surprised to find the ancient physicians Hippocrates and Erasistratus pictured on the walls of Pinel’s apartments and study, nor the eleventh-century St. Bruno, the director of the cathedral school at Rheims and founder of the Carthusian order. What is surprising is Gineste’s interpretation that Pinel identified with patriarchs and saw himself as a modern Abraham, destined to lead his people of mental patients into the promised land of sanity. To do this, Pinel “created the asylum,” imposing “the barbarities of medical power.”⁵ Definite shades of Foucault!

The Myth in Politics

The modern asylum is seen here as the nefarious creation of the Revolution. Such an opinion is not surprising among Frenchmen, since discussions of all aspects of modern French intellectual and social life eventually lead back to the great upheaval of 1789–1800, dividing Frenchmen into Right and Left. In the history of the asylum, it was the massive attack on medical power by Michel Foucault that led the assault in the 1960s,⁶ joining such critics and skeptics as R. D. Laing,⁷ Irving Goffman,⁸ Thomas Szasz,⁹ and Andrew Scull.¹⁰ In this context, critics see Pinel as an opportunist for whom the Revolution opened the door to a career. He presumably owed his post as physician at Bicêtre and the Salpêtrière not to his own talents and achievements, but to the maneuvers of his Ideologue friends (most of them Freemasons, which he was not). And he is scorned as a turncoat who successively served the republic, Napoleon, and the Bourbon Restoration. Gineste tells us that Pinel grew rich, bought a country house, just like other bourgeois upstarts who “lunged for the land” [*se ruer sur la terre*]. He created an inflexible *Nosography* that classified the mentally ill and he then applied this pattern to the asylum, diagnosing patients in order to confine them in the appropriate wards. Foucault characterized the asylum as a place surveyed from a panopticon where a “medical personage” ruled, where patients cowered in fear, realizing they were mad—a caricature of what Pinel tried to achieve.¹¹

Taking issue with this highly critical attitude, the friends of the Revolution, the “Left,” did not remain idle. The majority of historians of medicine and psychiatry claim Pinel as a champion of humanitarian and democratic reform. Official French politics has supported this view.¹² In 1849, under the Second Republic, the painting by Charles Müller, “Pinel Orders the Removal of Iron Shackles from the Insane Men at Bicêtre Hospice” was solemnly installed in the lobby of the National Academy of Medicine in Paris. There it towers, portraying a Pinel who orders a subordinate (presumably Pussin) to strike the shackles off the wrists of an old man, accompanied by an attentive disciple (who must be Esquirol—who never set foot in Bicêtre). Not to be outdone by its predecessor, the Third Republic ordered a painting of Pinel liberating the women of the Salpêtrière. Tony Robert-Fleury produced this well-known work in 1878: it hangs above the staircase of the Charcot Library at the Salpêtrière, badly lit, hard to see. The crowning effort of the Société médico-psychologique to honor the founder of psychiatry in France resulted in a statue of Pinel by Ludovic Durand erected near an entrance portal to the Salpêtrière. A recent effort to move the statue inside the hospice ground failed because the work was found to be too fragile to transfer. Paid for by public subscription, the statue portrays a youthful elegant man holding links of a broken chain. At his feet cower two young girls, overcome with emotion, looking up at him in surprised gratitude. Statues of *Science* and *Bienfaisance* flank the liberator. And to underscore the political meaning of the event, the Society unveiled the statue on 13 July 1885, thus linking the breaking of chains with the storming of the Bastille. There followed a Pinel stamp, a *rue Pinel*, a *place Pinel*, in Paris and elsewhere.

The Birth of the Asylum

By the time of the French Revolution, the need for special public asylums for the destitute mentally ill was clear. To what extent did Pinel find such an asylum in existence when he arrived at the Salpêtrière in 1795? He counted 7,523 persons lodged in great confusion and was shocked by the lack of medical supervision. Traditionally, to care for the inmates, a director [*supérieure*] supervised some 30 headnurses (*sœurs officières*) and several hundred nurses aides and maids, while a manager (*économ*e) administered the hotel functions of the hospice and 15 priests ministered to the patients' spiritual welfare. Jointly they serviced some twenty wards [*emplois*] as well as the infirmary, prison, workrooms, kitchen, bakery, laundry, linen and clothing depots. Their shared authority led to frequent clashes. The sisters' by-laws of 1692 empowered them to supervise physicians, surgeons and medications. They state: "The *supérieure* will obtain reports on the behavior of the servants to the insane and imbeciles to assure their moderation in the harsh and severe measures they sometimes must impose." Thus a small hierarchy of capable women claimed to rule the Salpêtrière with absolute power over the patients.¹³ The *supérieure* participated in regular meetings of the *bureau* of the General Hospital at the neighboring Pitié whose president *ex officio* was the archbishop of Paris: the role of physicians at the Salpêtrière was not among their major concerns. Typically, a recent Paris thesis analyzing the Salpêtrière under the old regime pays little attention to the inmates' medical condition. But the author acknowledges the "awakening" [*prise de conscience*] brought about by Pinel.¹⁴

Among the traditions and regulations of the old regime one can identify elements of the future asylum. One can extract information about the sisters and their activities from the manuscript folio registers of the Salpêtrière preserved in the Archives of the Assistance Publique in Paris. There are over one thousand such folios with detailed information, particularly of admissions and an especially intriguing series entitled "Mutations of the mentally ill women," covering the years 1802–1805.¹⁵ "Mutation" here means change to new lodgings for the curable mental patients and, in this series, brief case histories can be found recorded in the margins. One can here see the sisters triaging the women sent to the Salpêtrière by the administration or brought in by the police, assigning them to the ward that seemed to them appropriate. They thus made a medical diagnosis. They would assign melancholics to the Fountain Court [*cour des fontaines*], the demented to the Oriental court [*cour du Levant*], violent patients to individual cells [*loges*], imbeciles to the upper floor, epileptics to the lower floor, and incurables to their own section. They also granted trial leaves of six weeks and three months, each permission being signed by a headnurse. Under the old regime, little boys would be sent to St. John's or to Christ Child ward, pregnant women to St. Felicity, patients with paralyzes or gout to St. Agatha, those with rheumatism to St. Dorothea, epileptics to St. Joan and women with periodic bouts of illness to the Holy Virgin. Names changed, but habits did not. The Revolution replaced the saints with numbers and the wards [*emplois*] with divisions and sections, but the classifications established by the sisters persisted; one must assume that Pinel approved of these subdivisions. The folios suggest that while certain sisters were made to retire after the arrival of Pinel in 1795 and Pussin in 1802, others, such as sisters Modeste, Justine, Madelon, Françoise and Marguerite spent their whole lives in the service of the mentally ill. Pinel and Pussin appreciated their experience and often adopted their administrative patterns.¹⁶

Of particular interest is the daily schedule, dictated, under the old regime, by the times for prayer prescribed by the Catholic religion. All French hospitals followed this sequence of the canonical hours. After the disestablishment of the Catholic Church, it seems that the schedule remained: why else would the nurses at the Hôtel-Dieu fight so bitterly against the surgeon who wanted to make early morning rounds? Here Michel Foucault's idea, proposed in *Discipline and Punish*, surely holds true: he adduces the examples of the army, the seminary, the factory, the prison, and the hospital, showing how modern society regiments individuals. Thus Pinel's asylum borrowed from the old regime not only the division of the asylum into many special wards, but the regular daily schedule that organized the patients' lives. Did he "create the asylum?" What he added were plentiful possibilities of work for convalescents, his constant presence and careful medical supervision, and the bedside teaching of medicine and psychiatry.

The Asylum and the Rights of the Citizen-Patient

Arriving at the Salpêtrière in the 1790s, Pinel viewed the asylum with the eyes of a physician, a natural scientist, a nosologist, a philanthropist and believer in the “Rights of Man.”¹⁷ The post of physician-in-chief was new, with ill-defined duties. This left him free to check on environmental aspects of hospital life affecting the patients’ health. We find him in the kitchen tasting the soup, in the laundry checking on the new mangle, welcoming a lightning rod placed on the roof of the church, and always stressing the need for cleanliness and order. At the same time his mind was filled with ideas about the new specialty, while he published his three books in quick succession: the *Nosography* (1798), the *Treatise* (1800), and *Clinical Medicine* (1802).

From their contents it is obvious that he consciously faced the challenge that confronts all democratic governments: how to provide health care for all the country’s citizens at a time when the needs of the hospitalized populations were rising to astronomically costly proportions. If democracy means equality, then this promise must include equal access to equally good care. The struggle with this commitment differentiates the early phase of psychiatry in France from contemporary developments in other Western countries. The French reflected and planned in national terms, more theoretical than practical: the ideas of the French Revolution, the nation’s debt to the citizen-patient, were never far from the planners’ minds. The only other large-scale effort to serve the mentally ill was carried out, since the Reformation, by various Catholic nursing orders, led by the Brothers of Charity.¹⁸ On the other hand, secular individual initiatives were rare in France, compared to private or local experiments in psychiatric care attempted in Great Britain or in the Germanies. Few free-standing French psychiatric sanatoria have reached historians’ attention.

As he pondered the future of the asylum, a solid, scientific study seemed essential. Pinel therefore undertook an “experiment” of almost four years¹⁹: in phase one he re-examined the 569 mental patients hospitalized at the Salpêtrière in 1802; then he and his assistant carefully diagnosed all new arrivals. The aim was a statistical overview of over 1,000 patients that would allow projections and planning.²⁰ Surveys and statistics were all the rage in Napoleonic France and so a record-taking in the General Hospital should not surprise us.²¹ Pinel added some personal reflections on the probability of cure for the mentally ill. He was obviously remembering the work of his friend Condorcet and he may have discussed these views with his fellow-academician Laplace.²²

Several modern historians of medicine, including Sir Aubrey Lewis, and the philosopher Georges Canguilhem, were impressed by Pinel’s use of statistics and probability in clinical problems²³; Ackerknecht calls him “the actual father of the numerical method in medicine.”²⁴ One passage in the *Traité* that impressed several commentators as prescient reads:

To be authentic and conclusive and serve as a solid basis for a therapeutic method, an experiment must be conducted according to a fixed order. It must be based on a regular succession of carefully recorded observations repeated exactly for several years. It must *fairly report the proportion of positive and failed results*, all of which are instructive. It must therefore be based on the theory of probability which must henceforth be basic to medical therapies, if one is to provide them with a solid foundation.²⁵ [italics mine]

When the “experiment” was complete, Pinel submitted a report to the Academy of Sciences—not to the medical faculty or the Paris Hospital Council. He wanted a prestigious and influential forum. The Academy acknowledged the report’s importance by voting that it be published in the *Moniteur universel* the subsequent Sunday. Four years later the main features of this report became part of the second edition of the *Traité*.²⁶

What did this new orientation mean for the future of the asylum? How did the academicians respond? or the public? In fact, public response was very disappointing, at least in France.²⁷ To stimulate interest, Pinel’s friend Jacques Louis Moreau de la Sarthe published a 71-page synopsis of the new *Traité* in the *Moniteur universel* in 1811–1812. “We are surprised to find,” he remarked, “that the most serious newspapers have failed to comment on the second edition of M. Pinel’s work on mental maladies.”²⁸ To no avail: the French public remained mum.

The Psychiatric Profession in the Era of Realism

Pinel should have retired in 1810, at the age of 65, at the height of his prestige. His health was failing: unfortunately the extreme discretion of friends and colleagues and the lack of personal papers leave us but a faint hint of heart trouble. Then tragedy struck: in April 1811 Jean Baptiste Pussin died. He was exactly Pinel's age. Two months later Pinel lost his wife, Jeanne Vincent. He replaced Pussin with Esquirol and he remarried in 1815—possibly because the management of two sons, Scipion, fifteen, and Charles, nine at their mother's death, and two households, in Paris and Torfou, were more than he could manage. The official appointment of Dr. Esquirol as supervisor of the mentally ill women of the Salpêtrière has been hailed as the birthdate of the asylum by the brilliant French scholar Gladys Swain. One can see that 1811 marks, in many ways, the beginning of the end for Pinel.²⁹

His prestige as a medical thinker was being attacked by a young generation buoyed by discoveries in pathological anatomy that explained diseases by the lesion of organs. While Pinel shared in the triumphs of the "Paris Clinical School" as a foremost teacher of clinical medicine, he distanced himself from pathological anatomy such as experiments in dissecting brains, even though he had studied and measured skulls and included 12 images of skulls in his *Traité*. Brilliant students criticized basic concepts of his nosology, beginning with the defense of G. L. Bayle's thesis in 1802—Pinel being the sponsoring professor. Bayle successfully attacked a specific classification by Pinel into variety and specie, and the event was recorded by Bayle's friend Laennec and later published.³⁰ Then, in 1822, A. L. J. Bayle (the elder Bayle's nephew) proffered the conclusive experiment that proved that tertiary syphilis—hitherto based solely on observations of patient behavior and some clinical symptoms—could now be diagnosed by a specific correlation of an alteration of the arachnoid membrane with a derangement of the mental faculties and an incomplete general paresis leading to death. Bayle's research was undertaken at Charenton, where Esquirol was appointed director in 1826. The brain was becoming the center of researchers' attention and the path toward biological psychiatry was opening.

In the meantime another student of Pinel's, François Broussais (1772–1838), had launched a violent attack against the *Nosography*. He ridiculed the notion that *fevers* be considered as a nosologic category: in Pinel's classification they rank as the first of six *orders* of diseases. This was old-fashioned theoretical thinking and, in fact, Pinel was the last of the Enlightenment's nosologists.³¹ By the early nineteenth century, clinical research was producing so much specific medical knowledge that an overall classification of diseases was henceforth impossible. Pinel did not acknowledge the young generation's protests: he reissued the *Nosography* in three volumes, in 1813, and again in 1818.

Esquirol's Power and Pinel's Message

The political and cultural climate had changed in France. How the change affected psychiatry can be seen clearly in the career of Jean Etienne Dominique Esquirol (1772–1840), generally considered Pinel's heir.³² Educated by the Brothers of the Christian Doctrine and at the collège de l'Esquille at Toulouse, like Pinel, he came to study medicine in Paris and was soon identified by Pinel as his most brilliant disciple. He opened a small private sanatorium next to the Salpêtrière in 1802, sponsored (and, it seems, partially financed) by Pinel. He came to the hospice regularly, attending the clinical lessons, where Pinel chose him to write the many patient histories that figure in *Clinical Medicine* published in 1802. But he did not become Pinel's successor at the Salpêtrière, nor a professor at the faculty, nor a member of the Academy of sciences. One wonders why: it may well be that Pinel feared a rival.

Esquirol was a son of the Toulouse upper middle class, with monarchist sympathies and, during Napoleon's Empire, he maintained connections with like-minded young men in the government. In 1810, 1814 and 1817 he undertook self-financed tours of all the asylums in France. The report he published in 1818 has remained famous as an indictment of the asylums' abject condition.³³ By then he had begun to teach a lecture course on psychiatry at the Salpêtrière which continued until 1825. At that time tension had

been building between the reactionary Restoration ministry and the forward-looking members of the medical faculty. It erupted in 1822 when the government closed the faculty and put 11 senior professors who had served the Republic and Empire on emeritus status, at half pay. Pinel was thus dismissed at the age of 77. Esquirol became inspector of public education and, even though he lost that position when the July Monarchy came to power in 1830, he maintained his good relations with the government, becoming the main architect of the Law of 1838 which governs the internment of mentally ill patients to this day.

To bring about this Law, Esquirol had embarked on a 20-year effort planning the reform of asylums in all of France with members of the Paris Hospital Council, the Chamber of Deputies and the Chamber of Peers. From the beginning, Esquirol envisaged a national network of custodial institutions. He advocated medical control over the internment of the mentally ill, while the minister of internal affairs would appoint asylum superintendents and doctors. Such practical, political thinking was far from Pinel's concern with salvaging curable patients for a normal social life. But it was in tune with the political philosophy of the July Monarchy that favored strong administrative power over France's 86 departments.

Yet a serious hurdle remained before the Law of 1838 could be passed: the legal profession argued that the physician's power to intern a mental patient amounted to a deprivation of civil rights. Ever since the middle ages, only a judge could declare a person *non compos mentis* and assign a guardian. Esquirol's counter-argument was clever indeed: the doctor prescribed *isolation*, for medical and therapeutic reasons, and supervision was *administrative*, not judicial. And as for *non compos mentis* judgments, they only concerned financial matters and wealthy heirs (which was true). The indigent inmates of public asylums had never been targets of those lengthy legal proceedings. The Law passed, and *isolation* was accepted as a medical, not a legal matter.

The psychiatric profession closed ranks in those days. The French *Société médico-psychologique* began to publish its *Annales* in 1843 just as, in the United States, the *Association of Medical Superintendants of American Institutions for the Insane* began to issue the *American Journal of Insanity* (1844), the Germans their *Allgemeine Zeitschrift für Psychiatrie* (1844), and the English the *Journal of Mental Science* (1855). Medical school chairs in psychiatry followed in the 1880s, and soon International congresses: the psychiatric profession now had a national and international playing field.

But what of its medical philosophy? Some critics now remembered Pinel, for example Henri Ellenberger (1905–1993) in his *Discovery of the Unconscious* (1970), hailed by Henri Ey (1900–1977),³⁴ and by the brilliant Gladys Swain, tragically dead at 48.³⁵ These psychiatrists all stressed the psychologic aspects of mental illness and shared Pinel's insight that a remnant of reason subsists in the deranged person, and that a skilled therapist can reach this remnant of humanity so as to strengthen and possibly cure the patient. The philosopher Hegel had pointed out the originality of Pinel's concept as early as 1817, arguing that Pinel deserved "the highest recognition for his services."³⁶ And the contemporary philosopher Marcel Gauchet summed up Swain's work in a preface to a new edition of her thesis entitled "From Pinel to Freud" and in "Dialogue avec l'insensé." Gauchet and Swain see two pivotal moments in the history of psychiatry: around 1800, owing to Pinel's formulation of "mental alienation" and around 1900, owing to Freud's creative insights.³⁷

These historians all see in Pinel a physician who, more than any other, transformed the "mad" into mentally ill patients for whom doctors must care. He thus broadened the province of medicine to include a new field of activity, eventually called "psychiatry."

Notes and References

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2. Jan Goldstein, *Console and Classify: The French Psychiatric Profession in the Nineteenth Century* (Cambridge: Cambridge University Press, 1987), chapter 3 "The transformation of charlatanism, or the moral treatment."

3. For a well-documented argument by an advocate of the psychiatric nursing profession, see Jack Juchet, “Jean-Baptiste Pussin, ‘médecin des folles,’” *Soins psychiatrie*, 1992, No. 142–143, 46–54 and Jack Juchet and Jacques Postel, “Le ‘surveillant’ Jean-Baptiste Pussin,” *Histoire des sciences médicates*, 1996, 30 (2): 189–198. Juchet totally discounts Pinel’s theoretical formulations, classifications and famous case histories, dwelling only on his appreciation of Pussin’s skills.
4. See Dora B. Weiner, “The French Revolution, Napoleon and the Nursing Profession,” *Bulletin of the History of Medicine*, 1972, 46(3): 274–305.
5. Thierry Gineste, in *Le lion de Florence: Sur l’imaginaire des fondateurs de la psychiatrie, Pinel et Itard* (Paris: Albin Michel, 2004), 17–18.
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11. Foucault, “The Birth of the Asylum” chapter 9 of *Madness and Civilization*.
12. For details, see Dora B. Weiner, “Le geste de Pinel: The History of a Psychiatric Myth,” in Mark S. Micale and Roy Porter, eds., *Discovering the History of Psychiatry* (New York: Oxford University Press, 1994), 232–247.
13. See “Recueil de règlements intérieurs concernant l’hôpital de la Salpêtrière,” esp. ms. # 70, Bibliothèque historique de la Ville de Paris. See Dora B. Weiner, “Les femmes de la Salpêtrière: Trois siècles d’histoire hospitalière parisienne” *Gesnerus: Swiss Journal of the History of Medicine and Science*, 1995, 52: 20–39.
14. Jean-Pierre Carrez, “Le régime intérieur de la Salpêtrière de Paris,” *Revue de la Société française d’Histoire des Hôpitaux*, 2003, 110(2): 17–22.
15. Archives de l’Assistance Publique/Hôpitaux de Paris; Archives hospitalières. Salpêtrière. See especially Registres d’entrée series 1Q2 Mutations de femmes aliénées, 6Q5 1–4.
16. See Weiner, *Comprendre et soigner*, chapter 6 “Les transformations de la Salpêtrière.”
17. For context, see Dora B. Weiner, *The Citizen-Patient in Revolutionary and Imperial Paris* (Baltimore, MD: The Johns Hopkins University Press, 1993).
18. See Dora B. Weiner, “The Brothers of Charity and the Mentally Ill in Pre-Revolutionary France,” *Social History of Medicine*, 1989, 2: 321–337.
19. Dora B. Weiner, “Observe and Heal: Philippe Pinel’s Experiment at Salpêtrière Hospice, 1802–1805,” in Eric J. Engstrom, Matthias Weber and Paul Hoff, eds., *Knowledge and Power: Perspectives in the History of Psychiatry* (Berlin: Verlag für Wissenschaft und Bildung, 1999), 25–43.
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24. Erwin H. Ackerknecht, *Medicine at the Paris Hospital, 1794–1848* (Baltimore, MD: The Johns Hopkins University Press, 1967), 48.
25. Pinel, *Traité*, 2ème éd., § 323.
26. The text of Pinel's report corresponds, with slight changes, to section VI of the *Traité* of 1809, "Results of Observations and Composition of Tables to Determine the Probability of Cure of the Insane."
27. For an assessment of the public response to publication of the second edition of the *Traité* in 1809, see the "Prologue" by Jean Garrabé and Dora B. Weiner to the recent reissue of this book (Paris: Les empêcheurs de tourner en rond/Seuil, 2005), 7–60. The response in Ibero-America was prompt and long-lasting. See a forthcoming study, "Psychiatry Comes to the Americas: a Global Perspective."
28. Jacques Louis Moreau de la Sarthe, *Fragments pour servir à l'histoire de la médecine des maladies mentales et de la médecine morale* (Paris: n.p., 1812), 1–71.
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32. The following passage relies on Goldstein, *Console and Classify* for many details. See, esp. chapter 4 "The Politics of Patronage."
33. For a detailed version, see Esquirol's article "*Maisons d'aliénés*," *Dictionnaire des sciences médicales*. (1818) 30: 47–95.
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35. See Gladys Swain's thesis, *Le sujet de la folie* (Toulouse: Privat, 1977).
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Chapter 9

German Romantic Psychiatry

Part I. Earlier, Including More-Psychological Orientations

Otto M. Marx

Early nineteenth century German psychiatry is usually presented as a dispute between those who saw the origins of mental illness in the mind—the mentalists or psychicists—and those who interpreted it in purely biological terms—the somaticists.¹ This simple notion actually applies only to the contest between the early representatives of the period, J. C. A. Heinroth, the Leipzig professor, and Maximilian Jacobi, the director of the Siegburg, one of the first and foremost of German asylums. While of interest—Heinroth was undoubtedly one of the most prolific and extravagant writers of the era, and Jacobi taught many leaders of German hospital psychiatry of the following generation—this battle of words may not be the most significant aspect of early nineteenth century German psychiatry.

Here as elsewhere in Europe we see the continued development of psychological and psychiatric literature, the early efforts to establish institutions for the care and treatment of the insane, and the clear emergence of a new medical specialty—psychiatry. Among these developments, which Germany shared with other European countries, the most characteristic is that the German psychiatric literature has been said to have been written in the spirit of early nineteenth century German romanticism. Condemned by later nineteenth century psychiatrists, who wanted to see psychiatry as a medical specialty based exclusively on biological science, the romantics have more recently been hailed as forerunners of modern psychotherapy and psychoanalysis.² Closer inspection reveals the limitations of these two positions, and modern historiography requires that we first try to understand these contributions in their own terms. To that end, selections of the best-known literature will be analyzed in detail. They are preceded by an introduction to Germany and the German thought and medicine of this period.

German Sociopolitical Background

Germany was not a nation like England or France, but a conglomerate of large and small states, duchies, and principalities, each with its own identity and autocratic ruler.³ One source speaks of 300 monarchs and 1500 demi-monarchs at the beginning of the nineteenth century.⁴ Ever-changing alliances and wars were the order of the day and had continued throughout the eighteenth century, during which Prussia had emerged as the foremost military power. The Holy Roman Emperor of the German nation was in Vienna, where he ruled the Kingdom of Austria but exercised no real control over Germany. Indeed he, in turn, was encumbered by selective alliances and waged war with other German states.

Industrialization and urbanization came late and did not gather momentum until the second half of the nineteenth century. People lived in villages and towns. The merchants and craftsmen who constituted the middle class were relatively poor, conservative, and pious and had little political power. Germany was rich

in learning, though, with the spirit of the Enlightenment flourishing in its universities. Despite the Enlightenment's influence on many German rulers and despite its impact on learning and the pursuit of knowledge at the universities, German society was not prepared for a transition from the rule of religious and political authority to the rule of secular reason. The commitment to the Christian religion was strong. The French Revolution frightened the German subjects as well as their rulers.⁵

By the early eighteenth century some German rulers had realized that Germany's heterogeneity and diversity were dangerous and divisive influences that made the German principalities vulnerable to invasion from the outside. This anxiety on the part of German monarchs led to political support for the universities. The founding of the University of Göttingen in 1734 and its program for science and philosophy exemplified this effort. The quest for common origins and promotion of the German language and culture were its basic ingredients. However, these efforts did not provide the needed unification, and in the 1790s, the French made heavy incursions into German territory. By 1806 Napoleon's alliances and conquests had established French control over all of Germany.

Only during the French occupation did the reforms begin: peasants received rights in Prussia in 1807; guilds and forced labor ended in 1811; Jews were emancipated in 1812. It was only after Napoleon's defeat that the Duke of Sachsen Weimar proclaimed the first constitution of a German state, followed by Baden and Bavaria in 1818.⁶ While England and France experienced the first conflicts of industrial development, Germany settled into the comfortable Biedermeier period. As late as 1837, a hundred years after the inauguration of their university, seven Göttingen professors were summarily dismissed by their duke for political reasons. The first uprising of German workers, the weavers of Silesia, did not occur until 1844, followed by the appearance of the *Communist Manifesto* and the March revolution in 1848. Compared to its neighbors to the west, Germany was slow in entering the modern period.

German Thought and Philosophy

In England, Scotland, and France the Enlightenment was readily identified with empiricism. Although John Locke's empiricism had led to Hume's skepticism (with its doubts about cause and effect relationships in nature), the new natural sciences, based on systematic observations and careful analysis of sensory data, initiated the discovery of cause and effect relationships everywhere. The new science flourished and progressed, despite the doubts of the philosophers and some outside the discipline of philosophy. The analysis of experience and experiment had become the exclusive basis for the scientific search for truth,⁷ a development likely abetted by the support of the rich and of middle class parvenus for much of the new science. This was totally unlike the situation in Germany, where science and philosophy were the exclusive province of the university.

German thought developed along a different course, largely because of the philosophy of Immanuel Kant, who viewed the Enlightenment from a different perspective. While acknowledging the Enlightenment as a significant European movement, Kant recognized the contradiction between the espousal of individual freedom and the sciences that reduced everything to cause and effect relationships. He feared for individual freedom if human relationships were to be subjected to this scientific scheme. He identified the Enlightenment with the courage to use one's own understanding without directives from others, and created a critical philosophy that epitomized the analytic thought of the Enlightenment but set firm limits to its application.⁸ Agreeing with the empiricists that we can have no knowledge beyond experience, he also recognized that we can think beyond its limits. He proceeded to analyze the sources of human knowledge and to define the limitations of science and metaphysics.

Unlike Locke and Hume, Kant did not consider the mind a passive receiver of sensory input. For Kant, both sensory perception and reasoning were active processes of the conscious human mind. Knowledge, Kant pointed out, is limited to the world-as-it-appears-to-us, that is, the phenomenal world. Time, space, and cause and effect were nothing more than categories we needed in order to unify experience and the self. For Kant the self is but another example of a mental concept rather than a reality.

According to Kant, the systematic observation of the phenomenal world may lead us to formulate laws of nature. But these laws are merely another example of our imposition of categories of thinking on observations. True science requires that the observed laws can be expressed mathematically. He therefore denied the possibility of a natural science of psychology.⁹ In metaphysics, which goes beyond the world of experience, one can only establish possibilities. Hence neither the existence of God nor that of personal freedom can be proven. Man has only the potential for freedom.¹⁰ Man can be the subject of scientific study, but that will never exhaust our knowledge of man as a normal being, possessed of free will and striving toward freedom. As such, man inherently resists and resents being treated as an object instead of as a person.

Kant's concerns led him to an extensive philosophical analysis of the human mind in health and disease. He saw man's perfection as based on complete control of his mental faculties so that they could serve his free will. Reason should rule, but without weakening sensuousness. Unlike the sensualists, Kant adhered to a faculty psychology in which the ego and consciousness were the central concepts. He recognized that the largest number of our perceptions are dim (Leibniz had originated the concept of the dim perceptions, which Herbart had developed into the concept of unconscious ideas), but he related them to the sphere of physiology.

Important and invariably misrepresented is Kant's dictum regarding forensic decisions. Since physicians and physiologists were as yet unable to explain or predict crime on the basis of the defendant's anatomical or physiological peculiarities, Kant asked that the judge refer to the faculty of philosophy the question of whether the defendant possessed his natural reason and judgement at the time the crime was committed. The question was a psychological one, and psychological expertise was to be found neither in law nor medicine.

Medicine at the German Universities

Law, medicine, and theology had been the traditional faculties at German universities. The addition of philosophy as the fourth faculty was an innovation of the eighteenth century.¹¹ The categorization of knowledge and the separation of philosophy, science, and applied science that today we take for granted was not yet established. Physical science belonged to philosophy and the biological sciences to medicine. Moreover, the German term for science (*Wissenschaft*) included the *Geisteswissenschaften*, or mental sciences, as well, so that history, philology, and the newly arising study of linguistics were considered scientific pursuits. At the small German universities it was not unusual that a professor served on more than one faculty, and his expertise frequently spanned several fields. The medical faculty was no exception, and it is to eighteenth century medicine that we must turn next in order to understand the context in which psychiatry as a medical specialty began.

The eighteenth century had seen further attempts to equate medical theory with one of the sciences, so that we continue to hear of iatromechanics, iatrophysics, and iatrochemistry.¹² At the same time, there was a renewed effort to systematize medical thought on the basis of direct observation of disease at the bedside—clinical medicine. In the first half of the eighteenth century the eclectic synthesis of the clinical method with iatromechanics and iatrochemistry proposed by Herman Boerhaave of Leiden represented the highest achievement in medicine. But Boerhaave's unchallenged supremacy and fame were equally based on his *Aphorisms* in the tradition of Hippocrates. Moreover, despite the decline of Galen's authority since Paracelsus in the sixteenth century and the rise of natural science in the eighteenth century, medicine was still intimately connected with traditional medicine and its origins in ancient Greece. The ideas, methods and prescriptions of the ancients continued to be of immediate relevance for medical theory and practice. The break occurred only later, at the beginning of the nineteenth century.

Boerhaave's clinical vision was developed by his students, who founded the new leading medical centres in Edinburgh and Vienna. Another of his pupils, the Swiss Albrecht von Haller, went to Göttingen, where he founded an experimental physiology that differed radically from previous attempts simply to equate medicine with science. Still, the older systems persisted and newer ones were continually added.

Among the older systems, Stahl's animism deserves special attention. Georg Ernst Stahl published his *Theoria medica vera* or *True Medical Theory* in 1707, ten years after he promulgated his phlogiston theory in chemistry. Both endured for nearly a century, and Stahl's animism or vitalism profoundly influenced the founders of psychiatry on the Continent. The influence of vitalism on Pinel is well known, and Ideler considered Stahl the founder of psychiatric theory. In the tradition of the *archeus* of Paracelsus and Jean B. Van Helmont, Stahl postulated the *anima* as the vital organizing principle that counteracts the living body's tendency to decomposition.¹³ The disease process, which Stahl equated with the *anima*'s attempts to re-establish equilibrium, should be abetted and not opposed. Stahl saw the most common cause of disease as the passions, whose effect on the heart and circulatory system he took to be well known. In mental illness a disturbing idea (*perturbata idea*) diverts the movement of the *anima* in the wrong direction. Such "dynamic" explanations seemed of no relevance to those who believed that a more painstaking correlation of clinical syndromes with postmortem gross organ pathology would make medicine a science. Despite the acclaim, pathological anatomy neither yielded immediate therapeutic results nor allowed for broader generalizations in clinical medicine.

In this confusion of findings, systems, and theories the simple notions of William Cullen's student John Brown seemed to offer a welcome solution.¹⁴ Rejecting the hallowed tradition of specific diseases each with its causes, pathology, course, and complex treatment, Brown offered a simple theory in the tradition of the methodists. Life is characterized by excitability and depends on the physical environment for stimulation. Disease is the result of insufficient stimulus or over-excitement; treatment is either stimulating or debilitating. Though Brown's ideas and his system were short lived in Britain and France, his influence persisted in Germany, where Kant and the romantics believed in Brown's promise of a new science of medicine. Brown's system highlighted the shortcomings of all previous systems and emphasized the unity of all life. It was this latter aspect that made his theory so attractive to the philosophers of nature, for it coincided with their romantic notions of unity.

One other system of late eighteenth-century medicine fascinated the romantics—Mesmerism. Like Brown, Franz Anton Mesmer set out to establish a theory that would render the rest of medicine obsolete.¹⁵ His concept of a subtle magnetic fluid permeating the cosmos—including man's central nervous system—which, like light, obeys the laws of physics, included speculative but rational explanations for miraculous and magical cures. Moreover, Mesmer's grandiose view of utopian society had romantic and political overtones that went beyond the Enlightenment's ideal of the reign of cool reason.¹⁶ Subsequently, when induced somnambulism and trance states became the Mesmerists' focus of attention, their interests corresponded with the romantics' concern with the dark side of life, the inner self, and the longings, dreams, and hidden forces that operate beyond the limits of the waking mind.

Kant had stayed within those limits but had established a critical philosophy that claimed for itself the right to categorize all human knowledge and to be the supreme arbiter in both science and metaphysics. In the early 1790s some German physicians hoped that a science of medicine could be established along Kantian lines.¹⁷ Later attempts to do so in the early nineteenth century—including the work of J. C. Reil and J. C. A. Heinroth, who knowingly placed their efforts in the wake of Kant's philosophy—were also indebted to the romantic movement and the philosophy of nature (*Naturphilosophie*) of Friedrich W. J. von Schelling. The overall title of romantic psychiatry seemed therefore justified for all of these efforts.

In European art and literature, romanticism, spearheaded by the writings of Jean Jacques Rousseau, represented a reaction to the neoclassicism of the Enlightenment.¹⁸ Well under way by the mid-eighteenth century, it was followed in Germany by the *Sturm und Drang* movement. The central figure of this movement, which extolled the triumph of man's individual spirit, was Johann Gottfried Herder. Critic, philosopher, Lutheran theologian, and close friend of Kant's, Herder had a lasting influence on Schiller and Goethe, who brought him to Weimar. Herder's extensive writings covered the philosophy of history and language, the development of man, poetical and aesthetic theory, and the history of music. His concern with the reconciliation of opposites, contradiction and unity, the interpretation of feelings, and reflection became the central topics of romanticism.

Romanticism yearned for an idealized past of national origins—early Christianity, the Middle Ages, mysticism, and the infinite. Vehemently anti-materialistic, it opposed the notion of objective knowledge.

To the romantic the cold light of the Enlightenment seemed to isolate man from nature and to deny man's extrasensory or supernatural relationships.¹⁹ It favored a subjective, spontaneous, intuitive experience of man in nature. Metaphor and analogy revealed to the romantic a universe alive, a pulsating organism, an organic unity of the whole world of which man was a part.²⁰

It is not difficult to see the appeal of romanticism for a divided Germany in search of unity, yearning for freedom, yet afraid to abandon religion and traditional values. Napoleon gave German romanticism its final impetus. As a historical figure he represented its values, and at the same time, Germans found in romanticism a powerful movement with which to oppose the conqueror and the French ideology he imposed. The widely held suggestion that impotence to effect changes in the real world led Germans to embrace romanticism as a substitute revolution is in itself an example of romantic thinking.

Romanticism reached its climax in the romantic school at the University of Jena.²¹ In the late 1790s and the first years of the new century the most prominent representatives of German romanticism stayed in or around Jena, ruled from nearby Weimar by that same duke who had proclaimed the first German constitution and who was the lifelong supporter of Goethe. Johann Wolfgang von Goethe, poet, writer, naturalist, scientist, and universal genius, served as the duke's minister and was instrumental in bringing the romantics to Jena, just as he had brought Herder to Weimar. Friedrich von Schiller, the other "great German" and Goethe's close friend, also spent his last years at Weimar and Jena. Both Goethe and Schiller influenced and partook of romanticism while retaining their classical ideals and autonomy.²² But they objected to the romantics' breakdown of the boundaries between poetry and science, phantasy and reality, and the romantics' apparent abandonment of reason.

Johann Gottlieb Fichte's idealism was the first step in this direction. Whereas Kant restricted what we can know and added further limitations to traditional categories of knowledge, the romantics broke them down. Abandoning the limiting concept of the world-as-such, Fichte relegated the objective world to a mere projection of the observing ego (*Ich*). The personal ego was but a part of the greater world soul of which nature was an expression.²³ While the modern reader may find such reasoning abstruse, it is worth noting that Fichte's thought led to Johann F. Herbart's ego psychology. Introduced to psychiatry only in the 1840s by Wilhelm Griesinger, it provided the basis for Freud's psychoanalysis nearly a century later. For Fichte himself there were more immediate and dire consequences to his teaching at Jena. Accused of atheism, he was forced to leave. He subsequently ended up in Berlin, where he profoundly influenced the curriculum and the teaching of sciences of the newly founded university (1810). Like Schelling and other romantics, he turned to mysticism and Catholicism in his later life.²⁴

Fichte's idealism was taken several steps further by Friedrich W. J. von Schelling, whose philosophy of nature broke with traditional boundaries of thought and with the categories of knowledge that Kant had so carefully established. Schelling objected to Fichte's subordination of matter to mind. For him mind was the highest expression of nature. Mind and matter were not to be separated but to be considered as one.²⁵

In his *Ideen zu einer Philosophie der Natur* of 1797, Schelling proposed a science of all nature based on a priori concepts from which all natural phenomena can be deduced. Fichte's world soul became the central concept, of which the inorganic or spiritual world are mere expressions. Hence Schelling's freedom to reason about them by analogy. For Schelling the human mind was subject to the same laws of nature as the outside world. Intuition and speculation, as expressions of conscious mind, could therefore provide the principles around which to organize all knowledge. Since consciousness represented the highest form of development of nature itself, a science based on the deductive speculative method came with higher credentials than the empirical science of Newton. Having abolished Kant's dichotomy, Schelling declared mind and matter to be one. That was his theory of identity (*Identitäts-theorie*).²⁶ Everywhere in nature Schelling saw gradation and polarity. The opposing forces in electricity, galvanism, and magnetism were mere expressions of the *Urpolarität* or arch-polarity that permeated the cosmos and maintained the cosmic heartbeat.²⁷ In a rapidly changing world the romantics had tried to reunite the two worlds of poetry and physics in order to preserve the totality of human experience and its artistic expression.²⁸ As E. R. Wallace notes, Jung was especially influenced by German Romanticism; which was also the source of some of Freud's ideas.

Looking back just one generation, a medical historian clearly saw the detrimental effects as well as the benefits that German medicine reaped from Schelling's philosophy of nature.²⁹ To practice and therapy, philosophy of nature had contributed nothing. Schelling's speculative, deductive approach and the relegation of experience to second place had a negative influence, since attention to the study of detail had suffered. Yet the destruction of some old established boundaries of thought and the suggestion of previously unsuspected connections proved fruitful. Organism and environment were seen as interactive, matter and form were seen as basically one. The significance of nutrition and metamorphosis was reiterated. The equality of development and life in all organisms, the relationship between micro- and macrocosms was re-established. Organs were seen as specific, yet as parts of the whole. The similarity of human nature to the rest of nature furthered the study of comparative anatomy and natural history. One can add that the emphasis on process and development, the study of man and disease over time—including the development of epidemiology and medical history—owed much to the romantic movement. Finally, it has been said that philosophy of nature paved the way for a natural science of medicine.³⁰

As a movement in literature, the romantic school quickly dissipated after 1810. In German science and medicine, however, its influence continued for several more decades. In the newly arising field of psychiatry its impact dominated well into mid-century. I therefore proceed with a review of the psychiatric literature of the period that is usually identified with romanticism.

J. C. Reil

First and foremost is J. C. Reil's 1803 *Rhapsodies on the Application of the Mental Cure to Mental Disturbances*.³¹ A volume of nearly five hundred pages, it is a detailed theoretical and practical discussion of all the psychological methods the physician may employ in the treatment of mental illness. At the time of its publication Johann Christian Reil was a professor of medicine at Halle for fifteen years and was recognized as a leader of German medicine. Seven years later he was to become the first professor of physiological medicine at the newly founded University of Berlin. He died from typhoid in the same year as Benjamin Rush. He contracted the disease at the Prussian military hospitals, which he directed during the war against Napoleon. Highly regarded as a practicing internist and surgeon, he was one of the first to use percussion of the chest. Famous as a teacher and researcher, he was a tireless writer and publicist, reformer of medicine and medical education, as well as an ardent medical politician and fervent German nationalist.³² His anatomical studies included the use of chemical agents in the definition of anatomical structure, especially of the nervous system, and were published in 1797 in *De Structura nervorum*. In 1796 he founded the *Archiv für die Physiologie*, which opened with his monograph *Von der Lebenskraft* (On the Life Force). Beginning in 1799 he published four volumes of a monumental work, *On the Recognition and Cure of Fevers*. Its fifth volume, as well as two other works on general pathology and general therapeutics (published posthumously), were completed under the influence of the philosophy of nature.³³ The *Rhapsodies* were written to bring the plight of the mentally ill to public attention and to gain support for the establishment of mental hospitals—especially to establish a hospital in Halle.

While the title is usually quoted and considered to reflect romantic notions, it is important to note that Reil used the term *Rhapsodie* to denote Kant's concept of a natural science based on empirical knowledge. A preliminary to true science, it was not reducible to mathematical certainty.³⁴ Aside from a glowing opening and closing section, the tone of the *Rhapsodies* is generally somber and in no way extravagant.

Following a call to physicians, the governments, and the German public to do everything possible to ameliorate the plight of the mentally ill, Reil called for a redefinition of medical practice. Everything physicians do is either surgical (that is, mechanical intervention), medical (affecting the chemistry of the body by the introduction of nutrients or medications), or mental (affecting the patient through his mind). The doctorate in medicine should therefore include medicine, surgery, and mental medicine. While the *Rhapsodies* are confined to a discussion of the mental treatment of mental illness alone, Reil reminded his readers that this method is of equal importance in the treatment of all medical disorders. To this end he

proposed an empirical psychology for and by physicians, different from the psychology of the philosophers, who seemed satisfied to establish a system of mental functions in the normal state. Medical psychology would have to relate the psychological to the physical and would have three subdivisions: physiology and pathology of mind, and mental therapeutics (to which he added a mental dietetic as a fourth).

While Reil saw the mind as acting in unison, he differentiated three primary, closely related mental powers, which he found most notably affected in mental illness and to which the mental therapy of mental illness was to be primarily directed. They are consciousness, circumspection, and attention (*Bewusstsein, Besonnenheit, and Aufmerksamkeit*). Reil equated consciousness with self-consciousness (*Selbstbewusstsein*), which unified all internal and external perceptions and makes us aware of our place in time and space. Reil's sensitive, detailed analysis of mental function avoided the reductionist concepts to which we have become accustomed. He recognized the gradual development of self-consciousness from the un-self-conscious state of the child that has as yet no sense of self and can only respond to pain or pleasure. Reil noted that we maintain our sense of self and of continuity, despite the interruptions of our consciousness in sleep and in periods of unconsciousness. Among disturbances of consciousness, Reil described the partial disturbance in consciousness in somnambulism, which is complete in our dreams. He found the dream situation to be reversed in madness (*Wahnsinn*), in which the mind dreams without the body being asleep. More recently his idea has been revived in modern dream research. Reil thought that self-consciousness was closely related to the functional integration of the nervous system. Disturbances in self-consciousness reflected a breakdown in which nervous centers functioned in isolation or in association with others but without connection to the main focus of coordination.

The second mental power, circumspection (*Besonnenheit*), is based on self-consciousness and, in turn, provides the basis for the third function, which is attention. By circumspection, Reil meant the mind's ability to attend to external and internal perceptions while maintaining an openness to other impressions, memories, or thoughts at the same time. Circumspection permits purposive mental action in a state of equanimity, and spontaneous free action ruled by reason. Circumspection can be voluntarily raised or forced to a higher level. Then it becomes attention. Circumspection is disturbed when the *Seelenorgan*, or the brain as organ of the mind, is too tense or too lax, or when the mind has been inadequately trained. It may also be lost as the result of a natural tendency of man to distract himself with his imagination. Attention is the mind's ability to voluntarily tie its energy (*Kraft*) to an object raised out of a mass of perceptions to clear consciousness. Attention then consolidates the connection. Disturbed attention may lead to distraction or preoccupation. In preoccupation, attention is excessive and goes too far. In distraction, attention never obtains. Both may lead to mental disturbances.

According to Reil, normal attention (*Aufmerksamkeit*) had on one side the Scylla of distraction (*Zerstreuung*) and on the other the Charybdis of preoccupation (*Vertiefung*), both leading to mental illness. Having proposed this psychological scheme, Reil was very much aware that he knew too little about the functions of the nervous system to provide a physiological basis for it. He proposed a hypothetical animating life current in the central nervous system. Its flow, circulation, aggregation, or dispersion would affect the energy level in the different parts of the nervous system as a whole. He pointed out that the mind has no energy except as derived from the brain, which must generate it. Images or perceptions (*Vorstellungen*) can only arise if the energy is physiologically provided. Memory, for example, is not explained by traces left in the brain, but the same forces that originally brought the image about can be reactivated. In sleep, images return without the benefit of central control.

Speaking of mental illness, Reil certainly had some, if not extensive, experience. Many cases he quoted are from the medical literature—including Pinel, John Haslam, and Tissot. A few were his own, and in these cases the illness usually began with fever. We must realize that all patients of that period had a plethora of symptoms rarely seen today and that many mental patients suffered from a multitude of physical ills of which their mental illnesses were often but a part. Reil recognized that mental diseases were rarely simple disturbances of one function. Usually they presented disturbances in more than one of the postulated basic functions or in the conceptual faculty, that is, *Vorstellungsvermögen*. Inhibition of the conceptual faculty produced catalepsy. Its acceleration produced thoughts chasing each other

(*Gedankenjagd*) or flight of ideas (*Flucht der Ideen*). Such inhibition or acceleration could similarly be seen in the patient's movements, which he called *cataplexy* or *flight of movement*, recognizing that these conditions may alternate.

Although Reil addressed mental treatment in the title of his book, he repeatedly stated that those who want to heal mental disease must be physicians of body and mind, for mental or physical treatment methods may alternate or may have to be applied in combination. Among the causes of mental illness Reil cited all of the traditional notions, including irritation of the phrenic area, the solar plexus, or the genitals. He considered these external causes since they are external to the central nervous system itself. The long list of physical treatments with mental effects—and therefore considered mental treatment methods—is quite eclectic. It includes electricity, galvanic current, and magnetism. Like Hughlings Jackson many years later, Reil pointed out that the symptoms of mental disturbance could not be the result of destroyed sections of the brain but must be related to its functioning portions.

Reil divided patients into competent and incompetent, the latter lacking the ability of reasonable self-determination (*vernünftigen Selbstbestimmung*). Only for the incompetent did he propose coercion. Rewards and punishment are useful for the incompetent, just as they are in the education of children or the government of the “mostly incompetent masses”!³⁵

Although Reil's concept of disease did not follow Brown's notion of a purely reactive process, his positive or exciting, and negative or calming, mental treatment methods reflect Brown's influence. Notable is the use of Brown's favorite: wine with poppy juice, though Reil cautioned that poppy juice may exacerbate the mental disturbance and may facilitate the manic to act on his impulses.

After his elaboration of the mental treatment method—that is, all measures having a mental effect, though they may be either physical or mental in themselves—Reil turned to specific applications. Here the modern reader encounters the greatest difficulties. Most historians are quick to condemn with accusations of cruelty when they consider the measures unwarranted or attribute compassion to the author when they agree. Any measure unacceptable to us is designated “medieval” or cruel. It is difficult to assess these “remedies” because we do not always know the rationale, the context, or the manner in which these measures were carried out. It may be preferable to assume that the physicians were under great pressure to do something for these very difficult patients. Through the millennia certain measures had been found helpful, some of them only because they met theoretical requirements. But then, these were the “correct” measures and there were always anecdotal cases to prove their efficacy. Others were based on observation, and a third category has usually been considered merely fanciful. A closer look at this last group shows us that Reil proposed the application of theatre, or drama, often with the patients' participation. The therapeutic value of drama was then well recognized and since then has been almost universally applied. Often he had not tried what he suggested, but then he was writing at a period that looked toward a future in which the unattainable would be realized—a stance typically taken by the romantics.

He favored the arousal of pleasure by providing clean air, healthy food, exercise, sleep, and a regular regimen. He recommended sunlight, gentle massage, and, “most pleasant of all,” sexual intercourse, quoting Chiarugi in support.

While he recognized that displeasure (*Unlust*) may lead to mental illness, he believed it could also counteract it. Hunger, thirst, sneezing powder, blistering plaster, seton, burning moxa, red hot iron, or burning sealing wax dripped into the palm of the hand were recommended. A threat of any one of these measures might suffice, he thought, and he quoted Langermann in support of his contention. He knew of cases in which whipping with nettles or a strong tickle had brought patients out of a totally unresponsive state. Chiarugi had induced miliary fever. Reuss had inoculated patients with pox, and Müzel had a patient respond after infecting him with scabies. The last case had resisted beatings, induced vomiting, constant drip, and submersion in water. Reil recognized that he was advocating the use of torture, but then torture was a venerable European tradition. He believed these tortures to be “harmless,” including among them the use of mice under a glass on the skin and goats to lick salt-covered soles.

Submersion in water had been favored by the great Boerhaave and his student De Haen. Reil knew of agitated patients who had escaped, tried to drown themselves, and, when pulled out of the water, had

regained their sanity. Therefore, it seemed logical to attempt it. Reil reserved corporal punishment, including the bullwhip, for patients who were aware of their transgressions and who understood the reason for punishment. In any other situation Reil thought it would be “barbarous.” No attendant was to strike the patients, and only the supervisor was to use the whip. Restraints had only one purpose: to prevent harm to the patient or others. In any other situation they were detrimental since restraint upset the patient and inhibited the expression of the disease, a process through which the patient discharged his excess energy. Restraint was contraindicated as long as one expected to cure the patient. For incurable patients the proper means of restraining were still undeveloped. To revive the senses that appeared impervious to touch, sound, or sight, Reil proposed grandiose stage settings, such as a pitch-dark cave filled with the strangest alive and dead objects, skeletons, “furmen,” and ice pillars. Cannon shots, drums and firecrackers might be used, and he recalls having heard of a cat piano, composed of live cats whose tails would be hit with nails. Why does he mention it? He recommended music, a theatre for the mentally ill with roles suited to their individual needs, and in the same breath mentioned Chiarugi’s success in curing a patient by suspending him in mid-air. It is even more difficult to assess what Reil had in mind when we read that all the patients who recovered after music therapy had suffered from fever.

The application of medical psychology required a good knowledge of the human mind in general and of the condition of the mentally ill in particular. Medical psychology would be empirical and give equal consideration to body and mind. It would have a physiology and pathology of mind and mental therapeutics. Treatment would have to be developed on the basis of an educational science for the mentally ill (*Erziehungskunde für Irrende*). The psychiatrist (*psychische Arzt*) should avoid elaborate language. He should speak simply and directly, limiting himself to a few salient points. Reil passed over the “mental measures themselves,” that is, the specific psychological interventions. They would only serve as an “armamentarium for empty heads.” The knowledgeable physician will apply his knowledge “extemporaneously,” that is, creatively and appropriately to the situation.

It is clear from the foregoing that it is practically impossible to generalize summarily about Reil’s proposals, attitude, or conclusions in just this one book. He certainly maintained a realistic perspective regarding the limited efficacy of treatment and its dependence upon the “artfulness” of the practitioners. The complete submission of the patient—for which he was criticized—he saw as the initial goal of treatment, and he described how one could suspend the patient in mid-air over a fire-spitting dragon. In this instance Reil added that he wrote down his phantasies in order to stimulate the physician to develop his own appropriate measures. Once the patient had submitted, he must become the active, circumspect subject who plays an active role in his own care. The retraining of pride, or, as we would say, self-esteem, and cognitive training, swimming, and gymnastics were elaborated. The work of Gutmuth should be modified for the needs of the mentally ill.³⁶ Reil reviewed the literature recommending work, occupation, and mental exercises from Celsus through Pinel to the York Retreat.

Reil’s classification of mental illnesses brings up the difficulties we face in our attempt to understand the psychiatric literature of this period. Some terms, such as melancholia, do not refer to what we mean by it. Others are used by several authors in different ways. Worse still is the problem of translating the German terms. Some turn out to be translations from the English or French literature. Reil uses *Seele* and *Geist*, soul and spirit, interchangeably, and he does not ascribe a more spiritual meaning to them than to mind. But this is not true for other authors, who had specific mental entities in mind. *Verückungen* and *Zerrüttungen*, as well as *Störungen*, *Narrheit*, and *Wahnsinn*, have quite different meanings at times.

In the classification of his psychopathology Reil distanced himself from that of his collaborator Hoffbauer since he saw no clinical evidence for it. Reil’s own four classes were as follows: fixed delusions (*fixer Wahn*), mania (*Wuth*), folly (*Narrheit*), and idiocy (*Blodsinn*). They provided sufficient constancy in symptoms to be considered specific dynamic disturbances of the brain. He noted that intelligent people became foolish after going through a state of fixed delusions or mania, and recognized that bleeding could result in a transient loss of mental function. This was a dynamic loss as opposed to chronic idiocy based on a change in brain matter. He estimated that one quarter of the patients in madhouses were idiots who were formerly insane. Excessive bleeding, purging, emetics, and epilepsy had contributed to their sad state.

Reil proposed separate hospitals for the curable and the incurable, but all patients were to be admitted first to the former. A physician, a psychologist, and a supervisor were to collaborate as equals in the hospital's administration.

In the *Rhapsodies* Reil equated mental diseases with disturbances of brain function, stipulated a great variety of physical and psychological measures, and proposed the development of a medical psychological science. He voiced similar opinions in the fourth volume of *On the Recognition and Cure of Fevers*, but Reil objected to Gall's premature localization efforts since "the true structure and mix of the brain are still a secret." He proposed a natural science of man, in which physiology and psychology represented the objective and subjective sides. Reil's mental dietetics (*Seelendiätetik*) was in line with Kant's ideas, but with regard to the arousal of passions Reil was now much more cautious than in the *Rhapsodies*. Fear, anxiety, and pain "are always dangerous." They can "unhinge the microcosms" and can kill "on the spot." How are we to relate these cautions to the fanciful induction of terror of the *Rhapsodies*?

The difficulties in assessing Reil's position are further compounded when we examine his journal articles. His well-known monograph on the life force, published in his *Archive for Physiology*, opposed Stahl's vitalism.³⁷ Reil proclaimed physics and chemistry to be the basic sciences of the new physiology from which all metaphysics "including a world soul and a nonphysical life force" were to be banished.³⁸

In 1808 Reil collaborated with the Halle philosopher and psychologist Johann Christian Hoffbauer in the publication of a new journal, *Contributions to the Advancement of Mental Therapeutics*, after his first venture the *Magazine for Mental Therapeutics* had folded.³⁹ In an article published in the second fascicle of the *Contributions*, Reil coined and defined the term psychiatry.⁴⁰ In his opinion all physicians required psychiatric expertise, that is, the ability to treat their patients' minds. Psychiatry was not limited to psychological intervention nor to the treatment of mental illness. Reil objected to such a purely mental medicine (*psychische Medizin*). It is here, in his broadly conceived scheme for all of medicine, based on surgery, internal medicine, and psychiatry each affecting the organism at a different level of organization, that we see the influence of Schelling's philosophy of nature. The real and ideal poles of the organism are characterized as oxygenic and hydrogenic, or contractile and expansive. While at the lowest level of natural organization magnetic forces provide unity, electric processes differentiate and chemical processes unite them both. This assumption allows for the hypothesis that organic and inorganic chemistry are not fundamentally different. Reil sees life as a dynamic process integrated into an environment with which it is in physical and chemical equilibrium. "There are no purely mental diseases and those in whom predominately the mental side has been wounded cannot necessarily be cured by mental means."⁴¹ Conversely, other disorders can be cured by mental means. Reil makes it explicitly clear that he is not speaking of the immortal soul, but of the mind, which can be understood by studying its development in animal and man.

If, in his later years, Reil had succumbed to the charm of philosophy of nature, neither the *Rhapsodies* nor *The Cure of Fevers* showed much evidence of it. Indeed, in his opening appeal to all who were to join in the cause of the mentally ill he included "the group of sublime speculative philosophers of nature who like eagles hovering above all, assimilate their earthly bounty in the purest ether and give it back as beautiful poetry."⁴² Clearly, Reil did not count himself among them. Others did so much more readily.

A. Haindorf and F. Schelling

Among those others was Alexander Haindorf, the first to teach psychiatry at a university (Heidelberg 1811) and the first Jewish psychiatrist. In 1810, the year of his graduation from the University of Heidelberg, Haindorf wrote a *Pathology and Therapy of Emotional and Mental Diseases*.⁴³ He later taught psychiatry, as well as surgery and obstetrics, and was generally known for his report on French medical practice and hospitals.⁴⁴ His psychiatric text had little if any influence. Haindorf compared individual life to a galvanic process, existing between positive and negative polarities, and represented chemically by hydrogen and oxygen. One of the poles may engulf the other or external influences may exhaust both. Hence arose disturbances in the equilibrium. "The idea of the soul in its highest, purest meaning is equal

to the World Soul, the principle of the real and the ideal in the universe.” With soul or mind equated to God they could never become diseased.⁴⁵

Faculty psychology once again provided the basis for schemes of mental illness, but the restraint shown by Reil is missing. Neither clinical considerations nor his lack of knowledge limit the author. Admitting to inadequate data in cerebral anatomy to allow for the localization of functions, he readily locates disturbances of self-consciousness in the cerebellum. He followed his teacher Jakob F. Ackerman and placed emotional disturbances in the spinal cord. Clairvoyance—the highest stage of animal magnetism—was a vestige from an earlier period in history. Then everyone possessed it and could use it to cure themselves.⁴⁶

Haindorf was merely quoting Schelling, who summarized his views on the mind the very same year. For Schelling the soul (*Seele*) was the impersonal “rapport to God” to which the emotions (*Gemüt*) and the spirit (*Geist*) were subservient. Disease was an interruption of this rapport. Emotional disturbances occurred when the passions defeated the emotions. An interruption in the communication between the soul and the faculty of understanding (*Verstand*) with the spirit led to madness (*Wahnsinn*). Furthermore, Schelling proposed that madness pre-existed. It emerged when understanding could no longer control it. For Schelling, madness was basic to human understanding, which in turn was nothing but regulated madness. Reason was not necessarily superior to mere understanding. Reason was understanding in its passive mode. Schelling argued that understanding was totally subservient to the godly soul when it was governed by reason. “Though one speaks of diseases of the soul, they do not exist.” Clearly Schelling spoke of his own peculiar definition of the various terms. His ideas were not mere philosophical observations about the individual psyche, but part of a greater scheme, a utopian program for the liberation of mankind.⁴⁷ Schelling believed that universal freedom would have to await a religious transformation of the state. But the individual could anticipate this utopia and set himself free before all of mankind.⁴⁸ Interestingly, this led Schelling and the romantics to demand absolute responsibility from the individual for himself, a value that became the centerpiece of Heinroth’s theory of mental disturbances. But unlike Haindorf, Heinroth did not accept Schelling’s notion of the soul. For that, Heinroth turned to Christian religion.

J. C. A. Heinroth

Johann Christian August Heinroth was born, raised, and educated at Leipzig, a short distance from Reil’s Halle and Goethe’s Weimar and Jena. Before he obtained his doctorate he had practiced at Leipzig and in Italy, and had studied in Vienna. Work in French military hospitals and a local workhouse followed, and in 1814 he was appointed physician to Leipzig’s St. George’s, a combined penitentiary, orphanage, and hospice that also accommodated some mentally ill. His appointment to a newly founded chair of psychotherapy at the university in 1811 was followed by a doctorate in 1817 and a professorship in 1827. He died during his first year as dean of Leipzig’s medical faculty.⁴⁹ The newly founded *American Journal of Insanity* eulogized him as “the most distinguished of the German physicians for knowledge of mental maladies.”⁵⁰

From the beginning Heinroth, like Stahl and Kant before him, carefully differentiated psychopathology associated with physical illness from actual mental disturbances.⁵¹ He modified Kant’s classification of mental disturbances and disagreed with Reil, who had related these “actual” mental disturbances to disturbed brain dynamics without observable anatomical pathology. Where Reil had coined “psychiatry” to denote all medical treatment directed at the patient’s mind, Heinroth carefully reserved his term of *mental physician* (*psychische Arzt*) for the specialist treating mental disturbances of reason.⁵² He specifically excluded transient disturbances of reason in association with organic ills, including “all fevers, all diseases of nerves and brain, phrenitis, paraphrenitis, hydrophobia, fever delirium, catalepsies, apoplexy, and all soporific conditions, diseases of the senses, namely the so-called hallucinations, epilepsy, St. Vitus dance, nightmares, hypochondriasis and hysteria.”⁵³ Heinroth, however, agreed with Kant that general physicians were not qualified to determine the mental status of defendants since only the new mental physicians would have the necessary knowledge of psychology. He clearly regarded himself as an able representative of this new specialty. Unfortunately, he also used Reil’s term *psychiatrist* interchangeably with his own

term of *mental physician*. Adamant that the mental diseases as defined by him were disturbances of the soul and had no basis in physiology, Heinroth confounded the situation even further. He compared his unique ideas to those of Reil and others who conceived of psychiatry and mental illness in much broader and totally different terms.

Eschewing references to the literature or anatomical considerations, Heinroth's purely theoretical text opens with definitions of mental life in health and disease and the development of consciousness, which is unique to man. In infancy consciousness is limited to world-consciousness; pain and pleasure are its ruling principles. Consciousness of self develops in the second stage. Its goal is individual independence, and most people develop no further. In the third stage, reached by only a few, conscience arises within the self, yet in opposition to it. In this stage the ego is transcended and the individual is fully dedicated to reason and to God. It represents the epitome of mental health.

Mental illness was the end stage of this same process gone awry. Heinroth equated it with the *menschlichkrankhafte Zustand*, that is, "Man sick in his humanity." The progression toward mental illness was by way of error, sin, and vice, that is, the progressive abandonment of reason. This was the central principle of Heinroth's theory. Although reason was postulated to rule supreme only in the third stage of consciousness, Heinroth believed that conscience and reason were incipiently present at each stage of development. To that extent, man always had some degree of choice. If he failed to follow the voice of reason, he acquired guilt. Quoting Schiller to the effect that only moral man (the man of reason) is free, Heinroth saw any deviation from reason as "a step into the realm of bondage in which the disturbances of mental life have their seat."⁵⁴ Without knowing it, man was dedicated to God as soon as he stepped into this world, and his consciousness, equated with reason, wants to lead him to God. "That this happens so seldom is his guilt, and out of this guilt derive all his troubles, also the disturbances of mental life."⁵⁵

Physical predispositions were given short shrift; they were, after all, the result of an unhealthy mental life. Even physical illness could be the result of a way of life for which the individual is responsible. External factors like "climate and miasma" affected only those who are susceptible. Thus susceptibility was also the individual's responsibility. Although injuries to the brain or physical illnesses could produce mania, madness, or idiocy, Heinroth excluded these disruptions of mental functions from the definition of mental diseases. The passions were not the product of physical states but their cause. One could read Heinroth and surmise that he was limiting himself to the endogenous psychoses, as Gruhle suggested, or simply conclude that he was totally divorced from clinical reality.⁵⁶ Better perhaps, we may tend to agree with his contemporary critics who objected to his pious mysticism and saw him as too involved in an abstract psychology "borrowed from philosophy" and "too extreme" in his commitment to psychogenesis.⁵⁷ Surprisingly, no one at the time objected to Heinroth's preposterous claim that, among the religions, only Christianity could save man from mental illness! His stress on the individual's responsibility may have been related to his mother's Pietism. For Kant, whose mother was also a Pietist, the power of will alone sufficed in overcoming the passions and emotional disturbances. The loss of free will was for Heinroth the worst state of mental corruption—a sheer hell.⁵⁸

Heinroth dissociated himself from "Kantisizing" physicians and recent disciples of philosophy of nature whose "well-intentioned contributions to the topic of mental disturbance" were worthless.⁵⁹ Yet his own work clearly demonstrated his debt to both. Unlike Kant, he preferred the romantic idealization of human existence, and this ideal became the norm. He chose it explicitly over the more sober alternative that sees man as a "self-contradictory being" (*sich selbst widersprechendes Wesen*).⁶⁰ This position readily accounts for his constant self-contradictions, for he could not contain the paradoxical nature of man in his scheme. The romantic influence is apparent in Heinroth's consideration of mental function and dysfunction and his concept of treatment in developmental terms.

Heinroth's History of Psychiatry

Heinroth presented an erudite history of mental disturbances and their treatment. He ascribed periods of historical revolution to mankind, correlating these with special types of mental disturbances and

with different treatment modalities. His historical presentation makes it clear that a break with ancient, medieval, and renaissance medicine has occurred. He noted that the eighteenth century had seen the development of different schools in medicine analogous to schools of painting, and that national differences henceforth justified a separate discussion of French, English, Italian, and German medicine. His erudition is amply demonstrated. He found Chiarugi indispensable. Among the English, Arnold was the best; in France the work of Pinel and Esquirol represented the greatest “leap forward.” After Langermann had provided the guidelines for the diagnosis and treatment of mental illness in Germany, Reil was the “actual founder” of psychiatry.⁶¹ With Ernst Horn, the notorious inventor of the sack, empiric psychiatry had reached its highest development at the Charité Hospital in Berlin! (Heinroth totally disregarded the fact that Horn had been dismissed from his prestigious post because of a patient’s death). All that was needed was the “spiritual elaboration” of the new field, and that is what he planned to provide.⁶²

Heinroth’s Diagnostics

Heinroth arrived at his list of mental diseases by applying John Brown’s concepts of “hypersthenia, asthenia and combined hyper-asthenia” to each of the three mental powers—the emotions, the intellect, the will—either alone or in combination with each other. The will, for example, could be disturbed by itself or in combination with the intellect and the emotions or both. This yielded four possibilities and a total of thirty-six species of mental illness. To these he added seventeen varieties from the literature, and allowed for subclassifications in some instances, leading to a grand total of fifty-seven disorders.⁶³ Yet all these varieties were subsumed under a single heading: “lasting bondage or lack of reason, independent and by itself, even with apparent physical health, a disease or pathological state, including the sphere of diseases of the emotions, the intellect and the will.”⁶⁴

Who should treat these diseases? Heinroth’s answer was fundamentally the same as Reil’s. The psychiatrist will have to learn from the minister and the educator, develop the skill of psychological observation, and live a life of reason. “Only reason can recognize mental disturbances and only reason can cure them when they are curable.”⁶⁵ Heinroth defined treatment as re-education, but agreed with Reil that mental illness must be treated by the physician because physical measures must also be employed. In agreement with Reil, he considered these physical interventions “indirect mental interventions” because their purpose was the modification of the patient’s mental state. Like Reil, he did not want to prescribe a specific psychological treatment plan since this must be left to the creativity of the physician.⁶⁶

Seven years later Heinroth wrote *A Guide for Young Psychiatrists for the Correct Treatment of Their Patients*. A contemporary review of the book epitomizes the problem Heinroth’s writings have posed ever since: “Totally unacceptable,” yet “fascinating and illuminating” at the same time. Although his viewpoint “will never be accepted,” one critic wrote—and there seems to have been no one who ever did accept it—the book was “highly recommended, especially for its implications for practice.”⁶⁷

Some of Heinroth’s best points are the result of profound introspective analyses. “Man lives the way he loves,”⁶⁸ attempting to solve a problem by escaping into delusions, then trying to resolve the impasse through his subsequent actions.⁶⁹ He could see too that human emotions, like physical forces, seemed to obey the laws of physics, something the philosophers of nature “had assumed as a norm.” Perhaps he was correct when he restricted the applicability of the physical analogy to the disturbed mind that has lost its freedom, so saving the notion of free will.⁷⁰

His integrated view of body and mind led to discussions of this close interrelationship and the attempt to correlate specific emotional changes with bodily states.⁷¹ It also led Heinroth to coin the term *psychosomatic* in conjunction with a discussion of the most common “sources” of insomnia.⁷² His discussion of treatment is well organized and detailed, though he was not overly optimistic about its success.⁷³ Careful diagnosis, establishing complete control, and the physician’s intellectual superiority were its prerequisites.⁷⁴ Heinroth differentiated between the physician’s attitude toward his patient and the therapeutic measures the physician applies,⁷⁵ fully recognizing the importance of the therapeutic relationship, which, he wrote,

“off-handedly we call magnetism” until we know more of its character. Like Reil before him, Heinroth presented all measures and devices recommended for the treatment of mental illness including physical punishment, thunder and lightning, and Reil’s theatrical productions. Unlike Reil, Heinroth was quite liberal in his recommendation of leeches, bleeding, blistering, and the “carefully controlled” use of Cox’s machine.⁷⁶ Like Reil, he too was criticized for listing and not condemning all cruel and unlikely measures from the past. Some of these abominable measures were not from the past at all—Authenrieth’s pear and Authenrieth’s blistering ointment, among others, were among the newest inventions of German psychiatry. We must accept that he approved them and recommended them in his writings.⁷⁷ No one knows what measures Heinroth actually used in his practice, which was certainly limited. He quoted Arnold’s cases from the literature because of his own lack of practical experience, and yet he never tired of criticizing others as mere armchair psychiatrists.⁷⁸

Heinroth’s writings epitomized the attempt at a philosophical clarification of the new specialty. That is why he wrote an *Anthropology*, or philosophy of man. It was brilliantly written and carefully footnoted.⁷⁹ Although previously Heinroth had spoken of the body as just the external expression of mind, he opened this work with a review of man’s physical development, followed by a detailed discussion of the development of mental life. The reader learns much about embryology and developmental anatomy. Yet for Heinroth, the individual—he was taking the term literally—was indivisible and his material existence was but the external expression of his self.⁸⁰ Heinroth knew the extensive European literature in philosophy and the sciences. Though the influence of Schelling’s *Naturphilosophie* is obvious, it is just one of many influences that Heinroth brings to his book, which in the final analysis is very much his own. Having gone through his previous work, we find extensions of his ideas, but the basic message is the same. Two volumes on *Mental Health*⁸¹ give the patient full responsibility for his mental and physical health. The man who coined the term *psychosomatic* already anticipated some of the more extravagant claims to be made for specific psychosomatic correlations in later centuries. Others reflected old humoral medical ideas. Fear leads to paralysis, rage to hepatitis, envy to jaundice. It was inevitable that Heinroth would equate prevention with ethics, as he had already done six years earlier, and as he did again in his 1834 *Lessons for Proper Self Treatment in Beginning Mental Illness*, written for the lay public, and again in his final work on prevention, entitled *Orthobiotik* (Correct Living).

Heinroth and Forensic Psychiatry

Finally, something should be said regarding Heinroth’s contribution to forensic psychiatry.⁸² In his text of 1818 Heinroth had already addressed forensic issues and had defined the need for a medical forensic psychology,⁸³ limiting the forensic psychiatrist’s task to determining whether the defendant had control over his reason and will. Heinroth elaborated his ideas at much greater length in his *System of Legal Mental Medicine* of 1825 and his *Foundations of Criminal Psychology, or The Theory of Evil in its Application to Criminal Justice*.⁸⁴

Heinroth’s central concept is the *person*. Mental disturbances affect the person as a psychological unit, and it is as a free person that the individual functions in society. In forensic decisions, psychiatry and law join forces, for both are concerned with the question of whether a free agent chose to commit a criminal act. Twenty-five years earlier, Reil’s collaborator, Hoffbauer, had already called for a criminal psychology in his *Applications of Psychology to Law* of 1808. Heinroth felt he differed from Hoffbauer, a pure psychologist, who had limited his concept of mental disorder to defects in the mental faculties or to their interactions.⁸⁵ According to Heinroth, Hoffbauer had been too inclusive when he considered brief lapses of reason as mental illness. One of Heinroth’s main purposes was to establish meaningful limits to the insanity defense. He especially opposed the dominant trend in forensic psychiatry, which defined all reprehensible or criminal acts as the product of psychopathology.⁸⁶ Heinroth recognized that punishment had not been an effective deterrent, and he separated guilt from punishment,⁸⁷ recommending that the mentally ill who are found guilty should not be punished. If the person found not guilty by reason of insanity later recovered, he should not be punished then since mental illness was punishment enough.

Heinroth was convinced that guilt could be established by psychological examination, but he made the mistake of equating conscious guilt feelings with actual guilt. He also spoke of unconscious guilt or repressed guilt, which was typically found in hardened criminals, perfect egotists, and the transiently or chronically unfree, that is, the mentally ill.⁸⁸ Heinroth knew that he stood quite alone with his opinions—the reviews of his forensic work were usually negative.⁸⁹ The high standards he set for the examination of the defendant and his thoughtful elaboration of the issues eventually received the recognition they deserved.⁹⁰ The review of his actual cases (they were published posthumously) showed that in practice Heinroth was not the blind fanatic he had been accused of being.⁹¹

Years later one of his students recalled how “he was decried as a pietist zealot by those who did not know the joyful, mild, benevolent man.” He remembered Heinroth, famous as a writer on mental diseases and related philosophical topics: “At a time when the anatomical and physiological approaches were still totally tapping in the dark, Heinroth put the main value on psychological development.” But his system was “too artificial” and “unfortunately he used the word sin in such an exceedingly deviant way he came into serious discredit.”⁹² As we have seen, there were many other problems with Heinroth’s writings. When the former student tried to explain Heinroth to Esquirol, he reportedly said, “*Ah ca, ce sont de vos obscurités allemandes.*” But even in Germany Heinroth was rejected since even those who saw mental illness as a primary mental disorder could not accept his basic thesis.

J. B. Friedreich

The most vociferous opposition came from the somaticists, led by Johannes Baptista Friedreich, and Maximilian Jacobi. I first turn to Friedreich, who, like Heinroth, was a professor at the university, primarily a writer and publisher with even less practical experience than his opponent in Leipzig. I then discuss the development of German mental hospitals, since Jacobi’s position—though philosophically prejudiced—was also largely determined by his many years as a practicing psychiatrist and superintendent of an asylum.

J. B. Friedreich, son of a local physician and father of a famous Heidelberg clinician, became professor of medicine at Würzburg at twenty-four. He was subsequently appointed physician to several courts and also taught at Erlangen. Well known for his books on psychiatry and forensic psychology, he also published a journal on forensic medicine, a handbook on food, a study of the *Iliad* and the *Odyssey*, as well as a *Symbolism of Nature* and a *Symbolism of Heaven*. His 1830 *Inquiry into the Historical Literature of the Pathology and Therapy of Mental Diseases* was the first extensive bibliography of the history of psychiatry. Friedreich’s main work, his *Handbook of General Pathology of Mental Diseases* of 1839, defends the position that mental illness is always secondary to somatic pathology and also contains the curious observation that “undoubtedly the most interesting and profound correlation exists between the sexual system and mental life. Hence we find it sufficiently proven that the most frequent source of mental diseases is to be sought in different abnormalities of sexual life.”⁹³ Nothing came of it until Freud picked it up later in the century.

Of far greater interest is his *Critical Presentation of the Theories of Mental Diseases*,⁹⁴ which provides a critical review of the extensive English, French, and German psychiatric literature on this topic. Over 70 of the 324 pages are concerned with Heinroth, who he hopes will be the last in the “devilish comedy that began in the Bible with the possessed.” According to Friedreich, the mind cannot be diseased, for it is but a modification of the life force. Only matter can be abnormal in parts, and it is parts of the brain that are affected in mental illness.⁹⁵

Friedreich called Heinroth’s notion of the mind succumbing to evil “Heinroth’s cohabitation theory” (*Beischlafstheorie*) since he recognized its similarity to the accusation that witches had sexual intercourse with the devil. He saw little mental illness in penitentiaries or among prostitutes; wise and innocent people became mentally ill, including “Lavater’s wife, a model of female virtue.” Clearly, neither guilt nor sin could be a factor in mental illness. Most “physicians and philosophers” adhered to a somatic theory because physical measures alone had been effective in the treatment of mental illness. Among those cured

by physical means, less than one in ten relapsed, but in the York Retreat, with its purely moral treatment, the cure rate was much lower than in other institutions.⁹⁶

Friedreich recognized that the mind could affect any illness, but it invariably did so by arousing feelings or stimulating the imagination, that is, by a physical effect. Cool reasoning or reprimand were useless and had never effected a cure or corrected a delusion. He made the interesting point that he had also “proved” the somatic nature of mental illness. A patient could be aware of the absurdity of his delusion. The delusion was in one of the hemispheres of the brain, and the recognition of its absurdity was in the other. The “duplicity” of the brain could readily explain the clinical situation. Friedreich pointed out that even the defenders of psychological points of view, such as the philosopher Beneke and Michael Leupoldt, could not accept Heinroth’s conception of the role of guilt in mental illness.⁹⁷ Yet Friedreich believed in Heinroth’s specific psychosomatic correlations and shared the conviction that the re-emergence of skin eruptions or the re-establishment of hemorrhoidal bleeding could bring about a cure. No one seems to have objected to these old, traditional ideas, but not everyone shared Friedreich’s belief in a special physiognomy and specific body odor associated with madness. Jacobi eventually showed that there was no evidence for it.⁹⁸

Friedreich quoted many authors who found that physical diseases invariably preceded mental decompensation. At the same time the mentally ill seemed resistant to a variety of physical ailments, and physical injuries frequently led to the healing of mental disease. Since both Heinroth and Hoffbauer had considered intoxication analogous to mental illness, they should have drawn the obvious conclusion that insanity is a physical disturbance like intoxication and poisoning.⁹⁹ Indeed, fever delirium, as Reil had already pointed out,¹⁰⁰ should never have been separated from delirium, an idea with which Combe agreed. The modern reader is impressed by the common occurrence of mental disturbances in uncontrolled physical illness of the period. It led one physician to coin the phrase *Typhomania* based on his own experience of typhoid fever.¹⁰¹

Spurzheim thought mental alienation was always the result of “deranged cerebral organization” even if nothing is found at autopsy. Georget’s dictum that mental illness is a brain disease was supported by the observation that all the incurable patients who lived became demented and over half of them suffered from partial or general paralysis. As Friedreich pointed out in his critique of another moral theory, belief and moral theory could not be the basis of a theory of the genesis of mental illness. That should be based “on natural science and purely scientific proof.”¹⁰² Unfortunately, Friedreich was not the person to do this. According to the observations of Ernst Horn’s son Wilhelm, who visited Würzburg in the late 1820s, “Friedreich never treated a patient and does not lecture. There is not teaching of psychiatry, the theoreticians want Heinroth, the practitioners view him with derision, but do not trust themselves in this section of therapy, the students believe they do not need him.”¹⁰³

Wilhelm Horn’s observations went to the heart of the matter: Neither Reil’s enthusiasm, Haindorf’s application of Schelling’s *Naturphilosophie*, Heinroth’s religious ethic, nor Friedreich’s foregone somaticism—or his quite justified and learned critique—could function as a basis for psychiatric practice.

The difficulties inherent in a review of this literature are many, and some have been pointed out. It is practically impossible to summarize the rich material in all its aspects and contradictions, its theoretical and philosophical implications. The careful analysis of a few texts seemed therefore preferable to an overview, which is available elsewhere.¹⁰⁴

It has been proposed that a flourishing philosophical psychiatric literature without a basis in practice was unique to Germany, and that in England and France psychiatry began with the establishment of mental hospitals, psychiatric practice, and an empirically based literature. A closer look shows that in those countries too, writing on mental illness—uninformed by extensive experience—also preceded the work of the pioneers of psychiatric practice. Unfortunately, most psychiatric history does not carefully differentiate between political and social developments, the history of institutions, the role of governments, or changes in the medical profession, its practices, and its literature. Consequently, we have come to assume that medical writings initiated a new era or represented changes in practice.

The romantic psychiatric literature discussed so far was unique in its attempt to establish an integrated theory of mental illness that would retain traditional values and beliefs and conform to Kant’s concept of

science and to the romantic notions of individual responsibility and the unity of mind and matter. It becomes a more understandable endeavor when it is seen as an attempt to enhance professional status and authority at German universities in a rapidly changing society politically threatened from without and within. The modern reader would be less surprised if this literary endeavor were an attempt to relate psychiatry to natural science. Materialism was not only suspect, but actively suppressed by the governments who employed the German professors. Paradoxically, their psychiatry adhered to Kant's pragmatic anthropology, which viewed man as a free agent, but excluded Kant's physiological anthropology, a science that views man as subject to the laws of nature. Their persistent appeal to discipline, coercion, punishment, and restraint may be related to their fear of the human freedom that they espoused but neither trusted nor really knew.¹⁰⁵

This type of psychiatric literature persisted through the first half of the nineteenth century, but was soon supplemented with writing more closely related to the care of the mentally ill. This represents another aspect of German romantic psychiatry. For its understanding, a brief review of the care of the indigenous mentally ill in Germany is necessary. Part 2, in the next chapter, will begin with a brief summary of its development.

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Notes and References

1. Erwin H. Ackerknecht, *A Short History of Medicine*, rev. ed. (Baltimore: Johns Hopkins University Press, 1982), 129–158; Erwin H. Ackerknecht, *A Short History of Psychiatry*, 2nd rev. ed. (New York: Hafner, 1968), 60–74; Gregory Zilboorg, *A History of Medical Psychology* (New York: Norton, 1941); Max Neuburger, "British and German psychiatry in the second half of the eighteenth and the early nineteenth century," *Bulletin of the History of Medicine*, xvii (1945), 121–145; Karl Jaspers, *Allgemeine Psychopathologie*, 6th ed. (Berlin: Springer, 1953), 709. For the most extensive discussion of this period see Werner Leibbrand and Annemarie Wettley, *Der Wahnsinn* (Freiburg: Alber, 1961), 361–508, which gives a very sophisticated classification of the various contributors under headings of "Faculty Psychology" (Kant and Hoffbauer), "Faculty Psychology with Physiology" (Reil and Nasse), "Drive Theories" (Gall), "speculative Psychopathology" (Schelling, Novalis, Haindorf, Blumroeder, Bird, Schubert, K. G. Newmann, Vering, Beneke, Friedreich, Leupoldt and Damerow), "Contrasting Body Mind Concepts" (Heinroth and Jacobi), "Psychologism of the Passions" (Ideler, von Feuchtersleben). Our purpose seemed best served by offering concrete examples of the most influential contributors, especially since Theodor Kirchhoff, *Deutsche Irrenärzte*, 2 vols. (Berlin: Springer, 1921), provides biographies and summaries for most German psychiatrists of the period.
2. This issue is discussed in Otto M. Marx, "A reevaluation of the Mentalists in early nineteenth century German psychiatry," *American Journal of Psychiatry*, cxxi (1965), 752–760. It may require an almost superhuman effort to disentangle the useful ideas from 'speculative and moralistic verbiage of the period,' Ackerknecht, *Short History of Medicine*, 60. It seemed preferable to give as much direct substantive data from a few contributors so readers can judge for themselves.
3. Paul Kluckhohn, *The German Romantic* (Leipzig: Velhagen, 1924), 1–28; John T. Merz, *A History of European Thought in the Nineteenth Century*, 4 vols. (New York: Dover, 1965), vol. 1:158–225; vol. 3:192–366; vol. 4:8, 24.
4. H. A. M. Snelders, "Romanticism and Naturphilosophie and the inorganic natural sciences," *Studies in Romanticism*, ix (1970), 193–215.
5. Kluckhohn, *German Romantic*, 1–28; Merz, *European Thought*, 1:158–225, 3:192–366, 4:8, 24.
6. Werner Stein *Kulturfahrplan* (Berlin: Herbig, 1946), 866–908.
7. Kluckhohn, *German Romantic*, 1–28; Merz, *European Thought*, 1:158–225, 3:192–366, 4:8, 24

8. Samuel E. Stumpf, *Philosophy, History and Problems* (New York: McGraw-Hill, 1971), 304–329.
9. Gunter B. Risse, “Kant, Schelling and the early search for a philosophical science of medicine in Germany,” *Journal of the History of Medicine and the Allied Sciences*, xxvii (1972), 145–157.
10. Stumpf, *Philosophy, History and Problems*, 304–329.
11. Kluckhohn, *German Romantic*, 1–28; Merz, *European Thought*, 1:158–225, 3:192–366, 4:8, 24.
12. Ackerknecht, *Short History of Medicine*, 129–158; Paul Diepgen, *Geschichte der Medizin*, vol. 2 (Berlin: De Gruyter, 1959), 1–84.
13. Diepgen, *Geschichte der Medizin*, 1–84; Leibbrand and Wettley, *Der Wahnsinn*, 314–329; Lester S. King. “Basic concepts of early eighteenth century Animism,” *American Journal of Psychiatry*, cxxiv (1967), 797–802; L. J. Rather, “G. E. Stahl’s psychological physiology,” *Bulletin of the History of Medicine*, xxxv (1961), 37–49.
14. Bernard Hirschel *Compendium der Geschichte der Medizin* (Wien: Braumuller, 1862), 4–15, 337–439; Gunter B. Risse, “The quest for certainty in medicine,” *Bulletin of the History of Medicine*, xiv (1971), 1–12; Gunter B. Risse, “The Brownian system of medicine,” *Clio Medica*, v (1970), 45–51.
15. Diepgen, *Geschichte der Medizin*, 82, 88; Henri F. Ellenberger, *The Discovery of the Unconscious* (New York: Basic Books, 1970), 53–109.
16. Robert Darnton *Mesmerism and the End of the Enlightenment in France* (Cambridge, MA: Harvard University Press, 1968).
17. Risse, “Kant, Schelling, and the Early Search,” 145–158.
18. Christopher Flaskamp *Die deutsche Romantik*, 2nd ed. (Warendorf: Schnell, 1918); Morse Peckham, “On Romanticism,” *Studies In Romanticism* ix (1970), 217–224; Ernst Hirschfeld, “Romantische Medizin,” *Kyklos*, ii (1930), 1–89; George Rosen, “Romantic medicine,” *Bulletin of the History of Medicine*, xxv (1961), 149–158; Owsei Temkin, “Basic science, medicine and the Romantic era,” *Bulletin of the History of Medicine*, xxxvii (1963), 97–129.
19. Heinrich Heine, “Zur Geschichte der Religion und Philosophie in Deutschland,” 5–112, “Die romantische Schule,” 118–230, two chapters in *Sämtliche Werke*, vol. vii (Leipzig: Hesse); Morse Peckham, “Towards a theory of Romanticism,” *Studies in Romanticism*, i (1961), 1, 17; Peckham, “On Romanticism,” 217–224. Peckham calls romanticism “a sharp break with the rationalizing and sentimentalizing Enlightenment, expressed in a number of works dramatizing spiritual death and rebirth,” and claims that to understand it we should not look for attributes, but locate its problem. Gernot Rath, “On Romanticism,” *Studies in Romanticism*, ix (1970), 217–224; Gernot Rath, “Alexander von Humboldt and the medicine of his time,” *Studies in Romanticism*, iii (1964), 129–143; Walter Riese, “The impact of Romanticism on the experimental method,” *Studies in Romanticism*, ii (1962), 12–22, says “The atmosphere of the early nineteenth century was favorable to the establishment of that intimate and almost sacred contact between man and nature which is so significant to the romantic movement.” Riese stressed “the evolutionary methods and interests of romanticism, its longing for a happy past and denial of objective reality, its manifold attempts to study man no longer as a self sufficient and static fragment of the universe but as a stage in a dynamic process.”
20. Helmut Schanze, *Romantik und Aufklärung* (Erlanger Beiträge zur Sprach und Kunstwissenschaft, xxvii) (Nurnberg: H. Kar, 1966); Walter D. Wetzels, “Aspects of Natural science in German romanticism,” *Studies in Romanticism*, x (1971), 176–198. The goal of Schlegel and Novalis “to reunite the two worlds of poetry and physics in order to preserve the totality of human experience and its artistic expression” led in von Humboldt’s opinion to a dismal period “when German science sank deeply behind England and France” with “a chemistry in which one did not wet one’s hands, the diamond is a pebble come to consciousness, granite is ether.” H. A. M. Snelders, “Romanticism and Naturphilosophie and the inorganic natural sciences, 1797–1840,” *Studies in Romanticism*, ix (1970), 193–215. But, as Snelders beautifully shows, one must view the romantic from a broader perspective.
21. Heine, *Samtliche Werke*, 7:5–112, 118–230. The most significant figures aside from Fichte and Schelling were the brothers August Wilhelm and Friedrich Schlegel, the poet Georg F. von Hardenberg (better known as Novalis), Ludwig Achim von Arnim, the scientist Lorenz Oken, and the poet J. Ludwig Tieck.
22. Kenneth Dewhurst and Nigel Reeves, *Friedrich Schiller, Medicine Psychology and Literature* (Oxford: Sandford, 1978).
23. Stumpf, *Philosophy, History and Problems*, 304–329.
24. Walter A. Wetzels, “Aspects of natural science in German Romanticism,” *Studies In Romanticism*, x (1971), 44–59.
25. Friedrich W. J. von Schelling, *Friedrich W. J. von Schelling’s Werke*, Schroter ed., vol. 4 (Munich: Beck, 1927, and 1958 combined ed.), 309ff.

26. Schelling, *Schelling's Werke*, 309ff; Wetzels, "Aspects," 44–59.
27. Snelders, "Romanticism and Naturphilosophie," 193–215.
28. Wetzels, "Aspects," 44–59.
29. Hirschel, *Compendium der Geschichte der Medizin*, 4–15, 337–439.
30. Hirschel, *Compendium der Geschichte der Medizin*, 4–15, 337–439; Timothy Lenoir, "The Göttingen School and the development of transcendental Naturphilosophie in the Romantic era," in W. M. Coleman and Camille Limoger (eds.), *Studies in the History of Biology* (Baltimore: John Hopkins University Press, 1981), V, 11–205; see also Werner Leibbrand, *Die spekulative Medizin der Romantik* (Hamburg: Classen, 1956).
31. Johann Christian Reil, *Rhapsodien über die Anwendung der psychischen Curmethode auf Geisteszerüttungen* (Halle: Enke, 1913).
32. Rudolf Beneke, *Johann Christian Reil* (Halle: Niemeyer 1913), 1–23; Max Neuburger, *Johann Christian Reil* (Stuttgart: Enke, 1913); Leibbrand and Wettley, *Der Wahnsinn*, 387–399; Rudolph Zaunick, *Johann Christian Reil* (Nova acta Leopoldina, vol. 22, New Series #144) (Leipzig: Barth, 1960).
33. Theodor Kirchhoff, *Deutsche Irrenärzte*, vol. I (Berlin: Springer, 1921), 28–42.
34. Risse, "Quest for certainty," 1–12.
35. Reil, *Rhapsodien*, 18–19, 39, 53–60, 96–135, 145–153 (quote on 153), 303, 352–358, 377.
36. Reil, *Rhapsodien*, 215, 243–245; Gutmuth, *Gymnastic für die Jugend* (Schnepfenthal, 1793); Gutmuth, *Spiele, und Erholung für die Jugend* (Schnepfenthal, 1796).
37. Johann Christian Reil, "Von der Lebenskraft," *Archiv für die Physiologie*, I(1796), 8–162.
38. Reil, "Von der Lebenskraft," 12, 13; *Archiv für die Physiologie*, Introduction, 4, 5.
39. Johann Christian Reil and A. B. Kayssler, *Magazin für psychische Heilkunde*, I (1805).
40. Professor Reil, "Ueber den Begriff der Medicin und ihren Verzweigungen, besonders in Beziehung auf die Berichtigung der Topik der Psychiaterie," *Beyträge zur Beförderung einer Kurmethode auf psychischen Wege*, I (1808), 161–279. Historical Notes (no author), "The Word Psychiatry," *American Journal of Psychiatry* (1951), 107, 868–869. For a discussion of Hoffbauer see Gotz Hall, *Der Beitrag der Philosophen Johann Christian Hoffbauer zur Entstehungsgeschichte der Psychiatrie*, Dissertation, Munich (1958), and Wettley and Leibbrand, *Der Wahnsinn*, 369–386, 666.
41. Reil, "Ueber den Begriff der Medicin," 237.
42. Reil, *Rhapsodien*, Introduction.
43. Alexander Haindorf, *Versuch einer Pathologie und Therapie der Gemuths und Geisteskrankheiten* (Heidelberg: Braun, 1811); see Leibbrand and Wettley, *Der Wahnsinn*, 468–470. Twenty-six years after its publication Johann Michael Leupoldt described Haindorf as too one-sided in his philosophy of nature, too formalistic, and inadequately substantiated; Leupoldt, *Lehrbuch der Psychiatrie* (Leipzig: Voss, 1837), 13. J. C. A. Heinroth disagreed with Haindorf but did not want to go into detail; see Johann Christian August Heinroth, *Lehrbuch der Störungen des Seelenlebens*, 2 vols. (Leipzig: Vogel, 1818), 208.
44. Alexander Haindorf, *Beiträge zur Culturgeschichte der Medicin und Chirurgie Frankreichs* (Goettingen: Vandenhoeck and Ruprecht, 1815).
45. Haindorf, *Versuch einer Pathologie*; Leibbrand and Wettley, *Der Wahnsinn*, 469.
46. Leibbrand and Wettley, *Der Wahnsinn*, 469.
47. Michael Loewy, "Marxism and revolutionary Romanticism," *Telos*, xlix (1981). After all, it was Hegel's philosophy that was the culmination of this phase of German idealism that formed the philosophical basis of Karl Marx's utopia.
48. Schelling, *Werke*; Leibbrand and Wettley, *Der Wahnsinn*, 465.
49. Theodor Kirchhoff, *Deutsche Irrenärzte*, 1:58–75; Leibbrand and Wettley, *Der Wahnsinn*, 492–496; Otto M. Marx, "A re-evaluation of the Mentalists in early nineteenth-century German psychiatry," *American Journal of Psychiatry*, cxxi (1965), 752–760.
50. Anon., "Death of Heinroth," *American Journal of Insanity*, I (July 1844), 95 ff.; his famous *Textbook of Disturbances of Mental Life* of 1818 was published in English translation, Johann Christian Heinroth, *Textbook of Disturbances of Mental Life, or Disturbances of the Soul and Their Treatment* (Baltimore: Johns Hopkins University Press, 1975). The seventy-one page introduction by George Mora is very informative, but some of Mora's points are based on the translated text. The translation is not always reliable, and conclusions about Heinroth must be checked against the German original. This is not always the translator's fault, since Heinroth readily equates many terms. In ¶123 he speaks of mental disease (*morbis mentis*) as a diseased condition of spirit or soul, and also uses *Geisteskranke* as *insanientes* in ¶106. While *Wahnsinn* is used to translate both insanity and

- mania, mania is also *Tollheit* in ¶202. Even in German Heinroth freely equates what he polemically separated: mental disease conditions are equated with disturbances of the soul in 193. In the October 1844 issue of the *American Journal*, Article 1 defines insanity as “a chronic disease of the brain producing either derangement of the intellectual faculties or prolonged changes of the feelings, affections and habits of an individual” and two pages later it states that “insanity is regarded as a disease of the body, and few at the present time suppose the mind itself is ever diseased. The immaterial and immortal mind is, of itself, incapable of disease and decay” (97 ff).
51. Johann Christian August Heinroth, *De morborum animi differentia* (Leipzig: 1805 republished Solbriglia: 1811); Johann Christian August Heinroth, *Allgemeine medizinische Zeichenlehre von F. G. Danz* (Leipzig: 1812); Marx, *Re-evaluation of the Mentalists*.
 52. Heinroth, *Allgemeine medizinische Zeichenlehre von F. G. Danz*; Johann Christian August Heinroth, *Lehrbuch der Störungen des Seelenlebens*, 2 vols. (Leipzig: Vogel, 1818), 56–65. Since ¶ allows the use of the original or the translation, all references to the textbook will be given by paragraph.
 53. Heinroth, *Lehrbuch*, ¶54, also ¶¶49–52.
 54. Heinroth, *Lehrbuch*, ¶¶155–156.
 55. Heinroth, *Lehrbuch*, ¶¶155, 149–154.
 56. Heinroth, *Lehrbuch*, ¶¶189, 170–177.
 57. Johann Michael Leupoldt, *Lehrbuch der Psychiatrie* (Leipzig: Voss, 1837), 15–18; Johann Michael Leupoldt, *Über den Entwicklungsgang der Psychiatrie* (Erlangen: C. Heyder, 1833), 20–22. Having criticized Heinroth, Leupoldt designated him as the “actual accoucheur” of psychiatry and accused Heinroth’s opponent Jacobi of “attempted infanticide” of psychiatry (pp. 24 and 29); Carl Sundelin, “Über einen Aufsatz des Herrn Prof. Dr. Heinroth,” *Hitzig’s Zeitschrift für Kriminalrechtspflege*, vi (1828), 39.
 58. Leibbrand and Wettley, *Der Wahnsinn*, 361–368.
 59. Heinroth, *Lehrbuch*, ¶144.
 60. Heinroth, *Lehrbuch*, ¶46.
 61. Heinroth, *Lehrbuch*, ¶143.
 62. Heinroth, *Lehrbuch*, ¶¶119–124.
 63. Heinroth, *Lehrbuch*, ¶248. Little seems to be gained from presenting this logical table, which is readily available. Though some of Heinroth’s terms are still in use, the reader is cautioned that their modern-day meaning may be quite different.
 64. Heinroth, *Lehrbuch*, ¶55.
 65. Heinroth, *Lehrbuch*, ¶61.
 66. Heinroth, *Lehrbuch*, ¶73.
 67. Johann Christian August Heinroth, *Anweisung für angehende Irrenärzte zur richtigen Behandlung ihrer Kranken* (Leipzig: Vogel, 1825); see the anonymous review of this in *Medizinisch Chirurgische Zeitung*, J. N. Erhardt, ed. Innsbruck, 1 (1826): 89–96.
 68. Heinroth, *Lehrbuch*, ¶167.
 69. Heinroth, *Lehrbuch*, ¶204.
 70. Heinroth, *Lehrbuch*, ¶254.
 71. Heinroth, *Lehrbuch*, ¶¶168–169.
 72. Heinroth, *Lehrbuch*, ¶313; Edward L. Margetts, “The Early History of the Word Psychosomatic,” *Canadian Medical Association Journal*, lxiii (1950), 402–404.
 73. Heinroth, *Lehrbuch*, ¶¶75–76.
 74. Heinroth, *Lehrbuch*, ¶168.
 75. Heinroth, *Lehrbuch*, ¶46.
 76. Heinroth, *Lehrbuch*, ¶381.
 77. Johann Ferdinand Authenrieth (1772–1835) was a professor in Tübingen; see Kirchhoff, *Deutsche Irrenärzte*, 55–58; Dieter Jetter, *Geschichte des Hospitals*, vol. 1 (Wiesbaden: Steiner, 1966), 171–174, 225.
 78. Heinroth, *Lehrbuch*, ¶135.
 79. Johann Christian August Heinroth, *Lehrbuch der Anthropologie* (Leipzig: Vogel, 1822).
 80. Heinroth, *Lehrbuch der Anthropologie*, ¶22.
 81. Johann Christian August Heinroth, *Lehrbuch der Seelengesundheitslehre*, 2 vols. (Leipzig: Vogel, 1823, 1824).
 82. Otto M. Marx, “J. C. A. Heinroth, (1773–1843) on Psychiatry and Law,” *Journal of the History of Behavioral Science*, iv (1968), 163–179.
 83. Heinroth, *Lehrbuch*, ¶409.

84. Johann Christian August Heinroth, *System der psychisch gerichtlichen Medizin* (Leipzig: Hartmann, 1825); *Grundzüge der Criminalpsychologie oder die Theorie des Bösen in ihrer Anwendung auf die Rechtspflege* (Berlin: Dummler, 1833).
85. Johann Christian Hoffbauer, *Die Psychologie in ihren Hauptanwendungen auf die Rechtspflege*, (Halle: Schimmelpfening, 1808); Hoffbauer's point of view was accepted by Adolph Henke, *Lehrbuch der Gerichtlichen Medicin* (Leipzig: Hartmann, 1825); Leibbrand and Wettley, *Der Wahnsinn*, 369–386.
86. Heinroth, *System der psychisch gerichtlichen Medizin*, 326–328.
87. Heinroth, *Grundzüge der Criminalpsychologie*. Heinroth wrote that if punishment were effective, there would be no thieves left in England.
88. Heinroth, *Grundzüge der Criminalpsychologie*, 233, 266–271.
89. Kramer, Review in *Archiv für medicinische Erfahrung* (Sept.–Oct., 1826), 189–301; H. Johann B. Friedreich, *Historisch-Kritische Darstellung der Theorien* (Leipzig: Wigand, 1836), was Heinroth's most severe critic.
90. Heinrich Damerow, review in *Allgemeine Zeitschrift für Psychiatrie*, i (1844), 156–159.
91. Johann Christian August Heinroth, *Gerichtsärztliche und Privatgutachten*, H. T. Schletter, ed. (Leipzig: Fest, 1847); Otto M. Marx, "Psychiatry and Law," 163–179. The cases are well worth reviewing.
92. K. E. Hasse, *Erinnerungen aus meinem Leben* (Leipzig: Engelmann, 1902), 41ff.
93. Gruhle, "Geschichtliches," 7, quotes Friedrich Groos, an avid mentalist and contemporary of Heinroth, who opposed clinical experience to Heinroth's claims. Kirchhoff, *Deutsche Irrenärzte*, 1:158ff; Johann Baptista Friedreich, *Systematisches Handbuch der gerichtlichen Psychologie* (Leipzig: Wigand, 1835); *Realien in der Ilade und Odyssee; Symbolik der Natur* (1859); *Symbolik des Himmels* (1862); *Handbuch der allgemeinen Pathologie der psychischen Krankheiten* (Erlangen: Enke, 1839), 403; *Versuch einer Literaturgeschichte der Pathologie und Therapie der psychischen Krankheiten* (1830).
94. Johann Baptista Friedreich, *Historisch-kritische Darstellung der Theorien über das Wesen und den Sitz der psychischen Krankheiten* (Leipzig: Wigand, 1836).
95. Friedreich, *Historisch-kritische Darstellung*, Preface, 20.
96. Friedreich, *Historisch-kritische Darstellung*, 23–24, 30, 44, 84, 86, 167–168.
97. Friedreich, *Historisch-kritische Darstellung*, 168, 171–175, 33, 75, 76, 120.
98. Friedreich, *Historisch-kritisch Darstellung*, 119, 122, 105, 146–147.
99. Friedreich, *Historisch-kritisch Darstellung*, 144–145, 156, 162, 186.
100. Friedreich, *Historisch-kritisch Darstellung*, 186, 196; Johann Christian Reil, *Ueber die Erkenntniss und Cur der Fieber*, 4 vols. (Halle: Curt, 1802), 364. Volume 1 of *Fieber* was published in 1799, the volume 4 that I used seems to be the first edition and has the date 1805. Friedreich gives 1802 for the publication date of volume 4. The texts I used were cross-referenced.
101. Friedreich, *Historisch-kritisch Darstellung*, 198. Clearly everyone had experience with delirium and other mental disturbances related to physical illness.
102. Etienne Jean Georget, *De la Folie* (Paris: 1820), 74ff. It was translated by J. C. A. Heinroth, *Über die Verrücktheit* etc. (Leipzig: Weidmann, 1821); Friedreich, *Historisch-kritisch Darstellung*, 312.
103. Wilhelm Horn, *Reise durch Deutschland Ungarn, Holland Italien Frankreich Grossbritannien und Irland* (Berlin: Enslin, 1831), 1:100.
104. Klaus Doerner, *Madmen and the Bourgeoisie*, translated by J. Neugroschel and J. Steinberg (Oxford: Blackwell, 1981); Werner Leibbrand and Annemarie Wettley, *Der Wahnsinn* (Freiburg,: Alber, 1961); Gerlof Verwey, *Psychiatry in an Anthropological and Biomedical Context* (Boston: Reidel, 1984).
105. This point is repeatedly made by K. Doerner, to whose insightful formulations I am much indebted.

Chapter 10

German Romantic Psychiatry

Part II. Later, Including More-Somatic Orientations

Otto M. Marx

German Institutions and the Political Situation

In eighteenth century Germany the homeless poor and the mentally ill were typically housed together with all varieties of unwanted but dangerous folk. The *Zucht* and *Tollhaus*, a combined penitentiary and madhouse, exemplified this form of institution, which was supposed to free the countryside from all kinds of “rabble” and thereby assure public safety. Previously, such institutions had been established only in the larger towns. Most of them were established in abandoned castles and monasteries, only a few being in new, specially constructed buildings. Order was maintained by severe military discipline, including a thorough whipping of all inmates at the time of admission. It was supplemented by religious exhortation; when work was instituted, it was for the benefit of the institution.¹ The severe treatment was justified by the alleged dangerousness of the inmates. Combining penitentiary and madhouse allowed for an economical solution since “improved” criminals became the wardens for the mentally ill. Most of these institutions were small. Men, women, and children, the well and the sick, all lived together.²

Usually a physician was appointed to care for the medical needs of the inmates, which included the care of the insane. Reil’s duties as professor of medicine in Halle had included medical care of the inmates of the penitentiary there, and Heinroth’s position as physician to the house of St. George in Leipzig was of this very same kind. Yet by the end of the eighteenth century the problems in running these institutions and the inhumanity within their walls were recognized as problems as large as the ones they had been created to solve. Among those who called for the abolition of the combined institutions and the reform of prisons and for better care for the mentally ill was the Leipzig preacher H. B. Wagnitz, to whom Reil had dedicated his *Rhapsodies*. Yet reform did not come in the wake of Wagnitz’s well-known publications, nor did it follow Reil’s proposals for mental hospitals as outlined in his *Rhapsodies*. Instead, it came as a direct and indirect result of French pressure and was implemented along much more conservative lines. The reasons lay in the political changes that drastically altered Germany at the turn of the nineteenth century. In the 1790s France had pushed its borders to the Rhine. In compensation for the loss of their domains west of the river, German princes and Austria received ecclesiastic states and imperial free cities east of the river. Many convents and monasteries were dissolved as this process of so-called secularization—the transfer of ecclesiastic states to secular princes—continued on a large scale. The dissolution of monasteries and convents presented the state with large numbers of empty buildings as well as large numbers of indigent and insane who had formerly found refuge under the care of the Church. The number of homeless was swelled by those dislocated by war, social upheaval, and industrialization.

In order to deal with these problems, German rulers, fearful of revolution, sought the aid of professional administrators who could initiate the necessary reforms. They appointed university-trained ministers and

administrators who tried to effect a smooth transition from the old feudal order to the new national state while retaining the old autocracy. The *Irren-Reform* (a reform of the care of the mentally ill) was part and parcel of a program directed towards establishing a stronger, “healthier” state. The Prussian psychiatric institutions that were founded as result of this development retained many of the old *Zuchthaus* notions of relentless punishment, oppressive discipline, and restraint. In the lands under French occupation or in alliance with Napoleon, the so-called Rhine Coalition, the development of mental hospitals followed the French model more closely.

The Beginnings of Psychiatric Institutions

Traditionally, the opening of the renovated asylum at Bayreuth in 1805 signals the beginning of German hospital psychiatry. It was the result of close collaboration between the Prussian minister Karl A. von Hardenberg and the physician Johann Gottfried Langermann,³ the first medical director of the Bayreuth institution. As elsewhere, this gives the lie to Foucault’s contention that the seventeenth century was the “Great Age of Confinement” for the mad.

Johann Gottfried Langermann (1768–1832) had studied law and theology in Leipzig but had to leave there because of his agitation for university reform. In 1794 he went to Jena, where he studied philosophy with Fichte and medicine with Hufeland. He taught the poet Novalis and befriended Goethe, Schiller, and Haydn. Having authored the plans for Bayreuth in 1804, Langermann served as its first medical director from 1805 to 1810. He moved on to become director of the Prussian Health Services and later realized his greatest ambition when he was appointed chief of the Veterinary School in Berlin. In his only psychiatric publication, his dissertation of 1797, Langermann identified mental illness with uncontrolled passion.⁴ Like his teacher Fichte, and like Kant, Langermann considered the patient responsible for his loss of control and defined treatment as the establishment of the control of reason over the passions by means of education. His ideas were further elaborated by Ideler (see later discussion). Langermann’s attempts at transforming the combined penitentiary-madhouse into a place for treatment of mentally ill (*Heilanstalt*) were only partially successful and were short lived.⁵

In Berlin the mentally ill had been put on a ward at the Charité Hospital after the penitentiary had burned down in 1798. When Ernst Horn was placed in charge of this ward in 1806 he removed the chains but retained physical punishment and cold showers. He equated philanthropy with romantic weakness and invented a sack for the restraint of patients.⁶ In Saxony, the fortress Sonnenstein near Pirna was adapted as a mental hospital for curable patients in 1811, but until 1828 convicts continued to serve as attendants. Nearby Waldheim served incurables and prisoners. The directors of both institutions, Ernst G. Pienitz (1777–1853) and Christian A. Hayner (1775–1837), had trained with Pinel and Esquirol and tried to implement their ideas in Saxony. But it was only in 1842 in the Grand Duchy of Baden that C. F. W. Roller finally implemented the French ideas in the newly built exemplary Illenau near Achern. Despite these and other early efforts to establish modern mental hospitals in Germany, Friedrich Nasse, Reil’s most outstanding student and Jacobi’s closest friend, estimated in 1821 that only one sixth of the mentally ill were treated in institutions or by a physician. All others were still lingering in jails or penitentiaries or living in the streets. Against this background we now turn to the writings and work of Heinroth’s antagonist, K. W. Maximilian Jacobi.

K. W. Jacobi and the Siegburg

Karl Wiegand Maximilian Jacobi (1775–1858) was the son of the philosopher Friedrich Heinrich Jacobi, promulgator of a philosophy of religion that held that religious feeling and beliefs were the result of immediate conviction without intervention of the rational mind. Maximilian studied in Jena, where in the 1790s romanticism was at its zenith. He came to be very close to Goethe at nearby Weimar. He continued his studies in Göttingen and Edinburgh, received his medical doctorate at Erfurt, and later trained in surgery in London. He entered the Bavarian state service in 1805, the year his father became president of the Academy of Sciences there. In 1812 he became physician at Salzburg’s St. John’s Hospital, and in 1816 he

entered Prussian government service in Düsseldorf. At the request of the Prussian minister Von Altenstein, he began with the plans for the establishment of a mental hospital for the Rhine Province in 1820. He visited many of the newly established asylums in Germany and translated foreign psychiatric literature including Tuke's description of the Retreat at York. The decision to locate the asylum at the Siegburg, an ill suited old monastery, was taken contrary to Jacobi's advice. He admitted the first patients in 1824; the Siegburg officially opened in 1825, but it took the bureaucracy seven years before they confirmed Jacobi as its medical director. He held this post for the rest of his life, and under his guidance the Siegburg became *the* center of learning for hospital psychiatry in German-speaking countries. While most recent reviewers continue to place Jacobi within the same genre as Heinroth, the content and context of Jacobi's writings place them on a totally different plane.⁷

Jacobi traveled to Bayreuth, the Sonnenstein in Saxony, and the Marsberg in Westphalia, directed a 200-bed psychiatric hospital, and had extensive clinical experience with thousands of patients. Despite his intensive exposure to romanticism in Jena and his studies with G. H. Schubert and Ringseis in Munich and Windischmann in Bonn, Jacobi attempted a clear differentiation between his profound religious belief and his medical writing. His father had postulated an intuitive, immediate knowledge in matters of faith. Yet psychiatry, like medicine, was to be based exclusively on "sober observation of nature and most careful induction."⁸ Assured that his philosophical education would keep him out of "the labyrinth of uncontrolled speculation" prevailing in psychiatry, he explicitly dissociated himself from philosophy of nature. Of his magnum opus, *The Main Forms of Mental Disturbances in Their Relations to Therapeutics*, only the first volume, *On Mania*, was published after twenty years of extensive practice. Yet throughout his career he stuck to his basic conviction that the immortal soul and its functions were *never* affected by mental illness. His anthropology differed from that of Heinroth and Nasse. To Jacobi, anthropology referred to the study of mind in relation to body, with mind limited to the part man shared with animals.⁹ The other part, consisting of personal self-conscious mind with "its striving for freedom" and its belief in God, was excluded from psychiatry since it was never affected by mental illness. This pure mind or immortal soul, free of the organism, was the subject of study for psychology. Psychiatry was not concerned with moral perversions or "degradations" as Heinroth had claimed. Sin or abuse might lead to degradation of the organism (*Zerutungen*) and disturb the functions of its parts, leading to mental disturbances indirectly. But *mental disturbance* was invariably a sign or symptom of a physical disruption. Hence Jacobi denied a *direct* role to purely moral or religious agents "in both the genesis and in the fight against mental disturbance." Many nineteenth Century American alienists concurred that the soul was immune to derangement.

As we shall see, this did not lead him to disregard education, suggestion, or occupational therapy. For his classification of *mental disturbances*, Jacobi assumed that they represented an alienation of either desire (*Begehrungsvermögen*) or intellect (*Verstand*). Alienations of desire, or *Begehrungsvermögen*, were the *Gemüthskrankheiten*, or emotional diseases. An "exaltation" of desire would result in mania (on p. 34 Jacobi himself makes this translation for *Tobsucht*), or a "depression" of that capacity would lead to melancholia. Mania and melancholia or depression could also alternate or produce each other. Disturbances of intellect were either exalted, as in madness and its variations, or reduced, as in confusion and fatuity. The third large group was that of delirium and folly. Altogether, he postulated six mental disturbances, which may co-exist but could always be differentiated. They could blend into each other, change, and grow. In addition to these basic six mental disturbances, he recognized congenital mental vitiations and defects such as cretinism or congenital idiocy. Nearly half of the 786 pages of the volume on mania are detailed case histories, and only 12 pages deal with treatment. Review of the cases readily explains how Jacobi could maintain his thesis that physical illness is at the basis of all mental disturbances. In a typical case, we read of the threatening spread of tuberculosis of the lungs and early dilation of cardiac ventricles. The mania only subsided after twenty-eight months of hospitalization, when an intermittent fever and diarrhea lasting three months were followed by a cure of the mania. The patient had been said to suffer from religious mania, yet he turned out to be "incredibly ignorant on the religious subject." As in all cases, Jacobi had thoroughly investigated the family history. Comparing his own extensive statistical data with the psychiatric literature, Jacobi found his contemporaries sadly inadequate.¹⁰

The smell ascribed to the insane he correctly attributed to poor hygiene or dirty quarters. It did not exist at the Siegburg. Manics did not show extraordinary muscle strength as was commonly believed, and usually one attendant could subdue an agitated patient. Jacobi railed against the unsubstantiated claims made in the literature, his own claims being based on detailed statistics. He objected to Guislain's and Ideler's idea that pathology differed from mental health only in degree and that there was a gradual transition from mental health through eccentricity to mental illness. Mania was a disturbance in the emotional sphere and not a mental disorder as Esquirol had claimed. Mania could coexist, follow, or precede madness, and be an accessory symptom in folly, idiocy, and dementia. A patient may bear some responsibility for initiating a deleterious development, but could not be held responsible for his mania, madness, or folly.

Causes could be cosmic, terrestrial, climatic, or related to geography, food, ethnicity, stages of civilization, the development of science and the arts, or politics. Jacobi looked for numerical correlations between gender, age, constitution, temperament, intellectual capacity, religion, class, occupation, and illness related to mania. To put his opinions into perspective, note that Jacobi evaluated 1,460 admissions over a period of 18 years; of these, 900 were male and 560 female; there were 111 male and 117 female manics. Heredity was much less significant than claimed by others, including Esquirol. Slightly more than one ninth of manics had parents who suffered from madness, half of whom had become mentally disturbed only after their children were born. Consequently, only a predisposition was inherited and not the disease. Excesses in sexual pleasure, drink, the toils of war, and traumatic influences could create a pathological condition in the organism, which in turn precipitated mental disturbances. Chronic anger or sorrow "could affect the organs of the chest, the pelvis or the nervous system, and act destructively on our most inner vegetative life." Yet Jacobi readily admitted that the very same pathology might not lead to insanity.¹¹ He could tell neither what factors must coincide nor which one was critical. None of them had a "necessary connection" with the development of mental illness. While thousands suffered but recovered from scabies, in others chronic insanity followed the recovery.¹²

Among precipitating causes, alcohol abuse was by far the most common. This was true outside the Rhine Province as well. Puerperal disturbances, sudden loss of blood, and typhoid fever were common but much less frequent.¹³ A strenuous march, hemorrhoidal bleeding, and tubercular lung disease came next. Head injury usually precipitated madness only after an inflammation of the brain and the exudation of pus from the ears. Though Jacobi agreed that the brain mediated all perceptions, mental life was not limited to the brain. The bone, tendons, and muscles, in short "the whole organism in its totality, must be conceived as organ of mind." Even sensory perceptions were co-determined by the body and by our emotional state. Just less than half of Jacobi's patients with mania recovered. Forty-five of 111 males got well and 49 out of 117 females. Sixty-six males and 68 females remained incurable, and 16 males and 8 females died. He lamented that only John Haslam had provided comparable statistics.¹⁴

In his brief section on treatment, Jacobi espoused the treatment of the underlying physical disorder, a careful regulation of daily life, and persistent educational efforts. Active intervention should be limited, for he recognized that in the mental sphere he was only treating symptoms, and the physical disorder usually continued unabated. At best it could only be modified. He condemned Benjamin Rush for taking 200 ounces of blood from a 68-year-old manic patient in barely eight weeks. In England the fruitless practices of bleeding, shaving the head, and applying leeches persisted. Just a few years earlier, it was the practice to pour one, two, or three hundred buckets of water on the heads of patients at the Charité Hospital in Berlin, and the practice was widely imitated. Tartar emetic and trephining, vesicatories, jalapa, and high doses of digitalis and morphine as well as opium for sleep were indiscriminately given. When patients did not recover they were declared incurable. None of the manics who got well at the Siegburg had been bled. He opposed cold douches. Some of these measures he had used in his "psychiatric practice" earlier on but never again at the Siegburg. The use of vesicatories and the use of ointment on the shorn skull and internal medications were not only useless but dangerous.¹⁵ The use of the rotating chair, surprise baths, the treadmill, and dramatic shows, for which Reil had high expectations and from which psychiatry only slowly dissociated itself, were all useless. Soon "they will be remembered as but monuments of a wonderful aberration in the history of medical therapeutics." Among the symptomatic measures Jacobi favored

were removal from the environment to a safe, quiet, airy, simply furnished place; comfortable, easily changeable clothing so the patient could be easily restrained without taking it off; appropriate food; regulation of the bowels; exercise and fresh air; simple occupation; cold or warm douches or sitz baths; frequent washing; and “so-called mental treatment.” Experience taught him the need for restraining violent patients. He suggested a restraining chair for six to eight hours or a cold rain bath. It was unrealistic to assume that each patient could be given a personal attendant, and Jacobi could not find the necessary willing personnel. At Hanwell, where John Connolly claimed to use non-restraint, they had barely one attendant for twenty to twenty-five patients. As a result, improved patients suffered from being with sicker patients, and the worst patients were confined in solitary misery because they were not restrained. Certainly restraint was to be avoided whenever possible, but it had to be used when necessary.¹⁶

Altogether little seems to have changed since Jacobi’s time, for the realities of psychiatric care still pose these difficult problems. Clearly Jacobi is not simply Heinroth’s antagonist within a framework of philosophical speculation in early nineteenth century medicine based on philosophy of nature.¹⁷ If anything, his work on mania demonstrated Jacobi’s commitment to careful clinical observation, collection of statistical data, and recognition of the realities of practice and the limitations it placed on the practitioner. It also exemplified his unswerving loyalty to the metaphysical and theoretical positions he had formulated over twenty years earlier.¹⁸

Jacobi’s most significant contribution and lasting reputation rested on the establishment of the Siegburg and his directorship of that institution for over three decades. The volume describing its design attests to Jacobi’s intimate and extensive knowledge of psychiatric practice and firmly established Jacobi’s international reputation. It had appeared in 1834, ten years earlier than *On Mania*.¹⁹ Going beyond the specific design for the Siegburg, Jacobi provided general guidelines for the construction of mental hospitals. He favored a separate hospital for the curable and a maximum stay of two years for its patients. Such a hospital should have no more than two hundred beds and admit no patients who had been ill for over eight months. Its character would reflect the theoretical orientation of the psychiatrist in charge. He should have ultimate authority, and his second physician should be in complete agreement with him.²⁰ Jacobi suggested one attendant for every eight patients, with one attendant for two or three of the acute cases. Attendants slept at the hospital and were always on duty. He insisted on the strictest separation of the sexes. But experience had shown that the demand of “psychiatric theoreticians” for segregating convalescents was unwarranted: the convalescents did not relapse, and their presence had a salutary effect. The units varied from 12 beds for acute and manic patients to a ward of 110 for the well-behaved. Seldom was more than one attendant needed to control the patients. Violence was not a problem. If it occurred, it was to be viewed as an expression of the patient’s illness. In over 9 years only 3 of 600 patients had knocked their heads against the wall. Authenriet’s palisade room was unnecessary.²¹ Jacobi used the rotating chair (up to 100 rpm) but objected to horizontal rotation or the hollow wheel. He preferred leather straps because patients perspired excessively in straightjackets. Incontinent, disoriented patients were restrained on chairs.²² He set up showers, fire hoses, and cold rain baths, which were to be used cautiously and only if ordered by the director. He also offered a lengthy list of books for patients. Admission procedures included a complete personal and family history and filling out detailed questionnaires. These procedures could be completed in three weeks or in two to ten days in urgent cases. The physicians made rounds twice daily; bleeding, vesicatories, and fontanels were to be done by the second physician. Here is one instance in which Jacobi did change his mind. By the time he had published the volume on mania he condemned these very same practices as unnecessary and harmful.

Jacobi took as a compliment accusations that he had preempted Nasse’s expositions on the nature of mental illness without adding anything new. His own detailed—albeit ponderous—analysis of other theoretical positions were fair and restrained. He chided Friedrich Groos, who had sought to mediate between the somaticists and mentalists by postulating an “inner sanctum in the brain that could be adversely affected by moral mental noxious agents” (*moralisch-psychische Noxen*).²³

Although Groos had studied at Pavia under Spallanzani, Volta, and Peter Frank, and as director of the Heidelberg Asylum had ample practical experience, his concept of mental illness remained abstract and

philosophical. According to Jacobi, the search for the physiological basis of mental disturbances was a task not for philosophical speculation, but for natural scientific research.

View of Jacobi's Treatment

Treatment was a totally different matter. Since the physiological basis of disease was generally unknown, psychological intervention was important. In order for the physician to choose the most appropriate psychological intervention in the symptomatic treatment of the mentally ill, he "had to be knowledgeable in psychology" and could not do "without metaphysics and psychology." Furthermore, it was not enough to "comprehend" (*erfassen*) human nature with psychological or philosophical insight (*Einsicht*), but in addition the patient had to be treated (*behandelt*). Especially the recovering patient required psychological and ethical guidance, and for that purpose Jacobi had nothing but praise for Groos's utilization of Epictetus. Jacobi realized, though, that from a practical point of view the physician busy directing an asylum may have to leave such psychological guidance to others.²⁴

Certain that his view of the nature of mental illness represented the majority, Jacobi had his doubts about the efficacy of anyone's therapeutics. From his own experience and reading he concluded that "by far the smallest number of recoveries" could be attributed to the physician's "premeditated" efforts. Regarding his own work, he merely hoped that he had left adequate and reliable data so that others would be able to judge for themselves whether his efforts and results were related.²⁵ Thus we find in Jacobi a dedicated psychiatrist who treated thousands of patients over the many decades he directed the Siegburg asylum. He trained many younger physicians; though he changed his attitude towards treatment, he never modified his basic philosophic stance. His close friend, Friedrich Nasse, was a totally different person. He exerted his influence by teaching psychiatry as a part of clinical medicine and by publishing more journals on the new specialty than anyone else. Yet Nasse remained a generalist.

C. F. Nasse

In his psychiatric publications, Friedrich Nasse did not provide us with the type of information Jacobi had espoused.²⁶ Reil's favorite student and successor to his professorship at Halle was known as the exponent of clinical medicine in relation to physiology and pathological anatomy. He emphasized chemical and microscopic examination, and was perhaps the first to introduce percussion, auscultation, thermometry, and spirometrics at German medical schools. None of this is reflected in his psychiatric publications, which remained broadly philosophical. It was clearly not due to a lack of clinical psychiatric experience. The hospital in Bielefeld where he first worked had mental patients. At Halle he was medical director of the madhouse with thirty-two beds, and he spent an hour daily presenting mentally ill patients to his students.²⁷

At Bonn he initiated a regular summer internship for students at the nearby Siegburg, treated female mental patients in his home, and later ran a private mental institution for men. He was one of the first to promote the establishment of asylums for alcoholics. Nasse published more psychiatric journals than anyone else. One of the most "unromantic figures of this idealistic epoch," he has also been described as a follower of both Laennec and Mesmer.²⁸

For his contributions to psychiatry we have to look at the journals he founded and edited. In his article on "Naming and Preliminary Classification of Mental Diseases," Nasse firmly stood for the traditional. Since the terms *amentia*, *mania*, and *melancholia* had been used by Cullen, their continued use facilitated international communication.²⁹ He proposed a scheme in which the three diseases could be visualized on the circumference of a circle equidistant from its center and the mental health of the physician.

He then proceeded to characterize each mental illness in terms of a disturbance in input or output of mental functions. In *amentia* both input and output were suppressed, the manic was overwhelmed by his drives, and the melancholic (i.e., the mentally ill in the narrow sense) was overcome by receiving too much input: in other words, an affection of "irritability" in mania and of "sensibility" in melancholia. Since

“dynamic diseases” in general followed the same scheme, mental illness could be conceptualized like other diseases. Psychologists might find it useful to see in melancholy a disturbance in cognition, in mania a loss of freedom in the appetitive function, and in amentia a regression to the sphere of affect. Finally, “friends of philosophy of nature” could express these notions in their own terminology, and the scheme also fitted humoral pathology. In short, Nasse proposed that a simple traditional scheme could be agreed upon for the sake of communication and preliminary agreement between all different factions, and he clearly saw himself above sectarianism. In his article on the dependence or independence of madness on a preceding physical morbid state he agreed with Jacobi’s views.³⁰

Nasse was fully cognizant of his own position. He correctly saw himself in the tradition of medicine, which since antiquity had always been somatically oriented, and in the tradition of the study of man, that is, *Anthropologie*, which he traced back to the late sixteenth century.³¹ For Nasse the clinician, medical practice was more than applied science, and he forcefully objected to a view of man without religious free agency. Any theory of man, or anthropology, would have to do justice to man in his complexity, and nowhere was man found without religion. The separation of body and soul, of physiology and psychology made it difficult to study their lively interrelation (*lebendige Beziehung*). He proposed 168 postulates to clarify the complexity of this relationship and recommended that we embark on this study by an empirical method guided by induction. This anthropology would have to include an understanding of facial expression, mimicry, voice, the relationship of mind to brain, the senses, comparative studies of animals and the relationship of body and mind, including “the question to what extent the mind partook of the creation and maintenance of the body in health and disease by conscious or unconscious action.”³² This discipline would utilize comparative psychology and physiology, study man in all phases of life, in waking and sleep, including the psychology and physiology of death. Ways of relating, the use of language, sexual relations, and effects of temperament, age, and culture, would have to be investigated. He was not certain whether “the relationship” called animal magnetism should be included. It certainly existed, but did it belong to health or disease? He would name this part of anthropology *psychosomatology* or *psychophysiology*, and anticipated that it would provide the scientific basis for the study of mental diseases. While Nasse deplored the split between physiology and psychology, he did not propose a romantic dissolution of their differences and maintained the need for natural science research: “A poetical opinion is no proof and the repetition of an article of faith is not a principle.” “Religious contemplations” could not replace science, but “a world without God is a spook of philosophy in its darkest hours.” Nasse’s anthropology could not be derived from philosophy, and the idea of a Christian anthropology was as absurd for such a science as would be that of a Jewish or “Muhmammadan” one.³³ Although Heinroth was still an associate editor of the *zeitschrift für psychische ärzte*, undoubtedly Nasse had him in mind.

Fifteen years later, Nasse’s journal had once again a new title: *The Journal for the Evaluation and Treatment of Psychopathological Conditions*, with Jacobi and Nasse as co-editors. The only associate editors were three directors of institutions for the insane. It was “dedicated not only to the physicians, but all others engaged in research and diagnosis of psychopathological states.” At a time when disease was only too often relentlessly progressive, all physicians were daily confronted by mental complications and sequelae. We are reminded of J. C. Reil’s proposal that all physicians had to be psychiatrists, that is, physicians of the mind. Nasse reiterated the lack of factual knowledge. The role of affect and of the passions had been widely discussed but was far from proven. No specific correlations with physical or cerebral pathology had been established. Public health practitioners had no specific guideline for the prevention of mental illness.³⁴ Nasse’s journal continued to offer a broad spectrum of opinions. Windischmann, one of Nasse’s medical colleagues in Bonn and an associate editor, wrote on fire-and-brimstone religion as “something of which medicine is badly in need.” The true cause of all disease was “immaterial.” A soul that had gone wild with lust and desire, an estrangement of the soul from spirit or the truth, was the cause of all illness whether somatic, mental, or logical. The art of medicine should be “elevated” and fused with Christian religion. What has been called “sympathetic” cure in the past was based on mental imagination. Intent can heal and possibly acted at a level of natural relations below consciousness and imagination. The mysterious relationship would hopefully be clarified by the study of magnetism.³⁵

Another of Nasse's medical colleagues on the Bonn faculty, Joseph E. Ennemoser, contributed a paper on mental development that was primarily based on poetic insight and heavy with metaphor. At birth man is but a helpless animal; sensations and perceptions led to pain and pleasure. Desires resulted. "The eruption of the teeth begins a new, very remarkable development of mind." The child becomes increasingly independent. "With the eruption of the incisors, the child wants to grasp everything, possess everything and as it were, to gnaw it through mentally." This was the first process of assimilation. The child perceived the external world more eagerly and "the repeatedly chewed images became concepts." With the development of canine teeth and molars came the power of conceptualization and differentiation. Reflective language came only with the permanent teeth, for reflection was but "mental rumination." Ennemoser further expounded these ideas in his book *On the Origin and Essence of the Human Soul in General and of the Child's Soul in Particular*. Nearly 30 years later it was published again with an appendix on immortality.³⁶ Did Ennemoser "anticipate" Freud or some of the most recent ideas regarding the physiological nature of metaphor—or even of cognitive development? The subject of animal magnetism cropped up repeatedly in psychiatric writings considered so far, but it did not occupy a central position in the psychiatric literature. It usually appeared in separate publications. For the first three years of its existence Nasse had been editor of the *Archive for Animal Magnetism* but contributed little.³⁷ It was D. G. Kieser, co-editor of the *Archive*, for whom magnetism became for some time a primary interest. He contributed many articles, and his conceptualization of magnetism, or, as he preferred to call it, *Tellurismus*, resulted in a work along truly natural philosophical lines. Moreover, Kieser represents again a totally different and unique approach to the new field of psychiatry. His writings are among the most closely tied to romanticism. His career is most varied, yet he completes it in psychiatry.

D. G. Kieser

Dietrich Georg Kieser (1779–1862) studied in Würzburg and Göttingen, where he obtained his doctorate in 1801. After eight years of practice and notable publications on a broad variety of topics, he became professor at Jena, where he taught pathology, therapeutics, medical history, and botany. He saw military service in Germany and France, and directed a private medical-surgical-ophthalmological hospital before he was appointed director of the Jena mental hospital in 1816. In 1817 he began clinical teaching of psychiatry at the university and opened a private sanatorium. He served as rector, commanded a citizens guard, and represented the university in parliament (Landstag). He was ennobled the year of his death. His *System of Tellurism or Animal Magnetism* was first published in 1821.³⁸ The book opens with a statement that the cosmos is alive and ruled by strife. Dominance is positive, the dominated negative. In the solar system the positive sun dominates the earth's negative telluric force. Magnetism is an expression of telluric force. The opposition of solar and telluric had its analogy in other dichotomies: light and heat; man and woman; positive and negative electricity; in chemistry the opposition of oxygen and carbon to hydrogen and nitrogen. Oxygen and carbon are real, and are identified with the telluric pole of the earth. They increase life. Hydrogen and nitrogen are ideal, identified with the solar pole, and have a negative effect on life. Since there were no boundaries to stop his analogies, somnambulism became identified with a whole spectrum of phenomena. These Kieser then presented in visual representations that seemed to explain something.

The term "somnambul" was synonymous with the dominated side of any relation. The moon, for example, was "the somnambulist of the earth," and muscle was to the brain like the somnambulist to the magnetist.³⁹ Organs within one and the same body were believed to magnetize each other. On the other hand, the moon strengthened the somnambulistic state, and midnight was the time when the telluric force was at its zenith. The earth's atmosphere could be magnetized by man, and Kieser quoted the New Testament to the effect that "faith can move mountains." This equation of metaphor with reality was just as readily negated, although such flights into fantasy were typical of romantic writing.

Although Kieser began with the traditional tripartite human mind, this too was fitted into his bipolar concept of the universe and became a simple dichotomy. He divided the psyche into binary oppositions: emotional

side versus cognitive side. On the emotional side were imagination, night-time life, the body's trunk system, and magnetic acts; on the cognitive side were thinking, knowledge, daytime life, and the head system. Cognition was opposed to the emotions. Since the magnetic state was ruled by the emotions, it could be destroyed by cognitive means.⁴⁰

This scheme "explains" why dreams stop as we waken, why reason does not correct dreams, and why a somnambulistic state cannot be induced by intellectual endeavors. His scheme allowed him to rationalize the positive therapeutic value of the physician's kindness, trust, and self-confidence in therapeutics. In the care of every patient the physician acted through his person by way of organic and mental magnetism, thus supporting the dynamic (i.e., the pharmaceutic or chemical) effect of medication. Others wrongly believed that all effects of medication depended on the "organic-mental" effect of the physician.⁴¹

In the section on technique, magnetic treatment is defined as the application of telluric force to general telluric life. All the known techniques of magnetization are described in great detail. Kieser recognized that magnetizer and somnambulist were interacting (*Wechselwirkung*). Magnetization had to occur in privacy for "the magnetic circle is like a spiritual marriage and disturbing it is spiritual adultery."⁴² Attempts at critical examination by outsiders were doomed to fail, as the negative results of all commissions of inquiry had shown. Unfortunately, telluric night-time life readily lent itself to deception and immorality. (Much later Freud became aware of the sexual transference of female patients toward their male hypnotists!)⁴³

Finally Kieser placed the discovery of magnetism in historical context. The early immediate revelation of God in the ancient Orient had been followed by a second occidental revelation of God through intellect and reason. This led to occidental philosophy and science. Hence the scientific comprehension of physiology or the somnambulant night-time life had to await the development of the physiology of daytime life.⁴⁴

Having highlighted the romantic notions in this voluminous system of tellurism, one might be tempted to attribute these to a particular period in the author's productive life, as was perhaps true for Reil, and thus try to separate the natural scientist from the philosopher of nature. But there is no such demarcation of phases, not even a consistency with regard to topics. Thirty-five years after the publication of his *System* the reviewer of Kieser's *Elemente der Psychiatrik* spent thirty pages in an honest attempt to dissect the scientific, the clinical, and the speculative components of that work. He had the greatest difficulty in understanding Kieser's derivation of psychology from "theistic cosmological aphorisms."⁴⁵ Kieser amalgamated ideas from all sources with his own. In his pro-rector address "On the Passions and Affects" he followed not only Heinroth, Jacobi, and Gall, but also Ideler, for whom all mental illness was the result of unleashed passion.⁴⁶

K. W. Ideler

Karl Wilhelm Ideler (1795–1860) was a company surgeon during the march on Paris in 1815; he completed his medical studies in Berlin in 1824. Unhappy as a practitioner, his publication of an anthropology for physicians in 1826 brought him to Langermann's attention and the directorship of the psychiatric ward of the Charité Hospital in Berlin in 1828. He joined the faculty, became professor of medicine in 1859 and director of the psychiatric clinic the following year, and stayed in these positions for the rest of his long life. Little changed at the Charité during the 32 years of this benevolent man's reign,⁴⁷ for he stayed mostly off the wards.

With his encyclopedic two-volume *Foundations of Mental Therapeutics* Ideler hoped to provide a new basis for psychiatry. He begins his nearly 2,000-page text by establishing his mentor and supporter, "the great friend and thinker" Langermann, together with Stahl, as founders of mental therapeutics (*Seelenheilkunde*). To this end, he offered a detailed account of Langermann's biography, reprinted his dissertation, and offered a moving eulogy of his character. Every science, Ideler tells us, is the product of one creative thought of its founder, a "spiritual expression" of his emotional constitution (*Gemüthsverfassung*). In the case of mental therapeutics this creative thought was Langermann's "moral concept," which represented to Ideler a "genetic interpretation of the origins of mental therapeutics."⁴⁸ Mental therapeutics is to be understood as an expression of Langermann's knowledge, training, and personality (*Individualität*).⁴⁹ Although some of the original elements (*Urelemente*) had come from Stahl, Ideler reviews metaphysical,

mystical, ethical, logical, empirical, and materialistic psychology, as well as the sources of psychology in the inner sense, in *Menschenkenntniss*, history, practical philosophy, poetry, and mental therapeutics. Ideler objected to the abstract view of man as a reasonable being (*Verstandeswesen*). The power of the emotions over the will might not be rational but had to be accepted. The emotions were defined in terms of goal-directed drives and their conflicts, and consequently the life of every person was an ongoing experiment.⁵⁰ The psychologist must develop empathy so that he can “live himself into the situation of another person” (*sich hineinleben*). He quoted Zimmerman, who had said that one cannot understand mood swings unless one has experienced them oneself, otherwise it would be like “a cow’s understanding of metaphysics.” From Ideler, this was a particularly poignant comment: after it became known that he had suffered from a mental illness, his detractors suggested that his followers and students strengthen his morals so he could regain his equilibrium.⁵¹

Most mental processes did not come into consciousness and could only be discovered indirectly because the powerful mainsprings of mental life were mostly repressed (*zurückgedrängt*) into the background of consciousness (*Hintergrund des Bewusstseins*). The physician will have to use practical philosophy and wrestle himself through many internal conflicts in order to help others by “*psychagogik*” means. Ideler suggested that madness could not be understood merely as a product of “displaced brain fibres.” He recognized that the mentally ill patient could no longer find his way in his emotional condition (*Gemüthsverfassung*). He had lost touch, and in the dim feeling of opposing his feelings as an enemy, had created for himself an imaginary world with dream images corresponding with his intentions. Therefore, madness was always a disease of spiritual man as a whole and an expression of a total mental incongruity.⁵²

Ideler expanded his concept of the danger of unrestrained passion to the religious, social, and political spheres. Fanaticism could not endure without destroying the welfare of the nation. Crusades, religious wars, and the persecution of Jews could not be justified on religious grounds since they indicated the extinction of compassion for the victims. The French Revolution and the following terror had amply demonstrated the danger of unrestrained passion. There was no question in Ideler’s mind that “freedom” could only prosper under the auspices of authority. Napoleon had provided the latter but suffered from excesses of the drive to rule and the drive of honor (*Herrschaftsucht* and *Ehrensucht*).⁵³ Ideler accepted Kant’s definition of passion as a tendency (*Neigung*) or drive through which reason is prevented from comparing that same tendency with a sum of all tendencies. But he objected to Kant’s dictum that the damages of the passions were incurable like the damages of cancer. He accused Kant of being an abstract philosopher whose abstract thought led to an absolute concept of evil allowing for no transformations. Ideler did use Kant’s expression of cancerous damages when it came to the damage caused by inhibited and forcefully suppressed drives. Much too frequent among civilized people, these inhibited and suppressed drives had been absent in the heroic age of Homer.⁵⁴

Ideler defined his own ethical approach as a logical extension of the mediation between the warring factions that Stahl and Langermann had initiated. Heinroth’s excessively “transcendental mystical principle,” which confounded moral degeneration and madness, had been a true disservice to psychological research, which already had a bad reputation among physicians. Jacobi did not allow for a meaningful nosology, Groos was accused of excessive philanthropic fervor, and Pinel lacked scientific method and had been a mere observer of Pussin, who did the actual work and administered discipline (Recall D. B. Weiner on Pussin and Pinel!). Perhaps Reil had Pussin in mind when he suggested that a psychologist should work with the psychiatrist. Like Reil, Ideler equated the goal of mental therapeutics with the establishment of circumspection (*Besonnenheit*). In order to re-establish a lasting, strengthening of the equilibrium of the emotions (*Gemüthskräfte*), he demanded the complete submission of the patient to the physician. The ineffectiveness of reason justified the use of discipline, which acted directly on the emotions. For the organization of the mental institution, Ideler deferred to the plan of von Janckendorf, to the ideas of Jacobi and Roller, and to Heinroth regarding the personality of the psychiatrist.⁵⁵ Noteworthy among Ideler’s later writings are *Biographies of Mental Patients in Their Psychological Development*. These are excellent and detailed accounts of case histories that were to demonstrate the “genetic evolution of the illness” and were accompanied by lithographs of the patient’s face, since Ideler found their physiognomy “a true mirror of

their souls.”⁵⁶ The *Religious Mania* of 1847, which also provided more detailed, clinical case histories, opened, however, with a note reminiscent of Heinroth: “the nature of man’s basic character is his free striving to the infinite world beyond the senses which is in conflict with the many limitations of the sensory world.”⁵⁷ Perhaps Ideler was correct that we need to understand the psychologist’s own mind. He certainly was a man for whom the world of the senses had presented too many obstacles, and he withdrew from practice to writing. Similarly, we read with great interest that this man, whom all described as weak, proposed in his *General Dietetic for the Educated* that power was everything: “He who has power has everything, who has none lacks everything.”⁵⁸ His perspicacious mind recognized the practical difficulties that would impede the implementation of theoretical programs. Nasse’s proposed anthropology as the basic science of psychiatry would fail because it required the co-operation of different university faculties, which were embroiled in territorial bickering. The unification of the German faculty, like that of the different nations, remained a dream, a romantic yearning. Some steps would have to be taken to establish a connection between the independent spirits of German psychiatry. For the sake of unity, Ideler was willing to admit that over the years he had changed his mind and was ready now to give equal weight to the physical and mental genesis of mental illness.⁵⁹

If community was a romantic dream, at least it might be possible to move towards a common denominator. The move towards some common endeavor was clearly in the interest of the Prussian ministry, which oversaw the construction and administration of institutions. It was also a goal for the ministry’s faithful servant, Heinrich Damerow.⁶⁰

Although Damerow announced his wish to establish a journal in 1841, it was not until 1844, after his threat to resign and the offer of financial aid from the ministry that the *Journal for Psychiatry* finally appeared. The language of the introduction to the *Journal* reflects Damerow’s romantic leanings. Yet he put his hope not only in the higher, unifying force of the concept of anthropological man, that is, the triad of body, mind, and spirit, but also in the common purpose of practice and administration. Psychiatry was to free the insane from inner and external servitude.⁶¹

Such lofty goals were the romantic elaboration on the topic of improvement that had been introduced in a much more realistic manner at the turn of the century by Hufeland’s popular medical writings on the prolongation of human life, or as he called it, *Makrobiotik*.⁶² Philip Carl Hartmann (1773–1830), professor at Vienna, had extended this concept to a “*Kalobiorik*” or *Precept of Happiness for Man’s Physical Life* in 1808. Although Hartmann had been designated as the initiator of psychology and psychiatry in early nineteenth century Vienna, Damerow apparently did not think so, nor did Damerow mention Hartmann’s student, Ernst von Feuchtersleben, whose *Dietetic of The Soul*, first published in 1838, was to become the most popular book of its type. E. von Feuchtersleben’s *Principles of Medical Psychology* was clearly another matter, but it appeared a year later and Damerow then recognized its importance.⁶³

E. von Feuchtersleben

As we review the authors presented so far we note that romanticism dominated their work less than one might have expected. Except for Haindorf, none accepted Schelling’s view of the soul. They all shared a strong commitment to religion and philosophy, strongly opposing a view of man that excluded religious feelings. They rejected a blind, purely dissecting, analytic approach that did not respect traditional values of form, structure, and propriety. They feared the disruptions and destruction of revolution. Before we criticize them for not following a more “enlightened” path, we would do well to examine what the natural science of the time had to offer and to what degree their writings differed from their contemporaries who were identified with Enlightenment. The early work of Haindorf, of P. C. Hartmann, of Kieser, as well as of others briefly mentioned, was clearly of a more romantic genre. Except for Kieser, they are not considered significant psychiatric authors.⁶⁴ But before closing, it behooves us to have a brief look at von Feuchtersleben’s *Principles of Medical Psychology*, which rapidly gained popularity at home and abroad and provides a proper endpoint of the psychiatric literature considered in this and the preceding chapter.

Von Feuchtersleben's request to hold lectures on medical psychology at the University of Vienna was delayed by the censor. He had proposed to use Ideler's *Grundriss* as one of his sources, but that was considered too materialistic. When he finally held the lectures in 1844 (the first lectures on psychiatry in Vienna), he attracted a large number of faculty, physicians, and students.⁶⁵ The *Principles* appeared the following year. Supporting the progress in natural scientific research, von Feuchtersleben proposed a medical psychology as complementary to "inquiry by chemical agents, the microscope and physical means." He set himself the task of a clear and impartial presentation of medical psychology beginning with its history, "for the history of the sciences is the science itself." Four separate sections on physiology, etiology and semiology, pathology, and therapeutics follow. An appendix on forensics concludes over 400 pages of text. Von Feuchtersleben tries to stay close to facts observed, for he wants to meet the needs of the practitioner. Since medical psychology must address body, mind, and their interrelation, neither philosophical psychology nor materialist physiology can predominate. Fichte, Schelling, Spinoza—none had resolved the dichotomy between body and mind. The sources of medical psychology resemble Ideler's lists, as do his admonitions regarding the pitfalls of introspection, the difficulties of objective observations, and the impossibility of quantifying psychotherapy.⁶⁶ The physician treating "solely by an influence on the mind is a physician only in a metaphorical sense," since the purely mental sphere is the domain of education and religion. However, when the moral and logical spheres impinge on the physical realm, the physician will extend his rule over them. Mental diseases as such are but concepts, and "logical entities and are to be understood as disturbances in the relationship between body and mind." When it came to treatment, all well-informed and experienced physicians utilized the same mental and physical measures, differing only in their explanations. Perhaps most significant is von Feuchtersleben's consistent presentation of two complementary methods of inquiry; the analytic, which he based on Hartmann, and the synthetic exemplified by Nasse. The function of mind is presented in ascending order, beginning in the simplest corporeal sensation and leading up to attention, the "first manifestation of spontaneity of the mind." He emphasizes the participation of mind in the simplest sensory perceptions and agrees with Bischoff's *Naturlehre des Menschen*, which attributed an understanding of an emotional component to every perception.⁶⁷ Von Feuchtersleben defines imagination as the reception, retention, recall, and combination of ideal images furnished by coenesthesia and the senses. Reil is extensively quoted, as are Romberg, Burdach, Rosencrantz, Prochaska, Gall, Brach, and Carus. Plato's trichotomy of the mind—thought, feeling, and desire—von Feuchtersleben considered "founded on fact and identifiable with cerebral, spinal and abdominal ganglionic functions."⁶⁸ Coenesthesia is related to feeling of self or ego. Discontent with self is denoted by bad humor. Von Feuchtersleben places his greatest reliance on Hartmann when it comes to physiological aspects of psychology and on Schelling and Kant with regards to the emotions. He still roams freely through the literature of all ages in regard to melancholy, quoting Hippocrates as readily as Ideler. But whereas Ideler still gave men greater reason than women, von Feuchtersleben clearly states that "reason itself is a prerogative of no sex." In women convulsions and affections of sexual systems are more frequent, and in men it is the digestive system that is more commonly affected. Men may, indeed, have a globus hystericus, but those are commonly effeminate. He followed Grohmann in his critique of physiognomy and cranioscopy. While these theories are not "destitute of a foundation," the fanaticism of their adherents and their premature thoughtless conclusions brought them into disrepute.⁶⁹

He discusses at length dream and sleep because pathological conditions are "genetically" related to these particular states of consciousness. Dreaming is considered a state between health and mental aberration: "when waking dreams become habitual whims, and these whims chimeras, confirmed insanity is not far off." He sees a real progression from sleep to dreams to intoxication to vertigo marked by flight of ideas. He follows Nasse with regard to etiology. It can be psychosomatic or somatopsychic. Spirituous liquors are the frequent cause of delirium tremens. Excessive use of coffee and tea predispose to hysteria. Cretinism is the highest form of idiotism, not a subgroup as claimed by the French. The relation of the thyroid to mental function deserves every attention. While it was formerly believed that mental disorders were invariably incurable, this is no longer so. The cure rates in the literature are anywhere from one to two in five. The physician's personality is the vehicle of the psychical cure, so he should be honest and never use

deception. His thorough review includes Reil's cat harpsicord, which von Feuchtersleben thought "more likely to cause madness than to cure it."⁷⁰

We have come full circle. If von Feuchtersleben seemed to have accomplished "a synthesis of the Romantic totality concept and the scientific method of research within a psychosomatic synopsis founded on induction," his contemporary critic was less certain about it. The reviewer noted that spirit as such existed only in metaphysics and that we have the option to use philosophy for the mind and natural science for the body. But starting like von Feuchtersleben with a unity of body-mind, we still would have to commit ourselves to one of the two alternative methods. If we proceed with the "identifying" (*identifizierende*) method of philosophy of nature we do not untie the knot but only cut through it.⁷¹

Taking leave from the authors reviewed, we see that they lend themselves to few categorizations and generalizations. Their concept of man included faith and religion in addition to reason. Analysis was insufficient. What holds man together was critical for the understanding of individuals, especially when it came to healing those who were no longer mentally whole. All of these authors abhorred a secular view of man, a reality based on external perceptions, and a linear concept of the emotions that excluded religious feelings. Beyond that, there is no easy way to separate those with more extensive clinical expertise from those with less. Decades of experience at the Charité had little effect on Ideler's theories, just as Jacobi's years at the Siegburg did not modify his basic convictions. Certainly this was not a barren period for German psychiatry. This review highlights a need to separate efforts in psychiatric literature from practice, therapeutics, and the development of institutions. We are far from having a good overview and have little justification for more general conclusions.

Notes and References

1. Dieter Jetter, *Geschichte des Hospitals* (Wiesbaden: Steiner, 1966), Vol. I, 119–120. Jetter makes this point in order to differentiate the work there from work therapy instituted for the benefit of prisoners or patients later on. Elsewhere, as in Great Britain, John Howard had called for work to benefit the inmates already in the 1780s.
2. A notable exception was an institution in Celle, where the kings of Hanover established an exemplary penitentiary with separate quarters for the insane and separated the sexes. Jetter, *Geschichte*, Vol. I, 123–124.
3. In 1803, Karl von Stein, the Prussian minister, had initiated plans for the care of the mentally ill in Prussia, and the privy council issued legal regulations for the admission of patients to mental institutions. Klaus Doerner, *Bürger und Irre*, 2nd ed. (Frankfurt: Europäische Verlagsanstalt, 1984), 230.
4. *De methodo cognoscendi curandique animi morbos stabilienda*. See Karl W. Ideler, *Grundriss der Seelenheilkunde* (Berlin: Enslin, 1835), Part I.
5. Chronic patients were removed to an ill-suited old penitentiary at Schwabach. In Bayreuth the convicts remained as attendants. Within a few years after Langermann's departure Bayreuth had again deteriorated badly. K. Doerner, *Bürger und Irre*, 230ff. Martin Schrenk, *Über den Umgang mit Geisteskranken* (Heidelberg: Springer, 1973), 84ff.
6. Ernst Horn (1774–1848) studied in Göttingen and Königsberg, receiving the M.D. in 1797. He taught military surgeons in 1800, became professor of medicine at Wittenberg and Erlangen in 1804. During 1806 to 1818 he was a professor at the Medical-Surgical Military Academy, and became second physician at the Charité in 1810. In 1818 Horn was removed from his position after an inquiry into the death of a patient in his sack six years earlier. Remarkably, his career was not adversely affected, despite his dismissal from the Charité. He was appointed professor of therapeutics in 1821 and continued to teach, publish, and edit journals. He was much honored, and as late as 1824, he still lectured in Berlin on the special therapy of mental diseases. See Doerner, *Bürger und Irre*, 233ff.
7. Gerlof Verwey, *Psychiatry in an Anthropological and Bio-medical Context* (Boston: Reidel, 1985). This book was not available at the time the section on Heinroth (see Part 1) was written. Verwey places Heinroth and Jacobi under the rubric of anthropological psychiatry. Unfortunately, their concepts of anthropology differed significantly, and this categorization ignores more than it takes into account. See Doerner, *Bürger und Irre*, 243.
8. M. Jacobi, *Sammlungen für die Heilkunde der Gemüthskrankheiten* (Elberfeld: Schonmann, 1822), vii–viii, 35.
9. In the seventeenth century Thomas Willis had made that same separation in his studies of mental functions in relation to the brain: *The Soul of Brutes*; see H. R. Isler, *Thomas Willis* (Stuttgart, 1965). Thomas Willis. M. Jacobi, *Die Hauptformen der Seelenstörungen in ihren Beziehungen zur Heilkunde nach der Beobachtung geschiedert*, Vol. I,

- Die Tobsucht* (Leipzig: Weidmann, 1844) (title abbreviated below as *On Mania*). See also Verwey, *Psychiatry*; Doerner, *Bürger und Irre*; and Theodor Irchhoff, *Deutsche Irrenärzte* (Berlin: Springer, 1921).
10. He noted that Fodere, Haslam, Van Swieten, Heinroth, and others do not even mention the pulse. Joseph Frank, Chiarugi, Georget, Leupoldt, Hill, Guislain, Ideler, Cox, Benjamin Rush, and Neumann generalized without data. He launched into a long discussion, showing that other British, French, and Italian authors were unsystematic in their observations and had no scientific basis for their allegations. They simply alleged that practice showed something and described what they saw in the context of theoretical prejudices. *On Mania*, xxi, 93, 361, 380, 412, 724–760.
 11. It is interesting to note here that Jacobi now speaks in general about *Irresein* and apparently no longer about *Tobsucht*, that is, mania, which is the topic of this volume. *On Mania*, 511, 519, 629–630.
 12. Note here again that such an assumed clinical correlation led people to inflict scabies on mental patients in the hope that it would cure the insanity, and claimed to have had good results. *On Mania* 632–633, 646.
 13. *On Mania* 652. Jacobi also quoted W. S. Hallaran, *Practical Observations on the Causes and Cure of Insanity* (1838), p. 25, with a table of causes, and noted that 160 of 747 cases were due to abuse of alcoholic beverages. Most of them resulted in furious madness or mania. and in one eighth of the cases typhoid fever had played an etiological role—cited in Jacobi's. *On Mania*, pp. 654–666.
 14. *On Mania*, 698, 718–722.
 15. *Ibid.*, 787, 793–794.
 16. *Ibid.*, 803, 806–807.
 17. It seems even more difficult to agree with the contention that we are simply dealing with a philosophical difference analogous to that between Plato and Aristotle, a point made by Verwey, *Psychiatry*. Verwey's contribution is certainly worth reading, but is a philosophical analysis of the psychiatrists' *Selbstverständnis*, that is, how Verwey believes they saw themselves, and it leaves out their work.
 18. In 1822 he authored the first volume of *Sammlungen für die Heilkunde d. Gemüthskrankheiten* (Elberfeld: Schonmann, 1822) and expressed his opinions in the introduction to his translations of Samuel Tuke and Esquirol.
 19. M. Jacobi, *Ueber die Anlegung und Einrichtung von Irrenheilstalten* (Berlin: Reiner, 1834), translated into English by Dr. John Kitching, assistant physician at the York Retreat and with an introduction by Samuel Tuke. Abbreviated as *Ueber die Anlegung*.
 20. Jacobi considered himself the first to have achieved this goal in Germany. He did so only with the support of Langermann in Berlin and Nasse in Bonn. Insistence on complete subservience by the second physician led to his loss of Dr. Bird, his first choice for that position (*Ueber die Anlegung*, 15, 24, 196; Doerner, *Bürger und Irre*, 276). The Siegburg usually met the other requirements mentioned here, although occasionally Jacobi had to admit chronic or “unsuitable” patients. The worst aspect of the Siegburg was its location on a steep hill. Jacobi was not dogmatic. He granted that Frankfurt and Nassau were excellent institutions, though under nonmedical directors. See Jacobi, *Ueber die Anlegung*, 204–205.
 21. For Ferdinand Authenrieth, see D. Jetter, *Geschichte*, Vol. I, 123–124. See Jacobi, *Ueber die Anlegung*, 55–57, 335, 334, 68, 78, 80.
 22. Among 202 patients, 5 had to be restrained in bed and 3 on chairs. Out of 18 who wet and 7 who soiled their bed, 11 were at the Siegburg inadvertently. pp. 178–187, p. 189 fn.
 23. Jacobi, *Ueber die Anlegung*, 123–125, 289, 308, 314, 341. M. Jacobi, “Fortgesetzte Erörterungen zur Begründung der somatisch-psychischen Heilkunde,” in *Zeitschrift für die Beurtheilung und Heilung der krankhaften Seelenzustände*, i (1838), 34–118, 36, and 95; hereafter abbreviated as *Z. Krank. Seelenzustände*. Friedrich Groos (1768–1852) was the last medical director of the combined hospice and mad house in Pforzheim. In 1826 he moved with the mental patients to a renovated monastery in Heidelberg and lectured on psychiatry at the university. He came under heavy criticism for his forensic opinion on Pastor Sievert, whom he declared sane on the basis of his books and a personal interview in which Sievert defended his writings. Groos ignored the testimony of members of the pastor's congregation. One and a half years later he recanted. Barbo, “Friedrich Groos,” in Kirchhoff, *Deutsche Irrenärzte*, 51–55. Nearly a century later Freud analysed Schreber on the basis of his published writings without the benefit of an interview.
 24. M. Jacobi, “Fortgesetzte Erörterungen.” *op. cit.*, 114–115 and 117. Groos himself had sought help from philosophy during a lengthy not further defined illness. (Barbo, *op. cit.*) Epictetus, first century AD Greek philosopher who taught the belief in a God who directs the universe; primarily interested in ethics. He emphasized our responsibility for the use to which we put ideas rather than for having them.
 25. Jacobi, “Fortgesetzte Erörterungen,” *Z. Krank. Seelenzustände*, 103–106.
 26. Christian Friedrich Nasse (1778–1851), born in Bielefeld, came from a distinguished line of physicians. In Halle he befriended Achim von Arnim, collector and editor of German folk songs and one of the most illustrious of the

romantics, and received his M.D. there in 1800. He returned there as professor of therapeutics and director of the Teaching Hospital in 1815. Four years later he moved to Bonn, where he was in charge of all clinical teaching. In 1820 he initiated medical teaching along French lines; he performed physiological experiments, chemically examining secretions and excretions. His search for overarching general principles led to the publication of *Isogenesis*. See Werner von Noorden, *Der Kliniker Christian Friedrich Nasse, 1778–1851* (Jena: Fischer, 1929) and Abraham Jacobi, “German textbooks half a century ago; history and reminiscences,” *New York Medical Journal*, lxxiii (1901), 617–623.

27. Von Noorden, *Der Kliniker Friedrich Nasse*, 62.
28. Heinrich Schipperges, “Leitlinien und Grenzen der Psychosomatik bei Friedrich Nasse,” *Confinia Psychiatria*, ii (1959), 19–37. In 1817, he joined C. A. von Eschenmayer and D. G. Kieser in publishing the *Archiv für den thierischen Magnetismus*. In 1818 he founded and edited the *Zeitschrift für psychische Ärzte*, renamed in 1823 the *Zeitschrift für Anthropologie*, and again renamed in 1830 the *Jahrbücher für Anthropologie*; in 1838, together with Jacobi, he published the *Zeitschrift für die Beurtheilung und Heilung der krankhaften Seelenzustände*. It was dedicated not just to the physicians, “but also to all others who research and decide on pathological conditions of the mind.”
29. Friedrich Nasse, “Ueber die Benennung und die vorläufige Eintheilung des psychischen Krankseyns,” *Zeitschrift für psychische Ärzte*, i (1818), 17–48. He equated *Blodsinn* with amentia, *Tobsucht* with mania, and *Wahnsinn* with melancholia. The latter point is very important since the fusion of melancholia with depression rested on a misunderstanding of Hippocratic aphorisms by Galen (Nasse, p. 36).
30. Nasse, *op. cit.*, 46–47 and 128–140 (see first reference to Nasse below).
31. Friedrich Nasse, “Ueber die Abhängigkeit oder Unabhängigkeit des Irreseyns von einem vorausgegangenen körperlichen Krankheitszustände,” *Zeitschrift für psychische Ärzte*, i (1818), 128–140, 409–456, esp. p. 133. See Schrenck, *Über den Umgang*, 119, and M. Schrenck, “Das eigentliche Studium des Menschen,” in *Jahrbuch für Psychologie, Psychotherapie und medizinische Anthropologie*, xvi (1968), 214–224, esp. p. 216.
32. Friedrich Nasse, “Grundzüge der Lehre von dem Verhältniss zwischen Seele und Leib in Gesundheit und Krankheit,” *Zeitschrift für psychische Ärzte V* (1822), 1–35.
33. Friedrich Nasse, “Die Aufgabe der Anthropologie,” *Zeitschrift für die Anthropologie*, i (1823), 1–29.
34. Friedrich Nasse, “Die Aufgabe der Erforschung und Heilung der somatisch-psychischen Zustände,” *Zeitschrift für die Beurteilung und Heilung der krankhaften Seelenzustände*, i (1838), 1–42.
35. Karl Joseph H. Windischmann (1775–1839) studied philosophy and medicine. In 1801 he became court physician and as of 1803 was professor of philosophy and history at Aschaffenburg. He wrote “Self-destruction of Time and the Hope of Rebirth” as well as on astrology, alchemy, magic, and medical topics. In 1818 he became professor of physiology at Bonn. Karl J. Windischmann, “Über etwas das der Heilkunde Noth tut,” *Zeitschrift für die Anthropologie* (3rd quarter, 1823), 1–97.
36. Joseph E. Ennemoser (1787–1854) was a Tyrolean who completed his medical studies in Berlin after fighting for the independence of the Tyrol. He studied magnetism under Wolfart, and published on magnetism and on magic. He formulated what was to be known as Haeckel’s law of biogenetics 40 years before Haeckel. See Jakob Bremm, *Der Tiroler Joseph Ennemoser* (Jena: Eischer, 1930). Joseph E. Ennemoser, “Zur Entwicklungsgeschichte des menschen in psychischer Hinsicht,” *Zeitschrift für die Anthropologie* (1st quarter, 1824); *Historisch-psychologische Untersuchungen* (Bonn: 1824; 2nd ed., Stuttgart: 1852); translated into Italian in 1853.
37. *Archiv für den thierischen Magnetismus*, edited by C. A. von Eschenmayer, D. G. Keiser, and F. Nasse, who was succeeded by Nees von Esenbeck after 1820. Nasse contributed “Abhängigkeit der magnetisierten Person von der magnetisierten im Tode,” *Archiv für den thierischen Magnetismus*, i (1st quarter, 1817), 138; “Über das Begründende des sogenannten thierisch magnetischen Einflusses,” *Archiv für den thierischen Magnetismus*, i (3rd quarter, 1817), 3–21; “Über das Schauen der Zukunft im magnetischen Schlafwachen,” *Archiv für den thierischen Magnetismus*, iii (1st quarter, 1818), 27–50.
38. Dietrich G. Kieser, *System des Tellurismus oder thierischen Magnetismus* (Jena) (1821–1822). The 2nd ed. of 1826 (Jena) is used. (*Kraft* is translated as force or power.)
39. *Ibid.*, Vol. I, 2–8, 49, 58–59, 229.
40. *Ibid.*, 73–74, 100–102, 113.
41. In modern terms Kieser describes here the importance and problem of the placebo effect, just as he subsequently discusses faith healing, exorcism, the use of reliquaries, the cures of the New Testament, of Gassner, and of the Jesuits, as well as altered states of consciousness as the products of faith, trust, or domination of the emotional side without reflection or self-consciousness (Vol. I, 237–260). He also mentions the cure of Katherine

- Emmerich. See Henri Ellenberger, *The Discovery of the Unconscious* (New York: Basic Books, 1970). In the case of the experiences of witches, he quotes Wier, who claimed that the chemicals or ointments used may have contributed to producing the subjective experiences that were taken to be factual by the witches and their community. He also claimed that Eschenmayer was wrong (Vol. II, 75). Other religions could also heal, as A. de Haen had noted in his book on miracles in *De miraculis* (Frankfurt, 1776). See Kieser, *System des Tellurismus*, Vol. I, 224–228, 234–235, 263.
42. Kieser, *System des Tellurismus*, Vol. I, 345, 379–380, 391–393, 402.
 43. Kieser, *System des Tellurismus*, Vol. II, 238–239, 241–244. Kieser primarily referred to the French Commissions.
 44. Germans reached a higher level of science since the English and French had not recognized the importance of magnetism. Although they had greater clarity in politics, in science they did not (Kieser, *System des Tellurismus*, Vol. II, 289). Later he noted that America was still in its childhood but in the future it will complete what Europe has begun (Vol. II, 324).
 45. D. G. Kieser, *Elemente der Psychiatrik* (Breslau and Bonn: Kaiser), in *Allgemeine Zeitschrift für Psychiatrie*, xiii (1856), 469–499.
 46. The goal of treatment is the emancipation of the soul from the shackles of illness. The eclipsed godly idea of man must be raised again to God. In the criminal the process was voluntarily initiated, in the mad physical illness or uncontrolled passion led to involuntary servitude. The brain might be sensually affected but an unknown cerebral organ was involved in every passion (pp. 236–239). Interestingly, Kieser recognized that without the passions there was no mental life with greatness in it (p. 241). Both criminals and the mentally ill, according to Kieser, required treatment, the Sophronisterium for criminals and another one for madmen, both providing a “healing gymnastic” for spiritual life. The physician had to decide which would go where. D. G. Kieser, “Von den Leidenschaften und Affecten,” *Allgemeine Zeitschrift für Psychiatrie*, vii (1850), 234–252.
 47. Kirchhoff, *Deutsche Irrenärzte*, Vol. I, 153–157.
 48. Karl W. Ideler, *Grundriss der Seelenheilkunde* (Berlin: Enslin, Vol. I, 1835; Vol. II, 1838) (abbreviated as *Grundriss*). See Vol. I, 10–65.
 49. Certainly, the most extreme position of psychohistorians, Ideler recognized that Stahl’s equation of passions with madness had been stated already by the Stoics, but it was Stahl’s “beseelte Pathologie” that permitted psychology to enter medical science, and it was Stahl who said that a speculative psychology was inadequate, although Ideler recognized metaphysical psychology as a necessary step in scientific developments. *Grundriss*, Vol. I, 67, 93.
 50. *Grundriss*, Vol. I, 118, 125, 128, 135–137. He enumerated the drives in descending order as religious drive, drive for independence, inner freedom, truth, external freedom, honor, rule, occupation, life, egoism, social imitation, family love (which includes sex), and love of humanity. Later, he simplified them into three basic drives (1) the religious = man’s relation to God; (2) the Self = the drive for independence; and (3) Social, = the drive in relation to others.
 51. *Ibid.*, 780–781, 136–137.
 52. *Ibid.*, 150–152, 255, 445.
 53. *Ibid.*, 555, 642. Not only did Ideler write under the influence of these historical events, but he proposed philosophy of history as the actual basis of empirical psychology (Vol. II, 167). Perhaps he was right.
 54. Ideler, *Grundriss*, Vol. II, 537, 644; Vol. I, 177.
 55. *Grundriss*, Vol. II, 61, 92, 99, 732, 740. Ideler referred to Heinroth’s *Lehrbuch II*, 173–178, and *Anweisung*, 49–69; and von Janckendorf’s *Beschreibung der königlichen sächsischen Heil und Verpflegungsanstalt Sonnenstein*, 3 parts (Dresden, 1829). Ideler was aware that at his time, when materialism was in full bloom in philosophy and in “organic natural science,” any purely psychological interpretation would be decried as ideology and “gothic metaphysics.” Indeed, he was later described as a ruin out of the past projecting into modern time (Hirsch, quoted by Kirchhoff, *Deutsche Irrenärzte*, Vol. I, 154).
 56. *Biographien Geisteskranker in ihrer psychologischen Entwicklung* (Berlin: Schroeder, 1841), xvi. See also Sander L. Gilman, *Seeing the Insane* (New York: Wiley, 1982) for an excellent history of the portrayal of mental illness. He discusses Ideler (pp. 106–108) and places him in relation in Esquirol.
 57. Karl W. Ideler, *Der religiöse Wahnsinn erläutert durch Krankengeschichten* (Halle: Schwetschke, 1847), 1–3.
 58. *Ernst von Feuchtersleben*. Review of “C. Wilhelm Ideler, *Allgemeine Diätetik für Gebildete* (Halle: Schwetschke, 1846),” *Allgemeine Zeitschrift für Psychiatrie*, iii (1846), 381–343.
 59. Karl W. Ideler, “Ueber das Verhältniss der Seelenheilkunde zu ihren Hilfswissenschaften,” *Allgemeine Zeitschrift für Psychiatrie*, iii (1846), 394–430.
 60. Heinrich Philipp August Damerow (1798–1866) studied in Berlin under Schleiermacher and Hegel, studied psychiatry with E. Horn, and graduated with a dissertation: *quomodo et quando medicinae vera*. Later, he studied

with Esquirol and Magendie in Paris and spent time with Jacobi at Siegburg, but he was dubious about the experimental approach of Magendie and critical of Jacobi's somaticism. Damerow's interest remained philosophical throughout his long career, mostly spent in government service. In addition to his work in Berlin, he directed the provisional institution for the mentally ill in Halle from 1836 to 1839 and later directed the new institution that opened in 1844, long after Reil had pleaded for its establishment. Damerow wrote *Die Elemente der nächsten Zukunft der Medicin entwickelt aus der Vergangenheit und Gegenwart* (Berlin: Reimer, 1829). See G. B. Risse, "Historicism in Medical History," *Bulletin of the History of Medicine*, xliii (1969), 201–211.

61. *Allgemeine Zeitschrift für Psychiatrie*, i (1844), iii–v. For this period and the development of this journal, see also Joachim Bodamer, "Zur Entstehung der Psychiatrie als Wissenschaft im 19. Jahrhundert," *Fortschriften der Neurologie und Psychiatrie*, xxi (1953), 511–534.
62. Christoph Wilhelm Hufeland (1762–1836). After studies in Jena and Göttingen, Hufeland was personal physician to Goethe and Schiller, then professor at Jena, personal physician to the king of Prussia, and director of the Charité and the Medical-Surgical College; he was influential in the establishment of the University of Berlin and the medical clinic, which he directed. Publicist of the best known journal, many books for the public as well as the medical profession.
63. For P. C. Hartmann, see Erna Lesky, *The Vienna Medical School of the 19th Century* (Baltimore: Johns Hopkins University Press, 1976), 79–82.
Ernst von Feuchtersleben (1806–1849) was a poet and physician. Beginning in 1840 he was secretary to the Imperial and Royal Society of Physicians; he was lecturer on medical psychology, later dean of the medical faculty and vice-director of medical-surgical studies at the University of Vienna. He had studied with Hartmann, and extensively studied philosophy and medicine. For Damerow's note, see *Allgemeine Zeitschrift für Psychiatrie*, ii (1845), 182.
Ernst von Feuchtersleben, *The Principles of Medical Psychology*, trans. H. Evans Lloyd, rev. & ed. B. G. Babington (London: Sydenham Society, 1847). The German edition appeared in 1845. and the book was also translated into French, Dutch and Russian.
64. For similar reasons, Gotthilf H. Schubert and Carl G. Carus were not selected. While important for the history of psychology and traumatology, neither played a significant role in psychiatry as defined at the time. Gotthilf H. Schubert, *Die Geschichte der Seele*, 2 Vols. (Stuttgart: Cotta, 1830); Carl G. Carus, *Vorlesungen über Psychologie* (Pforzheim; Flammes and Hoffmann, 1846). See also Carus' contenty varies *Psyche, für Entwicklungsgeschichte de Seele* (Pforzheim: Flammes and Hoffmann, 1846).
65. Max Neuburger, *Der Arzt Ernst Freiherr von Feuchtersleben* (Wien: Braumüller, 1906), 31. Neuburger thought it likely that Ideler was considered too materialistic!
66. Von Feuchtersleben, *Principles of Medical Psychology*, 9, 11, 17–18, 20–22, 55, 82.
67. *Ibid.*, 22–23, 83–112, 118–119.
68. *Ibid.*, 120, 129.
69. *Ibid.*, 135, 227–228, 145, 157. Gall's craniology had relatively little impact on the authors considered so far. Most found the limitation of all mental function to the brain too restricting. Many, including von Feuchtersleben, accepted his notion that the cerebellum served sexual functions (p. 180). For an excellent presentation of Gall's psychology, see Erna Lesky, *Franz Joseph Gall (1758–1828) Naturforscher und Anthropologe* (Bern: Huber, 1979). In English, the classic works of Temkin and Ackerknecht are of value. See Erwin H. Ackerknecht and Henri V. Vallois, *Franz Joseph Gall, Inventor of Phrenology and his Collection* (Madison, 1956); Owsei Temkin, "Gall and the Phrenological Movement," *Bulletin of the History of Medicine*, xxi (1947), 275–321. For a good discussion of Lavater's *Physiognomy*, see Gilman, *Seeing the Insane*.
70. Von Feuchtersleben, *Principles*, 167–201, 241, 174, 228, 303–309, 311, 319–327.
71. Erna Lesky, *The Vienna Medical School of the 19th Century* (Baltimore: Johns Hopkins University Press, 1976), 156. Flemming, "Ernst von Feuchtersleben: *Lehrbuch der ärztlichen Seelenkunde*, Wien: Carl Gerold, 1844 [sic] 409S," *Allgemeine Zeitschrift für Psychiatrie*, iii (1846), 115–132.

Chapter 11

Descriptive Psychiatry and Psychiatric Nosology during the Nineteenth Century*

German Berrios

A conceptual history of the notion of “mental illness” during the nineteenth century should include the analysis of four interacting vectors: descriptive psychopathology, etiological theory, pathogenesis, and taxonomy. *Descriptive psychopathology* (DP) refers to the language of description; *etiology* to the causes of disease; *pathogenesis* to the manner in which disrupted brain mechanisms generate mental symptoms; and *taxonomy* to the rules governing the classification of disease. Ideologies from other fields have freely been used in generating such vectors. For example, descriptive psychopathology, or semiology, owes much to eighteenth century linguistics and theory of signs¹; etiological theory and pathogenesis reflect developments in general medicine, microscopy, and nineteenth century psychological theory²; and taxonomy is partly based on eighteenth century metaphors of order.³

These interacting vectors only gain full meaning when replaced onto the canvas of the nineteenth century *practice* of alienism. It is difficult to disentangle the separate threads from the resulting knot, and there are no “representative” elements. I have tried to solve the problem by practicing fine-grained “internal” history, an approach that can provide much-needed clinical detail, although it may be historiographically less appealing.⁴ Unlike social historians, clinicians start from the premise that the “meaning” of mental disorder depends upon knowledge of biological origins (that is, the source of the distorted biological signal). For clinicians most “psychiatric” phenomena express in final form biological signals modulated by personal and cultural grammars.⁵

The stability of DP varies with the rate of change in both biology and language.⁶ Descriptions and diagnoses are kept going as much by symbols, myths, and other constructs⁷ as by biological invariants.⁸ Indeed, psychiatrists have not yet developed accurate ways of deciding on the relative contribution of each. “Manipulative behavior,”⁹ for example, may fully result from human interaction and hence be only “social,” while “grand mal seizures”¹⁰ and “delirium”¹¹ are fundamentally biological phenomena.

Pre-nineteenth century literature is rich in descriptions of insanity.¹² Less is known, however, as to its theoretical underpinnings. Far more is known about the nineteenth century, but the three great changes that transformed the nature of psychiatry are only partially understood.¹³ These changes are: (a) the transformation of the “insanities” into the psychoses, (b) the narrowing (and eventual disappearance) of the “neuroses” as a general category, and (c) the fragmentation of the old monolithic descriptions of insanity into what are now called mental “symptoms.”

I address some of these issues in this chapter and chronicle the interactions among theory, observation, and the biological phenomena of madness. To avoid confusion, I shall endeavor to keep separate the history

* Professor Berrios’s chapter was completed earlier. Although his views have changed somewhat since then, he believes that the integrity of the paper should not be interfered with.

of words, behaviors, and concepts. Though I shall assume as a given that the protagonists of the tale were men with families, political interests, fears, and ambitions and that many of their choices were determined by “noncognitive” factors, I shall also consider them as rational beings who, when faced with real patients, exercised, as current psychiatrists would like to be thought of as doing, a modicum of descriptive freedom and objectivity. Hence their writings will also be considered as scientific documents.

The Development of Descriptive Psychopathology

Definitions

DP is here defined as a “language” comprising a theoretical basis, syntax, lexicon, and rules of application.¹⁴ Because DP can be said to impose order on a universe of complex behavioral forms, it is a veritable “cognitive system.” For each term (purportedly dealing with a self-contained piece of behavior or symptom), DP is expected to contain “caseness” rules, ways of determining the presence or absence of a given “symptom.”¹⁵ Symptoms (also conceived of as referents or signifiers) are defined by means of decision-making routines that are useful to comprehend in terms of signal-detection theory.¹⁶ At a basic level, symptoms result from a “fracturing” of insane behavior. Consequently, observers may differ in the way in which the task is done; indeed, before estimations of inter-rater reliability (e.g., the kappa values)¹⁷ ever became available, nineteenth century alienists used consensual qualitative rules to determine when a symptom *was present*, often appealing to the higher tribunal of “common sense,” to the “obvious” nature of some disordered behaviors, and occasionally to intuition and the “clinical eye.” When such aids failed, as they did with court challenges to alienists’ recognition of some symptoms, especially the predication of intentionality,¹⁸ soul-searching followed about how to improve symptom recognition.

The Problems

Absence of a recognizable DP is a striking feature of psychiatric discourse *before* the nineteenth century. However rich in literary detail, earlier references to insanity and germane terms such as dementia were made in terms of “holistic” categories.¹⁹ One explanation for the lack of detailed descriptive systems in earlier times may be that they were unnecessary or inconvenient because “insanity” fulfilled a different social or legal function.²⁰ By assuming continuities between mad and normal actions, such descriptive systems would have threatened “all-or-none” concepts of “total insanity.” Furthermore, since Greek times psychiatric categories have been founded on descriptions of polar “overt” behaviors²¹ and of social competence,²² leaving no room for nuances and transitions.

The creation of DP took about 80 years. It started during the third decade of the nineteenth century and was completed just before the Great War. It has changed little since. This means that the success of clinical and research endeavors does depend, and not to a small extent, on the quality of a conceptual machinery tooled during the nineteenth century.²³ The twentieth century no doubt refined psychiatric discourse by introducing techniques of statistical calibration and decision-making, but the historical question remains: how did nineteenth century alienists manage to extract stable descriptions and classifications based on long-term observation of what often were institutionalized groups of patients, with the concomitant high levels of social noise?

I shall briefly explore five factors in this regard: (a) the descriptive and medico-legal obligations of the new asylum officers; (b) the availability of psychological theories; (c) the changing importance of the notion of sign and symptom in medicine; (d) the introduction of *subjective* symptomatology; and (e) the introduction of a temporal dimension in the description of abnormal behavior.

The New Descriptive Needs

The drive to build asylums for the insane simultaneously appeared in various European countries during the early years of the nineteenth century.²⁴ The social processes that generated such need are dealt with

elsewhere in this book. Once built, these institutions created social and scientific consequences of their own. First of all, they encouraged the accumulation of the mentally ill within confined physical spaces. Overcrowding and lack of medical care occasioned decimation through intermittent infections, and pressed the need for a permanent medical presence. In Great Britain this was made good by the 1828 Asylums Act.²⁵ The incorporation of medical practitioners into asylums generated social and scientific change. They brought with them the habit (and medico-legal obligation) of documenting change in their charges. As long as this need related to physical state there was no problem because, during the early nineteenth century, there already existed recognized methods for history taking.²⁶ It was otherwise in regards to mental state. Perusal of clinical log-books from before the 1840s shows a poverty of description consonant with an absence of official “symptom lists.” Early asylum doctors were, thus, forced to improvise and borrow, and their activity can be said to be an important factor in the creation of a “semiology” of mental illness. After 1850 the quality of case descriptions noticeably changes.

In this regard, it is important to point out that, although some accounts of madness before the nineteenth century do elegantly describe mental states,²⁷ they neither amount to a *common* descriptive language shared by all physicians nor were intended to be such a language. What emerged from the nineteenth century descriptive enterprise was totally different: it was a common language based on an analytical and pictorial epistemology that dealt with symptoms *independently* and assumed that the *same* symptom might be seen in *different* forms of madness.

The creation of such language of description (DP) led to a shift in the *perception* of madness.²⁸ Changes in the “semiology” of medicine are no doubt important to this process. But the *sine qua non* for this change was the availability of psychological theories in terms of which to construct behavioral profiles.

The Psychological Theories

Descriptive psychopathology in its current form emerged in France during the fourth decade of the nineteenth century. After this period two changes can be noticed: books show case histories illustrating specific diagnostic categories and include sections on “elementary” symptoms.²⁹ This difference separates the predominantly holistic and taxonomic books by Pargeter, Arnold, Crichton, Haslam, Rush, Heinroth, and Pinel from those by Esquirol, Prichard, Georget, Guislain, Feuchtersleben, Griesinger, Morel, Falret, Baillarger, Bucknill and Tuke, Krafft-Ebing, and Séglas, all of which include sections on “elementary” symptoms.

Melancholia, mania, phrenesis, delirium, paranoia, lethargy, carus, and dementia were the main diagnostic categories inherited by the nineteenth century. By the 1850s these categories had undergone fractionation by means of a process that Henri Ey has described as a *dissection de la vie psychique morbide*.³⁰ Recombinations of these fragments gave rise to new diagnostic categories. Only occasionally did some old categories, for example, delirium, reappear unchanged; others, such as carus and phrenesis, were jettisoned altogether. In the main, old terms were given entirely different content (for instance, melancholia and mania).³¹

The fractionation of the old categories of madness occurred along planes of cleavage contained in the templates of the mind that faculty psychology and (less obviously) associationism made available.

Faculty Psychology

Faculty psychology, an ancient (and recurrent) view of the structure of the mind,³² underwent a revival toward the end of the eighteenth century. French alienists opted in their reaction against associationism for a form of faculty psychology, which goes far in explaining why DP developed first in France.³³ Influenced by the Scottish philosophy of common sense³⁴ and under the leadership of Maine de Biran,³⁵ Royer-Collard,³⁶ Cousin, Jouffrey, and Garnier, the French philosophical establishment accepted a “functionalist” view of the mind. This led to a change from the sensationalism of Condillac to an essentialist view that emphasized Maine de Biran’s “inner experience.”³⁷

Phrenology was one of the nineteenth century intellectual disciplines inspired by faculty psychology.³⁸ Indeed, it is not sufficiently emphasized that the conceptual basis of craneology (later called phrenology)

by Spurzheim) was but an “anatomized” form of faculty psychology. By suggesting “trait-profiles,” the phrenological approach made possible the early typological theories of personality.³⁹ These profiles could also be interpreted as conglomerates of faculties, and long after phrenology had been challenged and discarded, faculty psychology remained the conceptual matrix for the development of nineteenth century views on psychiatric taxonomy and localization.⁴⁰

Kant's Version of Faculty Psychology and the Nineteenth Century

Kant's tripartite concept of the mind was almost contemporary to that of the Scottish philosophers.⁴¹ Influenced by Wolff via Knutzen, his teacher at Königsberg, and via Tetens, whose version of the tripartite view he was to follow,⁴² Kant did rebel against the “dogmatic rationalism” of his teachers.⁴³ Following the views of Baumgarten,⁴⁴ he suggested that *affect* constituted an independent faculty. In the *Critique of Judgement*, Kant⁴⁵ put forward the view that the “three faculties are irreducible and cannot be derived from a common root” and believed that emotions had a causal role in mental disease (*Krankheiten des Gemüts*).⁴⁶ As Mora has remarked, “at the end of the 18th century, Kant came to think of mental illness as a form of weakness of the faculties, in line with his belief in Faculty Psychology.”⁴⁷

Kant wrote on mental disorders in the *Anthropologie*, but Jalley and Lefevre have disinterred another manuscript on the “diseases of the mind.”⁴⁸ This 1764 work shows the influence of John Locke, particularly when Kant differentiates between delusions originating from faulty perception and thinking.⁴⁹ Kant also suggested a separation between the perceptual and thinking functions; he called the impairment of the first “hallucination” and of the second “delusion”:

So far [in the hallucinations] the thinking faculty is not involved at least not necessarily, and the failure occurs in the empirical notions ... [A]s opposed to this, when thinking is impaired the conclusions from experience are wrong; the first degree of this disturbance is called delusion (p. 225).⁵⁰

Sauri⁵¹ noticed that the “ideal schema” of the faculties allowed Kant to classify delusional thinking no longer in terms of content but as a manifestation of a disorder of the intellectual function.

Little has been written on the influence of Kant on psychiatric thinking.⁵² Leibbrand and Wettley⁵³ remarked upon the fact that Kant's contribution was theoretical and made in spite of the fact that he had no first-hand knowledge of clinical disorders. Evidence for the long-term influence of Kant's views in nineteenth century psychiatry can be found, however, in an acknowledgment by Magnan and Serieux,⁵⁴ who referred to him as a “precursor” of the concept of *délire chronique a évolution systématique*. Jaspers was also influenced by Kant,⁵⁵ who “became for me, and remained for me, the philosopher par excellence.”⁵⁶ In his autobiography, on the other hand, he admitted that in his university years he found the German philosopher “hard to understand.”⁵⁷ In the *General Psychopathology*, Jaspers alludes to Kant only in relation to the role played by the alienist in deciding on the legal responsibility of the criminal offender. The Kantian view has not been without critics. For example, from a Marxist perspective Merani⁵⁸ criticised the overdescriptivist and antiexperimentalist stance of Kant's psychology.

Associationism

Associationism before the Nineteenth Century

The atomistic model of associationism provided the epistemological basis for the development of seventeenth and eighteenth century science.⁵⁹ The Lockean “simple idea” (the psychological counterpart of the Newtonian atom) served as a “unit of analysis” and allowed for the development of “laws of association,” a combinatorial algebra in terms of which the mind reconstructed the world out of simple experiences. This view found in perception an ideal model; in later years this was to favor certain functions, such as cognition, to the detriment of others, such as emotion.⁶⁰ John Locke's associationistic view of madness is appealing in that it does not presuppose a primary disorder of the faculty of reasoning: “having joined together some ideas very wrongly, (madmen) mistake them for truths; and they err as men do that argue right from wrong principles.”⁶¹

This intellectualistic definition was challenged only during the early nineteenth century. Pinel⁶² described cases with “lesions of the function of the will” “whose symptoms appeared enigmatic upon the definitions of mania given by Locke and Condillac” (p.102):

One can admire the writings of Locke, and agree nonetheless that his views on mania are incomplete in that he considers it to be always associated with a delusion. ... I thought likewise until resuming my research at Bicêtre; and I was not a little surprised to find many maniacs who at no period gave evidence of any lesion of the intellect, but who were under the control of a sort of instinctive fury, as if the affective faculties alone were impaired (p.156).

These two quotes illustrate well the switch from associationism to faculty psychology that was to characterize the new psychiatric taxonomy of the early nineteenth century.

Associationism during the Nineteenth Century

For all its influence, pre-nineteenth century associationism was more epistemological than psychological. However, the books by Thomas Brown and James Mill mark a change of emphasis. In spite of their heavy philosophizing, these works undertake to explain behavior, a tendency that James’s son John Stuart Mill⁶³ and Alexander Bain⁶⁴ were to develop further.

A similar situation obtained in France, where associationism was confronted, early in the nineteenth century, by faculty psychology and by the anti-analytic views imported from Scotland. The associationism of Condillac and Bonnet was epistemological in intention, and its psychological aspects were only developed by Destutt de Tracy and the “ideologues.”⁶⁵ Associationism thus became “psychological” and entered into conflict with faculty psychology, whose direct psychological usefulness, as in its application to phrenology and in the classification of mental disease,⁶⁶ had been obvious from the start.

It happened likewise in Germany.⁶⁷ A good example of this change is found in the work of Herbart, with his emphasis on education and psychology.⁶⁸ These views influenced Griesinger,⁶⁹ through whom the analytical tradition was passed on to Krafft-Ebing, Meynert, and Wernicke. It is, for example, exhibited in Wernicke’s “connectionist” view of aphasia, which was influenced both by Fechner’s views on the correlations between stimuli and intensity of sensation and the underlying metaphysics of the mind–body relationship⁷⁰; German psychiatrists sought to establish during the second half of the nineteenth century objective experimental descriptions of some of the symptoms of insanity. For example, Kraepelin, a disciple of Wundt and follower of his particular brand of associationism, carried over the analytical tradition into the twentieth century.⁷¹

Most alienists accepted the analytical epistemology of associationism and adopted the important concept of “unit of analysis” as applied to behavior and experience. Symptoms such as obsessions,⁷² delusions, and hallucinations⁷³ became the indivisible units of madness. This was consolidated in the work of Chaslin⁷⁴ and Jaspers.⁷⁵ However, taxonomy remained based on faculty psychology, and this created a tension in the evolution of DP.

The Surface Markers of Disease

Psychiatric “semiology” was born out of the observation of asylum patients, many of whom suffered from organic and functional psychoses. During the nineteenth century the “neuroses” *did not yet fall within the purview of the alienist*⁷⁶ and hence their “symptoms” contributed little to the semiology of insanity. The symptomatology of the psychoses was, in turn, modeled upon that of delirium.⁷⁷

The notion of “sign” is not free from ambiguity in the field of psychopathology.⁷⁸ In some cases (disorientation, for instance) it might relate to an underlying dysfunction rather directly in the same way in which smoke relates to fire⁷⁹ (what C. S. Peirce called “indices”⁸⁰); in others, it “signifies” a behavioral form (such as manipulative behavior, what Peirce called “symbols”). It is plausible to believe that “indices” are more likely to reflect a specific neurobiological disorder than “symbols.”

Assumptions and Concepts

Since descriptive psychopathology has changed little since the nineteenth century, an analysis of its conceptual bases should help to understand the enduring quality of some of the symptoms it generated (delusions, hallucinations, etc.). The following issues will be briefly touched upon below: “form and content” of symptoms, the role of numerical descriptions, iconographic representations, the relationship between mental disease and “time,” and the incorporation of subjective information into the definition of mental illness.

Form and Content

The distinction between “form” and “content” of a symptom is one of the enduring contributions of nineteenth century psychopathology. The Aristotelian “*eidos*” referred to the essence or common character of objects and is one of the origins of the current concept of “form.”⁸¹ With some modifications, the Aristotelian notion of form lasted well into the seventeenth century, when Bacon⁸² proposed that “form” might be simply considered as a synonym for “figure.” Kant in turn suggested that the sense modality in which a perception took place, in conjunction with its cognitive network, should be called “form.”⁸³

Nineteenth century descriptive psychopathology, and, indeed, Jaspers⁸⁴ at the beginning of the twentieth, followed the Kantian definition:

Form must be kept distinct from content which may change from time to time, e.g. the fact of a hallucination is to be distinguished from its content, whether this is a man or a tree. . . . Perceptions, ideas, judgements, feelings, drives, self-awareness, are all *forms* of psychic phenomena; they denote the particular *mode of existence* in which content is presented to us. It is true, in describing concrete psychic events we take into account the particular content of the individual psyche, but from the phenomenological point of view it is only the form that interests us.⁸⁵

To this day, “form” refers to structures that act as warrants for symptom stability, that is, to “constancy”: elements that render mental symptoms recognizable in time and space. The notion of “form” is easier to understand in physical medicine. Color, sound, surface, solidity, smell, and temperature provide the natural media in which “form” achieves expression and stability.⁸⁶ Inspired by medical semiology, alienists also expected to identify signs of insanity that were stable, public, and observable. To do so, they committed themselves to the epistemology of “natural kinds,”⁸⁷ that is, to the view that the solutions of continuity between symptom and symptom (whether mental or not) exist *in re*. This led to a loss of interest in “contents”: symptoms were just signposts to a brain lesion. Neglecting the semantic aspects of symptoms hindered the development of a comprehensive model; as a result a theory that catered exclusively for “contents” was to develop, with a vengeance, at the end of the century.⁸⁸

In clinical *practice*, the “contents” of symptoms were never neglected altogether. Alienists made use of such information to establish etiological connections between the subject’s illness and his past. By the second half of the century, before Janet or Freud had come to the scene, associations between content and past history were conceptualized as cause–effect chains. For example, it was felt that the content of a delusion or a hallucination or the form of a hysterical conversion might tell something about the circumstances in which the symptom was first acquired (trauma, financial loss, infection, and the like).⁸⁹ These putative cause–effect chains acted as veritable second-order “psychological” explanations.⁹⁰ Their ubiquitous presence in nineteenth century psychiatric practice calls into question the view that during this period alienists only entertained somatic etiologies.⁹¹ Not surprisingly, these psychological accounts matched the beliefs of popular psychology. When the neuroses, particularly hysteria, came within the purview of the alienist (and this only occurred toward the end of the century), he found that the content of a sign could tell a great deal about the circumstances of its acquisition (as in Charcot’s “idea” expressing itself in the symptom).⁹²

Emphasizing “form” also led to changes in type of explanation: for example, the “form” of a hallucination highlighted the importance of the sense modality in which it occurred, which in turn suggested a brain address.⁹³

Numerical Representation and Measurement

The mathematization of the natural world started in Europe during the seventeenth century.⁹⁴ However, the “Newtonian paradigm” had little effect on psychological thinking at the time, as both Cartesian and Lockean psychology agreed that numerical descriptions did not apply to behavior.⁹⁵

The suggestion that “psychometry” (the measurement of psychological experience) was possible and desirable is attributed to Christian von Wolff. While describing ways of assessing the magnitude of pleasure and displeasure he stated in a footnote: “these theorems belong to ‘psychometry’ which conveys a mathematical knowledge of the human mind and continues to remain a desideratum.”⁹⁶ Ramsay, Baumgarten, Crusius, de Maupertuis, Buck, Mendelssohn, and Ploucquet are all eighteenth century writers who prepared the conceptual terrain for the advent of measurement in psychology, though no one seems to have carried out experimental work.

The path to numerical description, originally suggested by Wolff (and opposed by Kant and Comte), was continued by Herbart, who suggested the development of a “statistics” of the soul.⁹⁷ This conceptual change made easier the work of Müller and Du Bois Reymond.⁹⁸ In turn, the instruments they designed facilitated the ideas of Weber and Fechner.⁹⁹

The introduction of quantification into medicine followed a different path.¹⁰⁰ Numerical management of data was already common to pre-nineteenth century epidemiologists and administrators (for example, bills of mortality), but inferential interpretations were scanty.¹⁰¹ Statistical analysis of data, based on probability theory,¹⁰² began in earnest during the nineteenth century,¹⁰³ This is clear in the work of Gavaret,¹⁰⁴ Louis,¹⁰⁵ Radicke,¹⁰⁶ Renaudin,¹⁰⁷ and Esquirol,¹⁰⁸ who also made use of inferential percentages.

Numerical descriptions extended only gradually to other areas of psychopathology, and this occurred around the middle of the century.¹⁰⁹ There is little historical evidence to suggest that before the 1850s any serious effort had been made to measure personality traits.¹¹⁰ This is surprising, as the ideas of Gall and Spurzheim had made available to psychology a conception of individual differences susceptible to quantification,¹¹¹ and phrenology sought to establish correlations between anatomical and psychological magnitudes.¹¹² After the 1830s, an officially sponsored opposition to phrenology developed.¹¹³ This might have discouraged alienists from espousing, at least publicly, Gall’s interesting “modular” view of the mind.¹¹⁴

The Psychopathology of Nonverbal Behavior

The great diagnostic categories of the past (mania, melancholia, phrensy, lethargy) relied on the observation of what the individual did, looked like, and thought rather than on what he “felt.” This is particularly so in regards to mania and melancholia.¹¹⁵ Much has been said about these two notions being forerunners of the clinical categories currently bearing the same names. Before the nineteenth century, however, there is very limited historical evidence that “elation” and “sadness” (i.e., pathological mood) were actually considered as “criteria” for the *medical* definition of mania and melancholia, respectively.¹¹⁶ The fact that *literary* uses of melancholia included a reference to low spirits¹¹⁷ is, of course, no argument in favor of a continuity in *medical* meaning.

The use of overt behavior as the *métier* of psychopathological description seems to have been started by the Greeks.¹¹⁸ Symptom mapping was influenced by their views on what constituted harmonious behavior. The categories they created became the archetypal forms of insanity, which, with little change, lasted well into the eighteenth century. Interest in the description of overt behavior was renewed during the eighteenth century,¹¹⁹ particularly in the study of facial expression in the normal individuals, in what came to be known as the science of physiognomy.¹²⁰ During the late eighteenth century, Parsons¹²¹ attempted to establish correlations between emotions and gestures. The application of these techniques to pathological states gave rise in the fullness of time to an iconography of madness. This, in turn, influenced the way in which the mentally ill were perceived.¹²² For example, exaggerated or distorted facial expressions were thought to indicate the intensity of the underlying derangement. During the nineteenth century, a change

occurred in the way in which the insane were depicted. The old stereotyped ways of Hogarth and Tardieu gave way to a more “realistic” approach; made possible after 1839 by the invention of the daguerreotype. This introduced another bias in the type of photographic records kept for posterity, as the long exposure times required by early photography encouraged its use in “static” conditions such as stupor.

Likewise the view that there was a one-to-one correlation between inner states and gestures became less acceptable; indeed, it was believed that the two factors could be dissociated. This in turn led to the idea that insanity could be either concealed or simulated. Morison, Laurent, and the great Pierret, for example, developed a complex theory of “mimia” and “paramimia” during the second half of the century.¹²³ Darwin’s interest in this issue is also well known.¹²⁴

Disease and the Time Dimension

Until the early nineteenth century the descriptions of insanity had been, in a real sense, *atemporal*. Synchronic identification of symptoms sufficed to make a diagnosis,¹²⁵ a result of the ontologically based belief that madness was an irreversible process.¹²⁶ Contemporary practitioners did not regard the “normal behavior” occasionally shown by their patients (known as the “lucid interval”) as contradictory evidence, since patients could “stifle their disorder.”¹²⁷

Asylum psychiatry allowed for the first time the longitudinal observation of groups of patients. This forced a change in the observational framework, and as a result a *temporal dimension* was gradually introduced in the 1850s.¹²⁸ The longitudinal approach encouraged major changes in the concept of mental illness. Thus, information obtained from longitudinal observation could be used to correct or modify earlier diagnoses. Kahlbaum used this with advantage in his definition of mental disease, and for the first time a distinction between acute and chronic insanity was made.¹²⁹ By the end of the century, “duration” had become the central category in the analysis of disease. As an example, for Kraepelin the evolution and outcome of a condition were crucial to making a diagnosis¹³⁰; some maintain that he purposely went to Dorpat to gain experience with chronic hospitalized cases.¹³¹ Hauser and I have suggested that the fact that the Dorpat patients spoke no German and Kraepelin did not speak Russian forced him to choose “more objective” signs to define “dementia praecox.”¹³²

The Incorporation of Subjectivity

This is, perhaps, the most important contribution of the nineteenth century to descriptive psychopathology. Pre-nineteenth century descriptions of insanity relied heavily on the observation of overt behavior, psychosocial competence, and cognition. During the early nineteenth century, changes in psychological thinking, particularly in France, led to the acceptance of the “contents of consciousness” as a legitimate field of inquiry.¹³³ Alienists, at the time searching for additional sources of clinical information, seized the opportunity and sought methods for eliciting and recording data.¹³⁴ The mental state assessment, in its dialogical form, appeared during this period.

Moreau de Tours can be considered as one of the protagonists in this development.¹³⁵ In his *Psychologie morbide* Moreau attempted to legitimate the value of subjective information.¹³⁶ This new source of symptoms included, in addition to analysis of hallucinatory images and delusional contents, a rich gamut of affective and volitional experiences.¹³⁷ Early on, the “form” of the newly discovered symptoms was much emphasized, with, for example, attempts to decide whether hallucinatory voices were bilateral or unilateral, recognizable, single or multiple, and so on.¹³⁸ Toward the second half of the century, the influence of Brentano¹³⁹ redirected attention toward the “content” of the symptom. One can view psychodynamic doctrines as an extreme illustration of this trend.¹⁴⁰

This is not the place to discuss in any detail the changes in the history of psychology that opened up this rich experiential source.¹⁴¹ Suffice it to say that they pertain to the appearance of a *psychological* notion of consciousness¹⁴² and to the acceptance of the epistemological value of introspection.¹⁴³

The acceptance that pure “subjective experiences” could be mental symptoms encouraged the redefinition of some mental diseases. For example, the newer notions of melancholia and mania were made possible by the availability of direct experiential information with regards to mood states and emotions.¹⁴⁴ Likewise the concept of paranoia was to reappear in the 1860s, this time based on the presence of delusional experiences.¹⁴⁵ The various types of stupor, until then lumped together, were also classified according to whether or not they left memory for the episode.¹⁴⁶ Subjective data were likewise used to identify “subtypes” of insanity. Symptomatic classifications—religious, metaphysical, erotic mania, and so forth—proliferated¹⁴⁷.

The Development of the Concept of Mental Disease

Two major clinical changes that occurred during the nineteenth century strike the historian of psychiatry: one concerns the metamorphosis of the insanities into psychoses; the other is the “crossover” of meaning and etiology between psychoses and neuroses. For reasons of space, only the first of the two will be dealt with in this chapter. The change from insanity to psychosis was made possible by the development of a new concept of disease in general medicine,¹⁴⁸ by the availability of new ways of defining behavior,¹⁴⁹ and by the appearance of new taxonomic principles for the classification of biological entities.¹⁵⁰

The Clinico-Anatomical View

This view, already present in embryonic form in the work of Sydenham,¹⁵¹ reached full development during the early nineteenth century. By then, the view that symptoms were signs of an underlying anatomical lesion had been fully adopted.¹⁵² As the century wore on, the concept of *lesion* was successively redefined as inhabiting organs, tissues, and finally cells.¹⁵³ The failure to identify anatomical lesions in many diseases led, during the second half of the nineteenth century, to envisaging “lesion” in physiological terms, and this included concepts such as “irritation” and “inhibition.”¹⁵⁴ In this way, the concept of “functional” lesion was born. The “psychological” redefinition of the notion of functional lesion was only one step further and took place by the 1890s. Janet and Freud helped to incorporate this view into psychiatry.¹⁵⁵

Psychological Definitions of Behavior

Associationism and faculty psychology helped the alienist to map behavior, to seek new sources of symptoms (such as subjectivity), and to develop new classifications. They also suggested ways of fractionizing behavior. Consciousness was metaphorically described as a “theater,” and its “contents” were captured by means of introspection. The acceptance of a view of the mind as a set of functionally autonomous modules provided a natural classificatory framework.

Pinel¹⁵⁶ at the beginning and Prichard¹⁵⁷ in the early middle nineteenth century abandoned the intellectualistic view of madness generated by John Locke (as reflected, for instance, in Arnold’s distinction between ideal and notional insanity)¹⁵⁸ and turned to faculty psychology. By the end of the century symptoms were considered as either exaggerations of normal behavior (continuity view) or as new forms (discontinuity view).¹⁵⁹

Taxonomic Changes

The philosophy of medical taxonomy also changed during the early nineteenth century. The botanical principles implemented by Linné, Sauvage, Cullen, and others¹⁶⁰ were replaced by an empirical approach based on frequential analysis of symptoms,¹⁶¹ etiological speculation,¹⁶² and later in the century knowledge of the natural history of the disease.¹⁶³

The early nineteenth century view that intellectual, emotional, and volitional mental functions could be separately affected by disease offered a solid taxonomic principle. Thus, the “intellectual insanities” became

the nucleus around which the notions of schizophrenia and paranoia were to crystallize; the emotional insanities served the same function in relation to mania and depression¹⁶⁴ and the volitional insanities with regards to the psychopathic disorders.¹⁶⁵

While the eighteenth century view of the insanities was cross-sectional and related to specific life events,¹⁶⁶ the nineteenth century view was longitudinal and better defined, particularly in the work of Kahlbaum, Wernicke, and Kraepelin. In the event, the last two were to develop rival classificatory systems,¹⁶⁷ and Wernicke's untimely death, rather than the power of his ideas, led to the success of Kraepelin's view. Had Wernicke lived longer, the classification of the functional psychoses would be very different today, partly because his was a model based on a veritable physio- and psychopathology.

But Kraepelin was the victor, and in his scheme of things the number of the insanities was drastically reduced.¹⁶⁸ His two chosen psychoses were characterized by stable and overlapping symptom clusters. Organic etiology and recognizable natural history and prognosis became the final diagnostic criteria.¹⁶⁹ From the start, the finding of clinical anomalies ("intermediate" cases) challenged the Kraepelinian dichotomy, and in later years, Kraepelin abandoned it.¹⁷⁰

The Combined Psychoses Debate

During the early twentieth century, the issue was debated as to whether two independent psychoses could simultaneously affect the same individual. Jaspers¹⁷¹ put it clearly:

The idea of disease entity leads one to expect that no more than one illness can be diagnosed in any one person. Where a schizophrenic process is present we duly suppose that we should hold it responsible for all the symptoms, but that is a presupposition.

But if the two psychoses are truly independent, what prevents their simultaneous occurrence? It would be tempting (but historically inaccurate) to blame the "taboo of incompatibility" on the psychodynamic view in spite of the fact that, according to this doctrine, it is nonsensical for two such "diseases" to occupy the same "psychological space." This very issue was debated under the general heading of the "combined psychoses,"¹⁷² but no agreement was ever reached. Indeed, no answer to this questions seems available in current psychiatry.

The Heritability of Mental Illness

The view that mental illness was passed on from generation to generation was well accepted during the nineteenth century. Morel, Magnan, and others, however, reconceptualized this belief in terms of so-called "degeneration theory." The application of this doctrine led to a number of blind classificatory alleys and to the search for somatic stigmata and other genetic markers.¹⁷³

Transformation of Insanity into "Psychoses" during the Nineteenth Century

The Adoption of the Word "Psychosis"

The word "psychosis" was used in the first half of the nineteenth century to refer to the *subjective* states accompanying insanity.¹⁷⁴ According to von Feuchtersleben,¹⁷⁵ the term "used with regard to normal processes is equivalent to the mental or psychical element in a psychophysical process, just as neurosis refers to that aspect of the process which belongs to the nervous system." In most cases, however, these experiences relate to "conditions which we usually call, in a more restricted sense, mental derangement" (p. 241). "Every psychoses [must be], at the same time, a neuroses; as without the intervention of nervous action, no change in the psychical realm can occur, [however] every neuroses is not a psychoses; of this convulsions afford a sufficient example" (p. 246). A similar view was taken by another commentator who chose to emphasize "the neural act corresponding to the mental phenomena" (p. 1025).¹⁷⁶

These two usages (“normal” and “pathological”) were officialized in German psychiatry by the device of using the singular form (*Psychose*) to name the former and the plural (*Psychosen*) the latter.¹⁷⁷ Adolf Meyer¹⁷⁸ attempted to clarify the issue:

Used pathologically (and in this sense the usage is rapidly gaining ground both in foreign and in the English literature) the term designates an abnormal mental condition, specially inasmuch as it is correlated with a specific disease-process (a disease entity, if the term be allowed) with characteristic origin, course and symptoms. The typical forms of insanity which can be scientifically differentiated would rank as psychoses in this sense.

Maudsley made use of the “pathological meaning”: “no wonder that the criminal psychosis, which is the mental side of the neurosis, is for the most part an intractable malady.”¹⁷⁹

The term “psychoses” gradually gained popularity and replaced “insanity” after World War I (Sir George Savage’s popular textbook was one of the last to use the old term).¹⁸⁰ The fact that its original meaning had referred to the experiential aspects of behavior no doubt helped in that it dovetailed well with the growing trend toward including subjective symptoms into the description of insanity. The word insanity, on the other hand, was too laden with pre-nineteenth century notions to be acceptable and managed to survive only in legal language. Another reason for the adoption of the term might have been that it lent itself to easy adjectival derivations (such as “psychotic”).¹⁸¹

The Defining Dichotomies

During the late nineteenth century the “psychoses” became defined in relation to five dichotomies: psychoses versus neuroses; functional versus organic; exogenous versus endogenous, total versus partial; and unitary versus multiple.

Psychoses versus Neuroses

As I have said, during the first half of the nineteenth century “psychoses” referred to subjective states and “neuroses” to the underlying neurological processes. By 1900, meanings had been exchanged: psychoses were the official name for all the “organic states” (whether exogenous or endogenous) and the neuroses had become psychologized.¹⁸²

The practice of alienism had been very different before the incorporation of the neuroses into psychiatry. Asylum alienists dealt only with cases of hard insanity (and many organic ones) and were thus mercifully free from worrying about the many forms of behavioral deviancy and psychological incompetence that have since been thrown their way. Insanity therefore provided the descriptive, taxonomic, and etiological templates on which all future conceptions of mental illness were based.

This view demanded that a “lesion” be sought in all cases. Failure to identify such changes in the case of the neuroses led to a gradual watering down of the concept of “lesion.” The basis of the neurotic symptoms was successively thought of as being anatomical (disorder of sense and motion), physiological (irritability and inhibition), and psychological (compromise between instinct and reality demands). This transformation was helped both by the gradual expurgation of many “organic” states from the class of the neuroses and by the popularity in which hypnosis and its putative “functional mechanisms” were held during the latter part of the nineteenth century.¹⁸³ The last condition to be excluded was the vasomotor disorders (Raynaud’s syndrome).¹⁸⁴

Functional versus Organic

At the dawn of the twentieth century the distinction between functional and organic psychoses became a fundamental aspect of their classification. The functional group included dementia praecox, manic depressive insanity, paraphrenia, the paranoid states, and paranoia; the organic psychoses comprised delirium, dementia, and “symptomatic” psychoses. Since all “psychoses” were supposed to have, at some level, an “organic” basis, it is at first sight unclear why the dichotomy was necessary at all.

E. Mendel's work¹⁸⁵ contains one of the earliest references to "functional" psychoses. He offered a negative definition:

On the other hand, there is a great difference of opinion amongst authors as to how to divide those mental diseases in which no anatomical findings have hitherto been met and which do not belong under any of the forms named. They are designated as *functional psychoses*, by which it is not said that anatomical changes do not exist, but only that we have so far been unable to verify them. ... [I]n this respect [absence of a recognizable lesion] they resemble the *functional peripheral neuroses*.

Mendel considered as functional psychoses delirium hallucinatorium, mania, melancholia, circular psychosis, paranoia, and acute dementia (pp. 175–213). The first and last categories include conditions that would currently be diagnosed as schizophrenia. Mendel also recognized a separate group of "organic psychoses" that included progressive paralysis of the insane, senile dementia, and atherosclerotic and syphilitic psychoses. He also distinguished between "psychoses which are called forth by focal diseases of the brain" (apoplectic attacks, brain tumors, traumata, etc.) and "psychoses arising from central neuroses" (such as epileptic, hysteric, and choreic psychoses).

By the end of World War I the functional-organic dichotomy had become sharper. For example, Jaspers¹⁸⁶ listed three functional psychoses: genuine epilepsy, schizophrenia, and manic depressive illness:

These three. ... have four points in common. In the *first* place their study gave rise to the concept of disease entity. ... [I]n the *second* place the cases which belong to this group cannot be subsumed under the disorders of group I and III [that is, organic]. One must however assume that many of these psychoses have a somatic base. ... [I]n the *third* place [they] are not exogenous but endogenous psychoses. Heredity is an important cause. ... [I]n the *fourth* place they all lack anatomical cerebral pathology.

Exogenous versus Endogenous

Nineteenth century neurobiological beliefs on the etiology of mental illness are enshrined in the "exogenous–endogenous" distinction. Already controversial and unclear in meaning at the time of its inception, it is now but a noble archaism that has, nonetheless, survived its obituarists.¹⁸⁷

First of all it must be stated that "endogenous," coined by Candolle in 1813, was never meant to signify "genetic" in the modern sense nor "exogenous" to signify "environmental." As Kraepelin¹⁸⁸ pointed out, it was the German neurologist Möbius who first introduced these terms into medicine in 1893. In his short neurology textbook, Möbius described endogenous disorders as those in which "the principal condition must lie in the individual, in a congenital disposition (*Anlage*), other factors being merely contingent and quantitative." Examples of this were neurasthenia, hysteria, epilepsy, migraine, Huntington's chorea, and Friedreich's disease. "Exogenous" diseases were toxic and infectious conditions, supposed to be "engendered from without," such as trigeminal neuralgia, thyroid disease, multiple sclerosis, and Parkinson's disease.¹⁸⁹

The value and meaning of the dichotomy seem to hinge around the feasibility of drawing an operational boundary between "without" and "within." Möbius did not make his criteria explicit, but it would seem that he did not consider the skin as the natural boundary (hence for him exogenous is not necessarily environmental), nor did he mean the head and neck (hence for him exogenous is not necessarily noncerebral). "Endogenous" in Möbius relates to the *Anlage*, to the intrinsic form or essence, hence it is not a "spatial" but a metaphysical concept.

The origin of this metaphysical view is to be found in nineteenth century degeneration theory, a doctrine that, as I earlier hinted, dominated European psychiatric and social thinking during the second half of the nineteenth century.¹⁹⁰ Phenomena as wide apart as Lamarck's inheritance of acquired features, somatic stigmata, and the fact that disease could suddenly disappear after one generation were all explained by degeneration theory.¹⁹¹ During the 1890s, the over-religious and fatalistic Morelian model of degeneration¹⁹² was made flexible by Magnan; after the 1910s it gradually merged with the new genetic views on mental disease.¹⁹³

But during the 1890s the concept of “endogenous” was still a shorthand for “degeneration theory” and postulated that the cause of the mental illness lay deeply in the metaphysical being.¹⁹⁴ Hence “endogenicity” was not just about genetic control or personality or constitution. Kraepelin liked the concept precisely because of these features. The terms endogenous and exogenous, no longer current in neurology (where they started their career), might have also sunk into oblivion in psychiatry had it not been for Kraepelin, who adopted them in the 1896 edition of his textbook.

The dichotomies functional–organic and endogenous–exogenous have therefore different historical provenance and their overlapping is only partial. To a late nineteenth century alienist, exogenous did not necessarily mean organic nor functional endogenous. Further obscurities have since accrued due to their well-nigh untranslatability into modern biological terminology.

Total versus Partial Insanity

Before the nineteenth century, insanity was clinically conceived as irreversible¹⁹⁵ and as involving all mental faculties, particularly the intellectual functions as signified by the presence of delusions.¹⁹⁶ Mania best exemplifies this concept of total insanity.¹⁹⁷ It signified not just behavioral and physical change, but, most importantly, also a metaphysical change as well. Insanity constituted a genus with many species that were defined in terms of the most salient symptom.¹⁹⁸ The categorical nature of “total insanity” is even clearer when the term is used in the legal field. Bracton, who gave the first systematic statement of English law in the thirteenth century, defined mania as “totally lacking in discern,” while four hundred years later Coke and Hale were still defining it as “absolute madness.”¹⁹⁹

The concept of partial insanity, that is, the view that insanity could be less than total, developed gradually and originated in the legal articulation of lay observations of cases where the traditional “all-or-none” choice broke down. In 1736, Hale defined it this way: “there is partial insanity of mind ...; some persons that have a competent use of reason in respect of some subjects, are yet under a particular dementia in respect of some particular ...; or else it is partial in respect of degrees.”²⁰⁰

Partial insanity was opened to multiple clinical interpretations. The commonest during the nineteenth century were (a) involvement of only one faculty (from the viewpoint of faculty psychology), (b) intermittent insanity, that is, presence of “lucid interval”²⁰¹ (from the longitudinal viewpoint), (c) mild or moderate (from the point of view of intensity), and (d) presence of a “partial” delusional system (from the point of view of the extension of the delusions).²⁰²

The concept of monomania (fallen into desuetude after 1850)²⁰³ was formed in the 1820s around definitions (a) and (d).²⁰⁴ Thus, Chambeyron,²⁰⁵ in his translator’s introduction to Hoffbauer’s treatise, presented the simplest classification: “insanity is divided into mania and dementia, according to whether the mental faculties are overactive or weakened; mania is subdivided in turn into polymania (or total insanity) and monomania (partial insanity).” The final acceptance of the tripartite classification (intellectual, emotional, and volitional) along with the gradual ascent of the natural-scientific view of disease led after the 1850s to the quiet disappearance in medicine of the concept of total insanity. In the legal field it never went away completely and enjoyed a revival after the passage in Great Britain in 1843 of the McNaughton rules,²⁰⁶ the narrow criteria of which made it very difficult to define a case of “partial insanity.”

Unitary versus Multiple Psychoses

An interesting offshoot of the nineteenth century taxonomic controversy was the development of the unitary and multiple views of insanity. Reacting against the proliferation of classifications and inspired by the principle of the indivisibility of the mind, some alienists put forward the view that there was only one form of insanity, and that its multiple clinical presentations were *epiphenomenal*, the result of pathoplastic factors.²⁰⁷

Among these factors they included idiosyncratic responses (individual styles of coping with the ravages of insanity); proximate and remote etiologies such as emotional precipitants; intensity (over- or underactivity

of the mental faculties); and duration of the condition. It was suggested, for example, that mania, melancholia, delusional insanity, and vesanic dementia might just be successive stages of the *same* disease.

This is an important point to remember when studying the history of circular insanity (bipolar disorder).²⁰⁸ Thus, Baillarger and Falret's proposal that mania and melancholia were related should not be considered as solely based on clinical evidence—the observation that some patients might intermittently suffer from both had been made often before them—for they were also influenced by the “unitary psychosis” concept.

To these factors a new one was added after 1857, namely, degeneration theory.²⁰⁹ According to this view, the degeneration taint was transmitted from parents to offspring and on each occasion gave rise to ever worse forms of insanity until dementia appeared.

Three Modules of the Mind and Their Insanities

Up to the beginning of the nineteenth century, the intellectualistic view of insanity reigned supreme.²¹⁰ The growth of faculty psychology led to the division of the mind into functional modules²¹¹ and provided a new model both to phrenology and to later studies on brain localization.²¹² As suggested by Kant²¹³ and the Scottish philosophers,²¹⁴ three modules were distinguishable: intellectual, emotional, and volitional. The old forms of madness were redefined as “intellectual insanities” (including both total and partial). This change in the original meaning of insanity (until then only considered as intellectual) opened a clinical space for pure “emotional” and “volitional” insanities. It also freed mania and melancholia from their secular duty as forms of delusional insanity.²¹⁵ The emotional insanities were to evolve into the *modern* concepts of melancholia, mania, and circular insanity,²¹⁶ and the “volitional” disorders played a role in the explanation of psychopathy²¹⁷ and aboulia.²¹⁸

The decline in popularity, by the turn of the century, of “will” and “volition” undercut this neat arrangement.²¹⁹ If “will” had no explanatory power, then it made little sense to ponder over its disorders; the question of what psychological functions (if any) are dysfunctional in psychopathy and aboulia was, however, left unanswered.

The shift in the meaning of “emotional insanity” occurred during the 1850s. No clearer statement can be found than Bucknill and Tuke's²²⁰ remark: mania,

perhaps the most interesting and best recognized form of mental disease, has been usually treated of by writers, as essentially a disorder of the reasoning faculties. Dr. Prichard classed it under intellectual insanity. We are disposed however to regard it as belonging primarily to the affective group.

The Separation of the Organic States

The symptomatology of delirium (phrensy) had, since Greek times, included fever, fleeting hallucinations, delusions, and behavioral disorder.²²¹ Other “organic” psychiatric disorders, however, such as dementia, were not distinguished during this period from the rest of the insanities. Analysis of pre-nineteenth century case reports confirms the view that during this long period, *mania* and *melancholia* included “organic” states such as encephalitis, neurointoxications, brain tumors, and certainly schizophrenia.

The modern concept of “organic disorder” only appeared after 1822 when Bayle described chronic arachnoiditis in patients with psychiatric manifestations of the type that were to be later called “general paralysis of the insane.”²²² Battie²²³ had already in 1758 differentiated between “original” and “consequential” madness, but the latter category cannot be said to refer to “organic states” in the modern sense. In his description of dementia Willis came closer than any other before the nineteenth century to separating dementia from insanity.²²⁴ Foucault²²⁵ interpreted this search for brain changes as a major perceptual shift in the medical discourse of the nineteenth century, a change in what he calls the “medical gaze.”

The interesting aspect of Bayle's work was not so much that he identified anatomical lesions in relation to a given neurobehavioral syndrome, but that he made possible the view that kaleidoscopic psychopathology (ranging from typical mania to melancholia, hallucinatory states, and dementia) could be associated with the *same brain lesion*²²⁶ and vice versa, namely that the *same syndrome* could be caused

by many types of lesions. Griesinger,²²⁷ in his insightful speech on the occasion of the opening of the Zürich Psychiatric Clinic, stated, “One can suffer of melancholia on account of eight or ten different brain diseases; and of dementia on account of twenty.”

It took the rest of the century for the “organic disorders” to be aggregated into a self-contained group. The old “mania” concept had included for centuries some of these clinical states, which their gradual separation helped to narrow.²²⁸

The Narrowing Down of the Mania Concept

The concept of mania was radically transformed between 1800 and 1900. At the end of the eighteenth century, it was tantamount to insanity²²⁹ or madness²³⁰; at the end of the nineteenth century it referred to “elated hyperactivity” with or without psychotic symptoms.

Gauchet and Swain²³¹ stated that the reconstruction of the concept of “mental alienation” revolved during the early nineteenth century around repeated analysis of the concept of mania. They point out that Esquirol himself used it as a synonym for “mental alienation.” Likewise, Erasmus Darwin (Charles’s grandfather) described in *Zoonomia*²³² three forms of mania, one of which included ecstatic states, despair, and melancholia. Arnold²³³ put it thus:

Maniacal insanity, properly so called, as a species, is of all others, perhaps, the most comprehensive; since it extends its dominion over the whole internal world of ideas, and comprehends every possible combination of sensible images which can enter into, and delude, a distempered brain. To enumerate all its varieties would not only be difficult, but impossible.

The concept began to change in the work of Pinel, who deleted “mania” (used in this general sense) from the subtitle of the second edition of his *Traité*.²³⁴ He classified *Manie* in the *Nosographie* as a genre of the *Vesanies* (insanities) characterized by “disorder of one or more faculties with sad, gay, extravagant or raging affect, occasionally free from disordered thought but always blind aggression.”²³⁵ He also recognized delusional and nondelusional forms of mania (p. 592). Couchoud²³⁶ rightly stated that it was from the large group of the manias that melancholia, dementia, and idiocy were eventually separated off.

In German psychiatry, a similar situation obtains. In the historical introduction to his book, Heinroth²³⁷ wrote that “mania, was a general insanity, accompanied by rages and by a bold execution of the demands of the will.” He described four types of “rage” (mania): simplex (pure rage), ecstasica (insane), ecnoa (rage accompanied by folly), and catholica (common rage); and differentiated mania from the following: daemomania, erotomania, raging melancholia, lycanthropia, mania cum tristitia (with sadness), continua acuta, continua chronica, periodica, nymphomania, satyriasis, and melancholia saltans (savage impulse to jump)²³⁸.

At the other end of the century, Mendel,²³⁹ perhaps the greatest specialist on mania during the late nineteenth century (his work on mania appeared in 1881), defined it as “a functional psychosis which is characterized by: a. pathological acceleration of the efflux of ideas, b. motor unrest, and c. absence of symptoms which confirm an organic disease of the brain.” In its symptomatology, Mendel included hallucinations, anomaly of thought, delusions, confusion, hypermnesia, heightening of motility, and loss of weight. He also recognized four stages of mania: “initial, exaltation, frenzy and decline”; and four subtypes: “hypomania, recurrent, gravis and periodic.” Kraepelin’s definition was greatly influenced by Mendel’s.²⁴⁰

Between Pinel and Mendel “mania” had not only become narrower but also more syndromatic (and defined in term of exclusive affective symptomatology). How was this change possible? It is unlikely that it resulted simply from the gradual erosion of the old concept of mania. Historical analysis shows that the word “mania” almost dropped out of circulation around the 1830s, when some of its clinical functions were taken over by the concept of monomania.²⁴¹ “Monomania” itself lost popularity,²⁴² and its decline brought back the word “mania.” On its return, however, it was furnished with a new meaning.

Hare wrote on the fact that “two manias” can be recognized during the nineteenth century, but made no effort to compare the two or document how one concept changed into the other.²⁴³ This omission is likely

to have been influenced by his views on dementia and partial insanity²⁴⁴ and motivated by a personal hypothesis about putative secular changes in the incidence of mental illness.

I believe that six factors primarily contributed to the metamorphosis of the old into the new notion. First of all, “mania” was too general a category to be acceptable to the analytical view of mental disease popular during the nineteenth century²⁴⁵; second, the concept of “total insanity” (on which it was based) had been replaced by one of partial insanity²⁴⁶; third, faculty psychology led to the acceptance of emotional insanities as a separate group of disorders²⁴⁷; fourth, organic disorders such as “general paralysis of the insane” that in the past had been a regular source of “manic states” were now well recognized and excluded²⁴⁸; fifth, the language of description became more rigorous as alienists created stable definitions for the “elementary symptoms”²⁴⁹; and last, subjective symptomatology became incorporated into the definition of insanity, thus making it possible to include “elation” as a central symptom.

Whither the History of Psychiatric Nosology?

This chapter has dealt with the historical origins of the current *concept* of mental illness. I have suggested that psychiatry is a complex medico-social activity whose historical success depends upon the progressive goodness of fit between man-made descriptions and mental symptoms resulting from neurobiological lesions. Such lesions can be expected to be mainly governed by genetic and neuroscientific principles. Social factors, however, also partake in the modulation of the biological signal and consequently in the generation and maintenance of mental symptoms. The historical analysis presented in this chapter has focused on both. Behavioral signals and their biological mechanisms are opaque to understanding unless they are made intelligible by means of words and concepts. This means that the description and mapping of mental disorders are language dependent. This feature has led some to believe that mental disorders can be reduced (without residuum) to linguistic events. There is evidence, however, that mental disorders are *more* than semantic or social artefacts, that they are also a manifestation of disordered neurobiology. (The latter may not be the whole story or may even be insufficient for treatment purposes, but it is *still part of the meaning and definition* of mental illness, and hence must be included in the writing of its history.) This chapter also suggests that biological “signals” are tenuous and usually appear enveloped in personal and cultural noise. Psychodynamic theories are, in fact, attempts at reading meaning into the latter.

It follows that the language of descriptive psychopathology is an intellectual, technical, and social event. Like any other descriptive systems, it includes terms, assumptions, and application rules, and can be studied by means of a cross-sectional (synchronic) or a longitudinal (diachronic or historical) methodology. While the former pertains to the philosophy of psychiatry, the latter gives rise to psychiatric history proper. Psychiatric history, to be of use, must do more than chronicle surface events. It must also unveil the particular structures of successive psychiatric discourses. Current descriptive psychopathology emerged from a compromise between needs to capture the invariant features of mental disorder (i.e., the biological signal) and needs to achieve public order and to contribute to the good functioning of society. The former were the expression of nineteenth century science, the latter of nineteenth century socio-political demands. This encouraged alienists to create a descriptive system that was both reality based and socially committed.

But the descriptive system also needed to be stable enough to withstand signal variation and redundant enough to cope with unskillful usage and perfunctory teaching. The conceptual stabilizers built into the language of description by the great alienists of the nineteenth century proved adequate for these tasks. Unfortunately, the ensuing stability has been interpreted by some incautious twentieth century psychiatrists as meaning that DP is right and exhaustive and hence can be considered as transparent. This has encouraged a premature “closure” of the psychopathological glossaries. Closure has certainly contributed to reliability, stability, and communication, but it also might have curtailed clinical validity and the rights of psychiatrists to describe new mental symptoms.

Analysis of this historical process is only possible because records exist that document the language of description and show that it has changed across time. Since clinical-historians cannot study first-hand the behavioral signals emitted by the countless patients that once came within the observational purview of their predecessors (and on which the language of description was calibrated in the first place), they must rely on documents enshrining partial accounts of what those signals were like. Confronted with a multiplicity of descriptions, the historian must map and “triangulate” these word systems and assess the relative contributions of biological signal and social noise.

This sort of analysis shows that, from time to time, changes take place in the way in which mental illness is described. In principle, these might have resulted from either shifts in the language of description itself or mutations in the gene system that controls the biological signal. In this respect, clinical historians have the advantage of being able to resort to an internal catalogue of bed-side experiences, that is, to “knowledge by acquaintance.”

When explaining the development of the language of psychiatry during the nineteenth century the following factors have been considered: (a) the availability of new semiological and psychological theories that allowed for a fractionation and (eventually) a quantification of behavior; (b) changes in the conception of physical illness itself, which demanded correspondence between lesion and signal and placed the disease firmly in the internal space of the body; (c) the availability of patient cohorts (as a result of the creation of asylums) that allowed for longitudinal observation, thereby introducing a time dimension in the interpretation of symptoms; and (d) the acceptance of subjective experiences as legitimate sources of mental symptoms. Other factors, no doubt, will be uncovered by further research.

Once descriptive languages have reached steady state they show surprising stability, becoming almost transparent to their users. Mentally ill patients are perceived in a similar manner by most alienists the world over. Stability and uniformity, however, should not be considered as features intrinsic to the descriptive system (or as necessarily advantageous). Part of the task of evaluating their usefulness is to explain their origin. In spite of the fact that an adequate theory of language stability (and change) would be of great use to current clinical practice, clinical historians have not yet started delving into these processes. Explanations for language stability can be based on assumptions of neurobiological invariance or on the effective and calming operation of social macro-concepts.

The hypotheses outlined in this chapter need further testing and open a research space for younger colleagues. One way ahead is to ascertain whether the general explanations apply to the history of each individual symptom and disease. The history of descriptive psychopathology will start being useful only after such a painstaking analysis of its various units of analysis has been completed. For this, detailed (even mathematical) study of the historical patient cohorts is essential, as the latter contain hidden information that might be relevant to the understanding of why a given alienist decided, with little more than a small number of patients, to undertake the honorable and awesome task of constructing a new mental symptom or disease.

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Chapter 12

Biological Psychiatry in the Nineteenth and Twentieth Centuries

John Gach

Introduction

Though mental illnesses have been described since antiquity, psychological concepts played little role in theory and practice until the Enlightenment, when psychiatry emerged as a medical specialty under the culminating influence of Phillipe Pinel (Riese 1969). In this chapter we shall use the term “psychiatry” to name this emerging field, including within its purview the various terms used by early investigators in different nations. Attempting to understand madness using the prevailing Enlightenment and Romantic biomedical concepts, these first psychiatrists interpreted mental disorders as failures of biological function. Little interested in theoretical issues such as the mind–body problem, they derived their psychiatric ideas from the organic medical tenets of their time. Even so, pioneers like Pinel and his pupil Jean Esquirol acknowledged the importance of sociocultural factors in mental disorders and maintained a humanitarian approach (deemed “moral therapy”), which attempted to respect the dignity of the mentally ill as persons (Pinel 1801; Esquirol 1838).

From Pinel’s time there have been four fundamental psychiatric orientations: the humanitarian, psychological, sociocultural, and biological. Beginning in the early nineteenth century as vague principles, these viewpoints have become increasingly more explicit.

Pinel followed the enlightened French medical method of clinical observation carried out in hospital over a lengthy period of time, eventuating in autopsy upon the patient’s death. The Paris School of Medicine—the most advanced in the first half of the nineteenth century—first emphasized this pathological method in the study of disease (Ackerknecht 1967). In this fertile period, Bayle (1822, 1826) and Calmeil (1826) described chronic inflammation of the arachnoid in the brains of many chronically demented patients. Their work led to recognition of the nosological category of general paralysis of the insane—a clinical syndrome that, with its demonstrated pathological process, soon became the paradigmatic model for mental disease. Many psychiatrists came to comprehend insanity as a single disease entity based on organic brain pathology and terminating in dementia, arachnoiditis, and cerebral atrophy. From such hypotheses and laboratory demonstrations neuropathology emerged as the basic science for clinical psychiatry. With this model dominating psychiatric theorizing for much of the nineteenth century, biologically oriented psychiatrists continually tried to demonstrate organic pathology in the major psychoses (the holy grail of nineteenth century psychiatry). Their failure led by the 1880s and 1890s to the formulation of functional concepts of mental disease (behavioral disorder without demonstrable brain pathology).

The vast expansion of medico-scientific knowledge in the nineteenth century, in which psychiatry as a medical subspecialty shared, helped define the contours of psychiatry as a discipline by the turn of the twentieth century. By then there were phenomenologically based schools, with many clinicians adhering

to a medico-biological model of insanity as a single disease; an emerging social psychiatry; and soon a psychodynamic psychiatry issuing from the work of Freud (a neurologist whose only psychiatric training was a brief hospital stint under Meynert), who studied psychoneuroses in contrast to the psychoses. Much of the history of biological psychiatry consists of errors committed while struggling to attain scientific status. As new scientific, technological, and statistical methods were developed, biological hypotheses became subject to the experimental method, so that they could be studied empirically for confirmation, rejection, or for various degrees of proof.

Griesinger and the Organic Approach to Mental Illness

Although ideas of extreme physicalism, determinism, and mechanistic reductionism were common in Europe after the French Enlightenment, they had less influence for psychiatric disorders, particularly in the German states, where psychiatric thought in the first decades of the nineteenth century remained imbued with the mentalism of the German romantic movement and the philosophy of nature (Schelling's *Naturphilosophie*). By the 1840s ideas tying the cause, course, and outcome of mental disorders to brain diseases were appearing. The pioneer German biological psychiatrist J. B. Friedreich, for example, stridently argued in 1836 that mental diseases without exception had organic causes. With Griesinger this minority view in German psychiatry was to become orthodox opinion. With his dictum "mental diseases are brain diseases" Wilhelm Griesinger asserted in his 1845 *Pathologie und Therapie der psychischen Krankheiten* the primacy of brain over mind for psychopathology.

Earlier nineteenth century psychicists, such as Johann Christian Reil and Johann Christian Heinroth, interpreted mental disorder as residing in the soul and as ensuing from man's sins and iniquities. Rejecting the dualism of the Romantics, Griesinger adopted a strict materialist monism quite in accord with the medical and scientific temperament of the 1840s. In doing so he made psychiatry part of the scientific medicine just beginning to emerge in the mid-nineteenth century, in which the soul was banished to religion. As Griesinger put it in the important first chapter of his book (p. 4),

How a material physical act in the nerve fibres or cells can be converted into an idea, an act of consciousness, is absolutely incomprehensible; indeed, we are utterly unable even to settle the question of the existence or nature of the media existing between them. ... Therefore, leaving out of view those possible but quite unknown mediating events, it is scientifically admissible to connect the faculties of the soul [i.e., mind in modern parlance] with the body in the same intimate relation as exists between function and organ—to consider the understanding and the will as the function, the special energy, of the brain, just as transmission and reflex action are considered the special functions of the nerves and spinal cord, and to consider the soul primarily and pre-eminently as the sum of all cerebral states.

Griesinger's alarm for psychiatry to focus on body events merely restated the program laid down in 1748 by the French physician-philosopher Julien Offray de La Mettrie in his atheistic, materialist treatise *L'Homme machine*. Though La Mettrie seems not to have been cited by any major nineteenth century physician, scientist, or psychiatrist, he argued precisely as Griesinger that "conscious and voluntary processes are only distinguished from involuntary and instinctual activities by the relative complexity of their mechanical substrate" (Wozniak 1992)—argued, that is, for an entirely naturalistic view of human beings and the world they inhabit. He in fact laid out the philosophical program for the scientific-medical enterprise that was to emerge after the French enlightenment.

How, then, did the ideas of La Mettrie—possibly the most influential *uncited* author ever—get into German medico-scientific thought? While German medicine and psychiatry before about 1840 was thoroughly in the grips of an idealist reaction to French materialism, the French tradition was still materialistic in tenor. Griesinger, who in 1838 had studied in Paris (Verwey 1985) and visited Magendie (who strongly promoted the experimental method in physiology), cites many writers from the French medical and psychiatric tradition—Esquirol often—and relatively few German texts. Beginning in the early 1830s, the materialist reaction in Germany to the reigning idealism, of which, in psychiatry, Heinroth is perhaps

the star example, took place as much in everyday affairs as in new theories being enunciated by the likes of Johannes Müller and Justus Liebig. German-speaking central Europe had begun industrializing in the 1830s: there was an explosion of factory and railway construction (the first German railway was built in 1835) and creation of business corporations, chambers of commerce, and polytechnic and commercial institutes. Science and commerce were beginning to dominate the German *mentalité* in a way that poetry, art, and idealistic philosophy had earlier in the century in the heyday of Romanticism (Lange 1880). It was into this newly positivist and materialistic tradition that Griesinger fit. For many years Griesinger published his papers in medical rather than psychiatric journals (Verwey 1985), the latter staying old-fogey and Heinrothian through the 1850s.

Just as the adoption of materialist monism made medicine part of science, it made psychiatry part of medicine (and, thus, also part of science). By adopting the implicit metaphysic of the emergent scientific medicine of Schwann, Schleiden, and, later, Virchow, Bernard, and Pasteur, Griesinger established psychiatry as an academic medical discipline, incorporating into his own views the growing physicalist and reductionist orientation in medicine and biology as well as the ideas of the German somaticist school and of French psychiatry. He established these principles as the dominant force within German psychiatry, situating psychiatry securely in the domain of the natural sciences as a medical discipline.

Although trained in internal medicine, Griesinger had a wide range of interests including infectious diseases, public health, and pathological anatomy, as well as mental disorders. At the Winenthal asylum from 1840 to 1842 he collected data for his textbook, which he completed at the University of Tübingen in 1843. For Griesinger mental diseases were not inherently different from neurological disorders. He followed the neuropathological concepts and methods of the French school, but with far greater emphasis on brain pathology and with wider applicability of the neuropathological study of the insane as the basis for psychiatric teaching and research. Following the clinical techniques of Pinel and John Conolly, he promulgated non-restraint and asylum reforms. His text immediately influenced psychiatric practice in Germany; by the time of its second edition in 1861 (translated into English in 1867), his book had gained world-wide acclaim. After serving as professor of medicine at the Universities of Tübingen and Zürich, he was appointed professor of psychiatry at the University of Berlin, the most prestigious position in German psychiatry. In Berlin he promoted a combination of neurology and psychiatry—"neuropsychiatry"—within a university medical school setting that served as a model in clinical work, training, and research for the psychiatric profession for over 50 years.

Major Changes in Biological Thought

Between the first edition of Griesinger's textbook in 1845 and its second in 1861, events occurred in Germany, France, and England that strongly influenced the subsequent development of biology and medicine throughout the world.

The first of these events was the attack by the three young neurophysiologists Hermann Helmholtz, Emil Du Bois-Reymond, and Ernst Brücke on the vitalist theories of their mentor, Johannes Müller. Helmholtz's preliminary articulation in 1847 of the law of conservation of energy proclaimed that all physical events, including organic processes and consciousness, are explicable as physical and chemical phenomena. This was a striking axiom for the biological sciences and medicine—indeed for all of science—since before Helmholtz there was no generalized abstract concept of energy (Gach 1979). Physico-chemical reductionism quickly came to dominate scientific and medical thought, one consequence of which was the situating of psychiatry within a broader scheme of biological interpretation of mental phenomena and mental diseases. Organic processes, now linked in a universal causal series to the inorganic, were construed as measurable and hypotheses about them as testable. Helmholtz first successfully measured the velocity of nerve conduction in 1850, a feat that Müller had thought impossible. Reflecting on the history of reductionism for science, including biology, the distinguished biologist Peter Medawar wrote

Reductive analysis is the most successful research stratagem ever devised: it has been the making of science and technology. Reductionism is the belief that a whole may be represented as a function (in the mathematical sense) of

its constituent parts, the functions having to do with the spatial and temporal ordering of the parts and with the precise way in which they interact. ... The laws of the properties and performances of living organisms are and can be nothing but the performance of living cells gathered together into the state characteristic of living organisms. Living organisms have no properties but those which are derived from and may be resolved into the properties of individual cells. (Medawar 1983)

The second major event was the development of cellular theory with Matthias Schleiden's recognition in 1838 of the cellularity of plant tissue and Theodor Schwann's application of Schleiden's ideas to animal tissue in 1838 and 1839. Cellular theory was quickly accepted as explaining organ function, much in the reductionistic manner described by Medawar. Using these new concepts, the renowned German pathologist Rudolf Virchow formulated a cellular theory of disease in 1858. For Virchow life is found equally in each cell; diseases—including mental diseases—are characterized by microscopically demonstrable changes in the cell. Virchow's famous aphorism "*omnia cellule e cellula*" (every cell from a cell) became the foundation for understanding disease. Pathology began to be conceptualized and investigated according to organ systems (e.g., the cardiovascular, respiratory, and central nervous systems) and to general pathological processes, such as degeneration, inflammation, circulation, neoplasm, trauma, congenital, or hereditary defects. By the 1880s classifications following these patterns of pathology, particularly for the brain, began regularly appearing in textbooks of insanity—as in those by Richard Freiherr von Krafft-Ebing in 1879–1880, Emil Kraepelin and Thomas H. Clouston, both in 1883, and Theodor Meynert in 1884.

The third major event was the adoption of evolutionary theory and the rejection of creationism in scientific thought (Young 1970). Though evolutionary ideas had been discussed since antiquity (Goudge 1973), the publication of Herbert Spencer's *Principles of Psychology* in 1855 spurred discussion and debate about evolution in England. Presenting an entirely new basis for association psychology in alliance with experimental neurophysiology, called "evolutionary associationism" or "evolutionism," Spencer's principles of continuity and evolution provided John Hughlings Jackson, the founder of modern Anglo-American neurology, with the essential concepts for his evolutionarily based hierarchical organization of all psychological processes from the simple constituent elements of sensory impressions and motions. Through Jackson and his friend David Ferrier, Spencer's ideas became widely influential in late nineteenth and twentieth century neuropsychiatry.

Reviving an interest in Lamarck's ideas, Spencer had accepted his hypothesis of the inheritance of acquired characteristics. A similar Lamarckian revival also occurred the 1850s among French biologists and physicians, most importantly in Morel. Though evolutionism was definitely "in the air," it was Charles Darwin's 1859 *On the Origin of the Species by Means of Natural Selection* that codified evolutionary thinking into a general biological theory. Generally rejecting Lamarckian notions, Darwin referred to Spencer's work only as a brief review of the pre-existing literature. Darwin did not personally engage in the controversies concerning evolutionary theory and religious dogma, a struggle readily undertaken by Spencer (1864–1867) and Thomas H. Huxley (1868) for the English-speaking world and Ernst Haeckel (1868) for Germany and continental biology. Many terms used in the evolutionary debate were not Darwinian in origin: "survival of the fittest" and "dissolution" were both first used by Spencer; "degeneration" by Morel; "atavism" by Haeckel.

Griesinger and Academic Psychiatry

Griesinger established academic psychiatry at the University of Berlin. Following the pattern he set, psychiatry and neurology came to be grouped together as active departments in the developing German medical schools (Marx 1972). With the university now the locus for both experimental and clinical investigation, medical specialists interested in both areas gained further legitimacy by being deemed neuropsychiatrists. Working in both clinical neurology and clinical psychiatry, the neuropsychiatrists learned the methods of gross and microscopic anatomy and of neuropathology as basic sciences for their clinical practice, studying diseases in which nerve cells failed to show visible defect.

Griesinger also championed hospital reform and the improvement of psychiatric care in Germany, arguing that the existing rural hospitals should be largely custodial while the new urban university hospitals would provide active medical care as well as case material for clinical teaching and research. German asylum psychiatrists stridently resisted his proposal. Eventually Griesinger had to capitulate to the institutional psychiatrists. Though he died in 1868 at the high point of these controversies, academic psychiatry had already been firmly established within the framework of the university. Indeed, by 1880 chairs for neuropsychiatry existed in 21 out of 28 universities in the German-speaking countries (Pichot 1983). In his great 1913 textbook *Allgemeine Psychopathologie* Karl Jaspers credited Griesinger as the founder of modern psychiatry. Jaspers firmly denied that Griesinger was simply a founder of “brain mythology”—the hypothetical reduction of psychological disorder to brain malfunction without empirical basis for the reduction.

Under Griesinger’s influence German and Austro-Hungarian psychiatry obtained international acclaim, becoming the dominant model for European and American psychiatry and eventually for psychiatry throughout the world (Ackerknecht 1959). Paul Flechsig (1876) mapped the central cortex’s motor and sensory areas and named the pyramidal tract. Knowledge about the functions of the thalamus began with Bernard von Gudden’s 1870 studies in which he described specific thalamic nuclei when certain areas of the cerebral cortex were destroyed. He also made important discoveries on the partial decussation of the optic paths (1874). In 1870 Gustav Fritsch and Eduard Hitzig first showed that electrical stimulation of the frontal cortex produced muscular movements in the extremities, thus demonstrating experimentally the existence of a motor area in the cerebral cortex predicted earlier in the same year by John Hughlings Jackson. Hitzig’s later research (1874) led to accurate delineation of the motor area in the cortex of the dog and monkey.

To Carl Westphal, the neuropsychiatrist who succeeded Griesinger in Berlin, more than to any other psychiatrist in the late nineteenth century we owe the inclusion of the psychoneuroses within the orbit of clinical psychiatry. He was the first to describe both homosexuality as a medical disease in purely psychological terms (1870) and agoraphobia (1872). In 1877 he rendered an early and influential description of obsessions in which he “suggested that obsessional states resulted from a disorder of intellectual function” (Berrios 1985, p.168). On the neurological side he first described pseudosclerosis in 1883; discovered the diagnostic value of the knee-jerk (1871–1872); and he performed anatomical studies in which he found the nucleus for accommodation of the third nerve (1887, Westphal’s nucleus). His 1892 *Gesammelte Abhandlungen* was immediately recognized as a major neuropsychiatric contribution.

Technical advances—the microtome, the oil immersion objective lens in microscopy, and staining techniques allowing more exact studies of cellular structure, brain nuclei, and connection systems—spurred research that defined the neural networks connecting the brain’s regions and their relationships to the cranial nerves, the spinal cord, and the autonomic nervous system. Franz Nissl (1894), Camillo Golgi (1886), and Santiago Ramón y Cajal (1892) developed important staining techniques that led to original discoveries. In 1904 Nissl reported the classical account of the histopathology of general paresis, while Golgi made valuable discoveries regarding the histology of the nervous system and of the existence of multipolar nerve cells (Golgi cells) using his silver nitrate stain. He also first described “Golgi type II” nerve cells with short axons diffused within the cerebral cortex. Ramón y Cajal devised important staining techniques for nervous tissue and provided considerable evidence for the neurone theory. His majestic *Textura del sistema del hombre y de los vertebrados*, issued in fascicules between 1899 and 1904 and translated into French in 1909, laid out the histological and cytological foundations of modern neurology. Golgi and Ramón y Cajal shared the Nobel Prize in Physiology and Medicine in 1906.

French, English, and American Psychiatry

The view that cerebral pathology underlay mental disease was also widely held in France, England, and America, but as a belief system independent of the more rigorous scientific methodology in Germany.

French psychiatry of the first half of the nineteenth century had initiated the cerebral pathologic approach—but under the dominance of a single institution, the University of Paris, with its control of the Bicêtre and the Salpêtrière, the two important hospitals. Since the Parisian hospitals contained large numbers of patients with both mental and chronic neurological disorders, psychiatry and neurology developed together in France as neuropsychiatry. Many neurological syndromes were initially described clinically and pathologically in the Paris setting: “Brown-Sequard’s paralysis” (1850), crossed hemiplegia, the first description of neurasthenia by Eugène Bouchut in 1860, Duchenne-Erb palsy (1872), and in Charcot’s extensive works the first clinical description of the electric pains in tabes dorsalis (1866) and of tabetic arthropathy (1868), multiple sclerosis (1868), and cerebral localization of various neurological disorders.

English and American psychiatrists readily accepted biological interpretations, accepting even single-cause theories of mental disorder as exemplified by Benjamin Rush’s hypothesis in his 1812 textbook (the first full-length psychiatric book by an American) that madness was caused by pathologic processes in the brain’s vasculature and blood supply. In the second issue of the *American Journal of Insanity*, published in 1844, Amariah Brigham clearly stated the view of the founding members of the Association of Medical Superintendents of American Institutions for the Insane (which became the American Psychiatric Association): “I consider insanity a chronic disease of the brain, producing either derangement of the intellectual faculties, or prolonged changes of the feelings, affections and habits of the individual.” Although they emphasized body disease for the origin of insanity, nineteenth century American psychiatrists strove to avoid the stigma of materialism (managing thereby to stay an intellectual backwater, since it was precisely philosophical materialism that was the engine driving European medicine). The non-materialists overtly stated that the immortal mind itself was incapable of disease and decay; hence, the reality of mind was not denied. As Brigham averred, “the brain is the instrument which the mind uses in this life.”

John Charles Bucknill and Daniel Hack Tuke—neurologists and institutional psychiatrists—reflected prevailing British psychiatric thinking in their clearly Griesinger-influenced 1858 *Manual of Psychological Medicine*, a standard text that went into four editions, when they described insanity as

a condition in which the intellectual faculties ... any one, or all of them—have their free action destroyed by disease, whether congenital or acquired. He will not go far wrong if he regard insanity as a disease of the brain, affecting one or more mental faculties—intellectual or emotional.

The Failure of Histopathology

Psychiatrists in Germany and elsewhere were soon confronted by instances in which the brain did not show significant pathology when examined by the available techniques (Ray *et al.* 1873). Even so, they maintained their basic biological orientation, citing pathological states of the cerebral vessels or morbid conditions of the cerebral organization, with eventual recovery in vessel tone or cerebral dysfunction. Though the brain’s original balance would not be regained, parts of the brain expressing particular faculties would encroach on other parts, altering its structure and organization and resulting in chronic mental disease without pathological appearance. They attributed the apparent soundness of the brain’s structure to observational imperfections. However, with the exception of senile psychoses, general paresis, or other clearly defined insults to the brain, cellular pathology had failed to discover a consistent pattern of localized lesions, generalized atrophy, or specific cellular changes in many forms of insanity.

Heredity and Degeneration

That mental illness tends to occur in certain families has been known from antiquity and often has been accorded ominous significance. Pinel, Esquirol, Griesinger, Bucknill, and Tuke all postulated a hereditary predisposition to insanity. Often heredity was invoked as a causal agent for particular mental disorders

rather than for all mental disease. In his review of the literature Griesinger emphasized the variability in the reports of hereditary predisposition.

Heredity became crucial for the mid-nineteenth century French school of psychiatry (Morel, Magnan, and Moreau). Whereas Pinel and Esquirol had conjectured that hereditary predisposition existed in only 10% of patients, Esquirol's pupil Jacques Joseph Moreau de Tours estimated 90% in 1859. With a lifelong interest in hereditary disposition to disease (his thesis in 1830 had been on the effect of physical factors on mental faculties; see Carlson 1985), Moreau stressed a multiform hereditary predisposition to imbecility (1853), epilepsy (1854), and insanity (1859), formulating an early form of degeneration theory—a theory that was to dominate late nineteenth century psychiatric thinking about deviance and criminality. The first to produce an artificial psychosis with drugs, Moreau reported his own experiences from taking hashish in his classic 1845 work *Du haschish et de l'aliénation mentale*. Moreau's ideas became key concepts many years later in postulating a toxic theory of insanity.

Benedict Augustin Morel, whose main works appeared in the 1850s, introduced in 1857 the term *dégénérescence* (“degeneration”) and in 1852 *démence précoce* (“dementia praecox”). Morel regarded degenerations, whether physical or mental, as pathological variations transmitted by heredity through acts of procreation that, worsening from generation to generation, gave rise to physical abnormalities, such as mothers with goiter giving birth to infants with cretinism. He considered many mental disorders as the expression of his postulated process of biological degeneration. He formulated a mostly unitary nosology with hierarchies of symptoms related to severity of illness and emphasized the progressive deterioration in the germ plasm. Unfortunately his concept of degeneration soon encompassed all forms of mental disorder, however different their symptoms, prognosis, and treatment. Furthermore, Moreau viewed human history in terms of degeneration, making racist claims about the breeding of mental illness and the rise and fall of civilizations (Genil-Perrin 1913).

Moreau extended his idea of degeneration to what Drinka (1984) called the “genius myth,” which postulated that not only the enervated and feeble-minded degenerate, but also movers of civilization and some geniuses displayed an imbalance of nervous energy. Though this might heighten the moral force in one or two select family members over several generations, it could also cause various forms of familial degeneration. The Italian psychiatrist Cesare Lombroso, one of the founders of scientific criminology, adopted and popularized Morel's alleged relationship of genius to insanity in many works published in the later nineteenth century (Lombroso 1864, 1876, 1911). Lombroso's most influential work involved criminals, whom he examined mentally and physically in great detail for signs of degeneration, inventing along the way the idea of “criminal type.” Whenever possible he performed neuropathological studies—often after a murderer's execution. As one example, he reported the criminal Vilella's brain had an anomaly in the median cerebellum, a feature Lombroso considered characteristic of higher mammals and primitive man. From 1870 into the early twentieth century Lombroso's ideas strongly influenced criminology. His argument, like Morel's, was Lamarckian, although he also took into account Darwin's evolutionary theory. According to Lombroso, however, evolution was not necessarily progressive. It could become involuntary, resulting in “dissolution” and “atavism.”

In his vastly influential 1886 *Psychopathia Sexualis*—one of the few nineteenth century psychiatric texts still widely read and a foundation text for modern forensic psychiatry—the Austrian neuropsychiatrist Richard Freiherr von Krafft-Ebing wrote that the various forms of sexual pathology were untreatable manifestations of hereditary degeneration. His list of hopeless conditions included homosexuality, the perversions, sadism, and masochism—the latter two terms being used for the first time in his book. He also thought that neurasthenia, hysteria, and the psychoses manifested hereditary taint. According to Krafft-Ebing, progressive hereditary degeneracy might lead from alcoholism in one generation to simple psychosis in the next, complex degenerative psychosis and epilepsy in the third, and sterility with consequent annihilation of the stock in the fourth generation. He studied patients for the “stigmata” of degeneracy—anatomical or functional deviations indicating a neuropathic disposition. Although many psychiatrists had lost faith in the theory by the end of the century, concepts of degeneration remained as explanations in psychiatric textbooks well into the twentieth century (for example, Church and Peterson's standard

American textbook *Nervous and Mental Diseases*) and have in the late twentieth century even had a partial confirmation with the discovery in 1983 of the genetic locus for Huntington's disease on the short arm of chromosome 4 and with the clearly genetic disposition to Alzheimer's disease compatible with an autosomal dominant pattern of inheritance.

Cerebral Localization and Neuroanatomical Concepts

Whether cerebral functions such as speech were localized in parts of the cortex was hotly debated in the 1860s. Localization had come to be rejected because of the fanciful speculations of the phrenological followers of Gall. In their massive four-volume set plus atlas published between 1810 and 1819 Franz Joseph Gall and his pupil Johann Caspar Spurzheim introduced the theory of localization of cerebral function and made the first attempt to map the cerebral cortex. In 1861 Broca demonstrated before the Société d'Anthropologie in Paris the brain lesion of his first patient suffering from aphemia (renamed aphasia by Armand Trousseau in 1864 when he discovered that Broca's "aphemia" meant "infamy" in later Greek usage). From this demonstration and subsequent observations Broca found that articulate speech depends on the integrity of the left third frontal convolution, which he termed the *circonvolution du langage*, later known as Broca's convolution. Broca contributed to neurology and psychiatry the concept of functional localization by cerebral convolution (Schiller 1979); his work had important implications for mid-twentieth century ideas about the inferomesial aspect of the hemisphere and the hippocampus, which he called the "great limbic lobe" or "limbic system."

Meanwhile at Breslau the precocious Carl Wernicke extended Broca's work on localization with the publication in 1874, at the age of 26, of his book *Der aphasischen Symptomencomplex*, in which he described sensory aphasia ("Wernicke's aphasia"), alexia, and agraphia. He published the first comprehensive account of the achievements of localization theory in his *Lehrbuch der Gehirnkrankheiten*, published in three parts from 1881 to 1883. He described "Wernicke's" encephalopathy as most likely a toxic phenomenon. In later years he studied psychiatric patients extensively, attempting in his classic textbook, issued in three parts from 1894 to 1900, to apply principles derived from his studies of aphasia to mental patients and introducing physiological concepts to explain mental disorders without neuropathological lesions. Not a clinical psychiatrist in the Kraepelinian manner, he disagreed with Kraepelin over the scientific status of the clinical method.

Professor of psychiatry at the University of Vienna, Theodor Meynert was a leading figure among both psychiatrists and neuroanatomists. A speculative neurophysiologist and a clinical psychiatrist, he attempted an early synthesis in his 1884 *Psychiatrie: Klinik der Erkrankungen des Vorderhirns* (issued in English in 1885 as *Psychiatry. A Clinical Treatise on Diseases of the Fore-Brain*). For Meynert, whose students included Wernicke, Forel, and Freud, psychological events were epiphenomena of neurophysiological events, themselves fundamentally dependent on specific neuroanatomical structures. Meynert made major contributions to cerebral topography and to the localization of cerebral function; his work was centrally involved in the reign of psychiatry's somatic-explanatory tradition. Freud attempted to elaborate upon some of Meynert's ideas in his unfinished 1895 *Psychology for Neurologists* (Freud's own working title for the manuscript), which did not appear in print until 1950. Unable successfully to reduce psychological processes to neurological events, Freud abandoned the work, departed from anatomico-physiological investigations, and instead, adopting a kind of implicit functional dualism, developed psychoanalysis as a purely psychological theory—albeit one rooted in biology (see Sulloway 1979 for an extended discussion of just how biologically moored Freud's concepts were).

Some investigators, such as Goltz at the University of Strassburg in the 1870s, rejected localization theory (Haymaker 1970). In animal studies Goltz initially removed small areas of cerebral cortex, and later more extensive areas until he accomplished subtotal decerebration. From these investigations he concluded that there existed a direct relationship between the amount of cerebral cortex destroyed and the degree of resulting dementia, thus suggesting the holistic concepts of cerebral functioning developed later by Shepherd Ivory Franz (1902) and Karl Lashley (1929).

The Early Use of Drugs and Physical Theories

Psychiatrists introduced various somatic theories and physical treatments based on the hypothesis of brain dysfunction in mental illnesses. Hydrotherapy—a means of physical tranquilization used by the ancients—remained a common and important way to control overactivity and agitation in chronic patients. Until the advent of the newer somatic therapies of the last 50 years, the continuous tub, cold packs, douches, jet sprays, needle showers, colonic irrigation, 50-degree plunge, spinning chair, and similar methods were widely applied in institutions, often with the extensive use of sophisticated mechanical equipment. In her 1932 *Hydrotherapy in Hospitals for Mental Diseases*—the major twentieth century work on the subject—Rebekah Wright stated that, in the field of psychiatry, hydrotherapy was the most important treatment method, applicable to delirium, psychomotor excitement, agitation, cerebral congestion, insomnia, and many other conditions. Once modern chemotherapeutic agents were introduced in the early 1950s, the days of elaborate hydrotherapy were nearly forgotten. H. S. Sullivan was quite taken by it.

Chemical means for altering sensation and behavior using plant extracts or the products of fermentation—for example, the opiates, hashish, and alcohol—have been used for millennia. The specific application of drugs to mental disease begins in the mid-eighteenth century with George Young's report of dramatic therapeutic effects from the use of opium in the insane. Joseph Brandreth in 1792 regarded opium as a specific treatment for insanity. Opiates came to be widely used in the nineteenth century. As late as 1858 Bucknill and Tuke advocated their value in their widely used textbook: "the opiate treatment, both in melancholia and mania, has gradually undergone development, until at the present time, the skillful and discriminating use of the drug may only be called 'the sheet anchor of the alienist physician.'" From its zenith in the mid-nineteenth century, increasing recognition of its addicting qualities gradually led to its rejection by 1900 (Carlson and Simpson 1963).

Bloodletting—much recommended by Benjamin Rush in his influential 1812 textbook on mental diseases—was widely practiced through the middle nineteenth century. Though Bucknill and Tuke agreed that bleeding may need to be applied to very disturbed patients, many psychiatrists rejected bleeding, following Pinel's condemnation of the practice. When the voices of Griesinger, John Conolly in England, and Pliny Earle in the United States were added to Pinel's, bloodletting disappeared as a therapeutic method in psychiatry.

Throughout the nineteenth century various chemical substances were used, many of which besides the opiates were of ancient origin: quinine, the purgatives hellebore and castor oil, port wine as a stimulant, calomel, and tartrate of antimony. Drugs have been used as hypnotics, tranquilizers, antidepressants, stimulants, and as substitutes for mechanical restraint. Hand in hand with the rise of non-restraint in the 1850s went the production of new sedatives for chemical restraint. The English physician Charles Locock introduced bromide of potassium as a treatment for hysteria and epilepsy in remarks given in 1857 at a meeting of the Royal Medical and Chirurgical Society; after publication in 1861 of Samuel Wilks's paper on its use, it became wildly popular, so much so that Temkin reported that by the mid-1870s 2 1/2 tons a year were being used at the National Hospital in London. The bromides remained popular for sedation of agitated patients and epileptics until the 1890s, when their toxic effects were recognized as bromism. Chloral hydrate, the oldest hypnotic drug, was first made in 1832 by the great German agricultural chemist Justus Liebig. Recognizing that chloral reacted with an alkali to form chloroform, Otto Liebreich first used it therapeutically in 1869. Since its principal action is to depress the central nervous system, chloral hydrate was often prescribed for insomnia. Its popularity waned with the introduction of barbiturates. Paraldehyde, a rapidly acting hypnotic, was introduced by Cervello in 1882 (Weatherhill 1888). The illustrious German chemist Emil Fischer, who won the 1902 Nobel Prize for Chemistry, and the young physician Joseph von Mering introduced in 1903 barbital (diethylbarbituric acid) under the trade name of Veronal—the first barbiturate. The barbiturates quickly supplanted other drugs for use as sedatives with psychiatric patients. As with most innovations in treatment, these drugs were introduced with great enthusiasm, their limitations becoming apparent only after years of use. Nonetheless, these four compounds remain in the pharmacopoeia and are still occasionally prescribed.

Of the many physical measures introduced in the last 150 years, few have had much theoretical basis, nor have many lasted more than a few decades. These short-lived treatments include oophorectomy, castration, hysterectomy, trephining, removal of various organs for focal infection, fever therapy, and, more recently, insulin coma therapy and prefrontal lobotomy (Tourney 1967).

The Shift to Functional Concepts and Environmentalism

The reductivist model of mental disease that held sway in the middle 1800s assumed that structural defects in the brain “caused” mental illness. When the search for biological markers failed convincingly to connect defective brains with mental illnesses, medical emphasis shifted from structure to function. Both the term and nosological category “neurosis”—meaning disorder of the nerves—had been introduced by William Cullen in his *First Lines of Physic*, published between 1776 and 1784 in four volumes. Charcot in the late 1870s and early 1880s had created the category of functional neurosis to make sense of a group of patients exhibiting neurological disorder who were neither malingering nor found to have an actual neurological defect. By the 1890s these functional neuroses began to be known as psychoneuroses (with psychological etiology) to distinguish them from the neuroses arising from nerve disease or dysfunction. Adopted in psychiatry, this model shifted emphasis from morphology (diseased brains) to physiology (aberrant functioning of intact brains). So Ernst von Feuchterslebens’s term “psychosis”—introduced along with the term “psychopathology” in his 1845 *Lehrbuch der ärztlichen Seelenkunde als skizze zu Vorträgen*—was invoked to cover cases of extreme mental disorders (that is, of the sort for which one needed to be institutionalized) arising from brain dysfunction but without underlying discernible pathological changes. Since all still agreed with Feuchterslebens’s dictum in Section 123 of his book that “every psychosis is, at the same time, a neurosis [that is, brain disorder] ... but every neurosis is not a psychosis,” this signaled a shift of attention from the hypothesized diseased or dysfunctioning brain to disturbed behavior (disturbing to others if not always to the patient). In effect, this reintroduced a kind of practical, unacknowledged dualism into psychiatry: Since attempts to identify the origins of mental disease in and to treat the brains of patients had not produced much success, it was a short step to paying attention to and looking for meaning in what the patients actually did, and but another short step to positing life experience, especially with other persons, as causative agents for mental breakdown.

In the 1880s and 1890s explanations in terms of psychological and emotional factors began to replace the reductionist physicalist explanations that seemed to lead nowhere. With this shift in theoretical mode we are at the doorstep of phenomenological psychiatry and twentieth century psychopathology.

Trained in Zurich as a neuropathologist under Forel, Adolf Meyer (1928) taught that the mind event and the brain event are both physiological. Under his holistic concept of psychobiology he subsumed all the individual’s organic, emotional, and mental processes as contributing to the totality of the person—replacing the concept of disease with that of reaction type, which required both physiological and psychological explanation. Beginning in the late 1890s and extending through the first few decades of the twentieth century, psychiatrists abandoned the barrenness of brain pathology for psychology, psychopathology, and psychoanalysis—began, that is, to seek psychological and psychosocial explanations for what were increasingly viewed as psychological disorders rather than physical diseases. Looming at the turn of the twentieth century, however, lay a great success for the traditional reductivist monist model: the reduction of general paresis to physical causes.

The Paradigm of General Paresis

By 1900 neuropathology had made considerable progress in understanding many organic brain diseases: congenital anomalies, mental deficiency, and some infectious diseases such as encephalitis and meningitis. But of diseases regarded as psychiatric, only general paralysis of the insane (GPI) was successfully to

be reduced to a specific brain malady—the correct explanations of formerly psychiatric diseases such as pellagra and beriberi succeeded in moving them out of the psychiatric bailiwick. A common psychiatric disorder in the nineteenth century, GPI displayed varied clinical symptoms: paralytic attacks, slurred speech, tremors, emotional lability, and intellectual disorders. Though in the early stages these symptoms were often indistinguishable from those of dementia praecox and manic depressive disorders, GPI inevitably deteriorated to a state of dementia, paralysis, and death.

Thomas Willis, who coined the term “neurologie,” gave the earliest description of GPI, followed in 1798 by John Haslam’s description of three cases in his 1798 *Observations on Insanity*. Then the French took the lead with Antoine Laurent Bayle, now recognized as an important theoretical innovator in French psychiatry, identifying general paralysis as a discrete disease entity in his 1822 thesis. Jean Baptiste Delaye, a pupil of Esquirol, recorded the early signs of the disease and emphasized the importance of speech disturbances in his 1824 thesis. Another student of Esquirol’s, L.-F. Calmeil, gave the classic description of the disease in his 1826 *De la paralysie*, followed by Esquirol’s description in his great 1838 *Maladies mentales*, which drew on all the previous work. According to these French authors, inflammation of the meninges and cerebral cortex produced dementia paralytica, which terminated in progressive dementia and paralysis. In an 1857 paper the German psychiatrists Johann Esmarch and Willers Jessen first posited a connection between syphilis and general paresis, a suggestion taken up by a host of researchers. The great French venereologist Jean Alfred Fournier proposed in 1876 that locomotor ataxia originated in syphilis. In 1894 he demonstrated statistically the causal relationship of syphilis to paresis and tabes, designating GPI as “parasyphilitic,” by which he meant that it was syphilitic in origin but not in nature (Henry in Zilloorg, 1941). By the 1890s, much evidence had accumulated showing that paretics had a prior history of syphilitic infection. Prominent clinicians such as Krafft-Ebing (1896) and Kraepelin (1901) hypothesized that paresis was a tertiary manifestation of syphilis. With the aid of Franz Nissl’s new histological staining methods and neuropathological studies (1904) the German bacteriologist Fritz Schaudinn, working with serum from a genital lesion provided by Erich Hoffmann, identified *Spirochaeta pallida* as the infecting organism on March 3, 1905. Schaudinn later renamed the organism *Treponema pallidum*. In 1906 the German bacteriologist–psychiatrist team of August Wasserman and Felix Plaut developed a test for determining the presence of syphilitic antibodies in blood serum and cerebrospinal fluid, which became known as the Wasserman test and which greatly aided in diagnosing general paresis. Over 90% of paretics tested positive in Wasserman’s test. Finally, the etiology was confirmed in 1913 when the Japanese bacteriologist Hideyo Noguchi confirmed the presence of the spirochete *Treponema pallidum* in a duplicate set of tissue slides sent him by the American physician Joseph W. Moore. Syphilis had now definitively been shown to be present in the brain tissue of paretics—one of the great triumphs of modern neuropathology and microbiology.

Drugs such as mercury, silver, bismuth, and the arsenicals had long been used for treating syphilis (Ehrlich and Hata 1910). Wagner von Jauregg, who had been experimenting using fever therapy with psychotics since 1887, treated nine paretic patients in 1917 with malarial-induced fever therapy, six of whom responded favorably. He received the 1927 Nobel Prize in Medicine for discovering this treatment. Fever therapy remained the treatment of choice until John F. Mahoney of the U.S. Public Health Service demonstrated the specific anti-luetic action of penicillin in 1943—a treatment, soon applied to paretics, which succeeded in arresting the infectious process, often with significant clinical improvement.

The history of the cure for general paresis illustrates one paradigm for the biological approach to psychiatric disorders. Clinical description of the illness based on naturalistic observation is followed by formulation of a specific disease concept, which generates hypotheses empirically testable through experiment. Slowly, a body of positive knowledge builds, leading to increasingly precise diagnostic tests, and eventually to the discovery of a specific etiology. Treatment measures, largely derived from empirical studies, are used; finally, specific treatment and prophylaxis lead to the conquest of the disease. This paradigm elegantly illustrates the reductivist medical model applied to psychiatric research. The question remains as to how suitable this model is for other major mental disorders.

Of course, that is the internalist scenario, how the story looks when the winners tell it, looking backward to construct a steady history of progress culminating in the final victory. If one asks why general paralysis

became such a medical cause with an army of interdisciplinary researchers attacking it, one might conclude that, first, a great deal of luck was involved. Given the myriad short-lived psychiatric diagnoses and nosological categories proffered throughout the nineteenth century, surely a few of them had to correspond to something actually going on in the world rather than in the minds of psychiatric theorists. By emphasizing one that won the lottery and forgetting the rest, we not so much falsify the past as reconstruct it in an image pleasing to us now. Second, we overlook the human struggles for turf and priority. The reputation of Bayle, the first delineator of GPI as a separate disease entity, was trashed for decades by the pupils of Esquirol, who championed Delaye as the first to describe the disease. As a consequence of Esquirol's disfavor, Bayle never got a position as an asylum physician (Goldstein 1987, p. 146). Or again, in an account we shall turn to presently, Jean Delay managed to get his name starred as the first to use chlorpromazine with psychotics, when he was actually second. Third, there has to be a prize attached to victory. Once GPI began to be diagnosed everywhere (no doubt too commonly), it was obvious that fame and other goodies awaited those who identified its cause and those who found a cure. Fourth, it took a lot of money to finance a hundred years worth of research. GPI, fitting so perfectly as it did the reductivist model, was the right game to play for career advancement. The system became mutually reinforcing with early successes encouraging more entrants into the contest, making, as it were, the pot even bigger. To work in an area not already defined as interesting and important risked consigning one's career to the dustbin.

Further Paradigms: Toxic, Nutritional Deficiency, Thyroid Deficiency and Heredity

Though poisons have been known to produce serious psychiatric symptoms since ancient times (Citois, 1616), only in the nineteenth century were the toxic effects discovered of lead and other heavy metals, which result in psychiatric, neurologic, and general medical symptoms. Tanquerel des Planches first described lead encephalopathy in 1839. His description of four classes of symptoms was generally accepted: (1) *delirious*, (2) *comatose*, (3) *convulsive*, and (4) *a combination of the three major symptoms*. Dementia was gradually recognized as a form of chronic toxicity. Though psychiatric textbooks of the 1880s make no reference to lead encephalopathy, Daniel Hack Tuke drew attention in 1880 to cases of mental disorder of a more obscure and chronic kind resulting from chronic ingestion of minute amounts of lead. Tuke reviewed the subject extensively in his great 1892 dictionary. By the early twentieth century ingestion of lead by infants and young children was recognized as a public health problem. In the teens and 1920s pica was connected to ingestion of flakes of lead paint as well as to water supplied through lead pipes (Blackfan 1917). Only in the 1960s were the endemic features and even epidemic proportions of lead poisoning in lower socioeconomic groups fully recognized and researched (Gilsinn 1972; Lindon 1973; Pueschel *et al.* 1972). The problem remains endemic in many urban areas.

Alcohol is another substance long recognized as toxic. Trotter first designated alcoholism as both a medical and a mental disease in 1804. Psychotic sequelae of alcoholism, such as delirium tremens, had been known since antiquity. In the later nineteenth century two additional syndromes were identified: Wernicke's alcoholic hallucinosis (1881) and Korsakov's psychosis (1887), which involved confabulatory memory loss, paranoid psychotic disturbances, pathological jealousy, explosive aggressive behavior, and general intellectual deterioration. The Swiss Forel (1901, 1910) and Bleuler (1916) were particularly interested in alcohol abuse and its complications, advocating abstinence and legal prohibition. As early as the later half of the nineteenth century the question was raised as to whether the alcoholic psychoses were due to alcohol as a toxin or to malnutrition associated with alcoholism.

In addition to the classical addiction of alcoholism, other addictive disorders described in the nineteenth century remain as major social problems, diseases, and psychiatric disorders. Valentin Magnan of the French school made early studies on general paresis and the toxic effects of absinthe, alcohol, morphine, and cocaine. In 1874 he published his monograph on alcoholism, in which he emphasized the public health problem and the need for special hospitals for alcoholics. Heinrich Laehr reported the first case of

morphinism in 1872 in Volume 29 of the *Allgemeine Zeitschrift für Psychiatrie*. The addictive properties of cocaine, which was introduced in 1860, were well recognized before the turn of the century (Hammond 1886), although its value as a local anesthetic had been proved in the middle 1880s.

Pellagra—common and often epidemic throughout continental Europe—was first described by Frapolli in 1771. Its symptoms were later designated the “four d’s”: dermatitis, diarrhea, delirium, and death. One can lengthen this to the “six d’s” in that depression and dementia are also common symptoms. Pellagra was common among the poor, who often subsisted on a diet of maize. Witnessing its epidemic proportions in much of Europe, Lombroso (1869) concluded that it was caused by a toxic factor that developed in deteriorating or contaminated maize. French psychiatrists also studied the problem extensively (Roussel 1866) with some theorizing that pellagra resulted from a deficient diet among poor populations (Rossi 1913). Joseph Goldberger, an American physician born in central Europe in impoverished circumstances, had witnessed such conditions before his migration to the United States, where he obtained his medical education. Pursuing the deficiency hypothesis, Goldberger isolated in 1914 what he called the pellagra prevention factor, which was found to be deficient in pellagra patients and the administering of which cured the disease. In 1938 this pellagra prevention factor was identified as niacin or vitamin B3 (Elvehjem *et al.* 1938). Although rare in Western nations today, the condition is still seen in association with chronic alcoholism and other types of substance abuse and remains endemic with repeated epidemics in Third World countries.

Kraepelin and the Dementia Praecox Concept

By the turn of the nineteenth century Kraepelin’s ideas were already starting to dominate European and American psychiatry. Borrowing from the experimental psychologist Wilhelm Wundt, whose student he had been, Kraepelin established, first at Heidelberg and then at Munich, model experimental laboratories for performing clinical psychiatric research. His influence spread as much through the students who worked with him in his laboratory (many of them American) as through his writings. His principal work, indispensable for understanding twentieth century psychiatry, the *Lehrbuch der Psychiatrie*, originally issued as a brief compendium in 1883, grew through its nine editions into a veritable encyclopedia of current psychiatric knowledge and shaped the contours of twentieth century and early twenty-first century psychiatry. In the 1896 fifth edition Kraepelin first introduced the nosological distinction between deteriorating and periodic, nondeteriorating psychoses. In the sixth edition of 1899 these turned into the familiar nosological categories of dementia praecox (which Bleuler renamed “schizophrenia” in his 1911 monograph on the subject) and manic depressive psychosis. With Kraepelin, emphasis shifted from neuroanatomy and neuropathology to careful clinical observation, evaluation, and classification and to the phenomenological description of mental disorders over time, often over many years. After such careful studies, one might then be able to infer the existence of specific disease entities, the underlying disease processes themselves not necessarily being apparent in the surface symptoms. Kraepelin did not reject Griesinger’s fundamental stress on the biological basis of insanity, but rather reworked it into a subtler, multistage model. With Kraepelin the nineteenth century notion of insanity as a single disease with a single cause disappears into different forms of mental disorder, each with its own diathesis and etiology.

Adolf Meyer’s enthusiastic 1897 review of the fifth edition of Kraepelin’s *Lehrbuch* helped bring Kraepelin’s work to the attention of American psychiatrists. A. Ross Diefendorf, an American psychiatrist who had studied with Kraepelin, issued in 1902 an abridgement in English of the sixth edition of Kraepelin’s textbook, of which a revised and enlarged edition appeared in 1907, which saw a number of reprintings into the 1920s. Kraepelin’s 1901 *Lectures on Clinical Psychiatry*, with its case histories illustrating his concepts, was translated into English in 1904. Kraepelin’s studies of the natural history of mental disease established a clinical psychiatry based on naturalistic observation. The Kraepelinian dictum was “mental symptoms are dethroned unless they are a characteristic of etiology, course and outcome.”

The Kraepelinian stimulus along with the Kraepelin-influenced clinical methods developed by Meyer and August Hoch (another American who studied with Kraepelin) brought about important changes in American psychiatry. As custodians of the insane in asylums, psychiatrists had become isolated from the scientific trends of general medicine. Now emphasis shifted from administration to careful clinical study. Psychopathic hospitals conjoined to universities and dedicated as much to research as to custodial care began to appear in a number of states. The earliest such research-oriented institutions were the those headed by Albert Barrett associated with the University of Michigan (1906), E. E. Southard at the Boston Psychopathic Hospital (1912), and Adolf Meyer at the Henry Phipps Clinic at Johns Hopkins University (1913).

The schism between adherents of psychological and biological etiologies of dementia praecox already existed in the first decade of the twentieth century, as shown by Southard's (1910, 1915) comprehensive 1910 review in the *American Journal of Insanity* of the conflict as it existed in Continental, British, and American psychiatry. One side regarded dementia praecox as a type of intoxication with brain damage yet to be identified; the other as a dissociative mental disease without structural brain damage. Southard noted the shift from "insanity = brain disease" to "some insanities = brain diseases." Wernicke's idea of insanity as a disease of the brain's association areas was an advance over the notion of disease as secondary to focal morphological changes.

Southard further stressed that diseases like manic depressive insanity or dementia praecox should not necessarily exhibit—even theoretically—brain damage, concluding that existing evidence for the organic nature of dementia praecox was not convincing because of the lack of cytological changes. Since some cases of dementia praecox and manic depressive psychosis go into remission, he suggested that any pathological changes associated with acute illness would be mild and reversible. Although focal changes were postulated and found in post-traumatic states, infections, and toxic deliria, they were in no way to be related to the functional psychoses.

Dunlap's work reported in 1924 helped to clarify the problem. He found little to indicate histopathological changes in dementia praecox. Careful study revealed dementia praecox completely lacking in fundamental alterations of any neurons. Dunlap posited that any nerve cell alterations in dementia praecox were inconsistent. These he regarded as reactions to various, mostly unknown somatic conditions as well as to post-mortem and technical factors. Similar inconsistent findings were seen in the control subjects. Even before the work of Southard and Dunlap, Meyer (1921), already the leading voice in American psychiatry, had abandoned his original total devotion to histopathology as a means for understanding the basic mechanisms in the functional psychoses. He promulgated a pluralistic approach to psychiatry embodied in his concept of psychobiology.

Developments in Heredity, Genetics, and Eugenics

With the rediscovery of Mendel's work, heredity and constitution once again became important for understanding mental disorders (Mendel 1866; Bateson 1902; de Vries 1901–1903; Johannsen 1903). The discipline of genetics emerged, based on the gene as the carrier of hereditary characteristics across breeding generations according to the precise rules discovered by Mendel. Before the advent of gene theory, illnesses among family members had been reported by admitting physicians without being studied or diagnosed through clinical studies of families. Darwin's cousin, Francis Galton (1883), however, had done important preliminary work by systematically studying the transmission of human characteristics as well as the influence of heredity and environment, developing biometric methods based on careful collection of data with procedures of statistical analysis. Applying Darwinian concepts to the study of human faculties (Galton 1889) and mainly focusing on the heredity of genius, talents, and intelligence, he established the discipline of eugenics as a method of understanding and modifying human traits through a knowledge of heredity and its mechanisms.

Under Kraepelin's supervision in Munich Ernst Rüdin (1916) carried out the first extensive genetic field studies of mental illness. Virtually the entire next generation of genetic psychiatric researchers were

trained in his laboratory working under Bruno Schulz, including Slater, Stromgren, and Kallmann. Rüdín's work became an important stimulus to the pioneering American investigators Henry A. Cotton (1912) and A. J. Rosanoff and I. F. Orr (1911). Rosanoff investigated the heredity of mental disorders to determine whether they followed the laws of Mendelian inheritance, concluding that the neuropathic constitution is transmitted across generations as a recessive trait. The American physician George Sumner Huntington gave the first complete description of chronic chorea (Huntington's disease, initially called Huntington's chorea), in 1872, with its classical features of involuntary movement, depression, and dementia along with a family history of the disorder. This was the first neuropsychiatric disorder found to follow the Mendelian theory of dominance of the transmission of the genetic traits.

Early investigators thought that the inherited predisposition to mental disease was general rather than specific, with the particular form of disorder being determined by factors other than heredity. By 1913 Rosanoff had concluded from his researches that a predisposition to specific mental maladies was inherited rather than a general tendency. He posited hereditary relationships in epilepsy, dementia praecox, manic depressive insanity, imbecility, involuntal melancholia, paranoiac conditions, acute alcoholic hallucinosis, and some allied psychoses, believing all these to share a common recessive transmission. His interpretations remained highly controversial in both Europe and America.

Endocrinology

Endocrine influences on personality and behavior were first studied in connection to the thyroid. Wagner von Jauregg first described psychotic symptoms with myxedema in 1888 (Wagner von Jauregg 1912). In 1891 Murray successfully treated hypothyroidism by injection of sheep thyroid gland extract. In 1908 Marine and Williams demonstrated the connection of cretinism to goiter and to maternal iodine deficiency, soon prevented in most instances through the use of iodized salt. Psychiatric symptoms were then recognized as part of a number of hypo- and hyperfunctioning endocrine disturbances. Considerable knowledge about the endocrine system had accumulated by the 1920s. Cannon's pioneering 1913 book *Bodily Changes in Pain, Hunger, Fear and Rage* contributed to knowledge about the both the sympatho-adrenal system and the physiological action of adrenaline as well as its effects on other endocrine glands. Expanding upon Claude Bernard's concept of a *milieu intérieur*, first introduced in the 1850s, Cannon introduced the influential concept of homeostasis—the tendency of an organism to maintain stability and constancy in its internal milieu through neuroendocrine mechanisms—and conjectured that specific brain-endocrine physiological patterns would be discovered for some psychiatric illnesses.

Reviewing constitutional studies on dementia praecox in 1923, Nolan Lewis found that atrophy of the testes and adrenal cortex, interstitial changes in the thyroid, and irregular changes in pituitary and pancreas were all reported as occurring in this syndrome. However, these findings were found to be inconsistent and nonspecific for schizophrenia. Attempting to connect body types with character, mentality, and psychopathology, Kretschmer (1921) tried to correlate asthenic body type with schizophrenia and the pyknic type with manic depression; but such relationships had only partial validity.

In 1927 Roy Hoskins, a physiologist at Harvard Medical School, received funding to undertake a comprehensive research program investigating schizophrenia from Mrs. Stanley McCormick, whose husband (heir to the McCormick Implement Company) was a chronic schizophrenic who had failed to respond to treatment by a number of world-famous psychiatrists. Hoskins was appointed director of the Memorial Foundation for Neuroendocrine Research in Schizophrenia, housed at the Worcester State Hospital in Massachusetts. The research program investigated thyroid, adrenal (medullar and cortical), gonadal, and pituitary functions; undertook metabolic studies; and examined neurophysiological factors. Glandular extracts were used as investigative therapeutic agents, but with no consistent results. Although Hoskins's group failed to demonstrate well-marked endocrinopathies in schizophrenia, many patients showed deviations from normal that suggested less severe endocrine disturbances (Hoskins 1946). More-recent endocrine studies have identified a number of hormones, steroid metabolism, and relationships between

the hypothalamus and the anterior pituitary, including the hypothalamic hormones or releasing factors that control pituitary function and in turn other endocrine glands (Sachar 1973).

Although Hoskins's program had little success for understanding the pathophysiology of and treatment for schizophrenia, a number of important biological functions and active substances and hormones were discovered. Several of Hoskins's investigators continued studies of hormonal relationships to schizophrenia at the Worcester Foundation for Medical Research under the leadership of Pincus. Although success continued to elude them in the understanding of schizophrenia, their basic endocrine research resulted in the discovery of the first practical oral contraceptive in 1953, for which Pincus later shared the Nobel Prize.

Physical Therapies

A number of somatic therapies were introduced in the 1930s. Fever therapy, which had become an important treatment for general paresis, provided a model for investigators to pursue other physical and chemical methods. Manfred Sakel, Ladislav Meduna, and Egas Moniz all introduced new and different forms of somatic treatment. Sakel (1934) worked with insulin coma therapy and Meduna (1935) with chemical convulsive therapy, and Egas Moniz (1936a, b) developed a neurosurgical approach, prefrontal leukotomy, in conjunction with clinical psychiatrists. All three were associated with the hospital care of the major psychoses, particularly schizophrenia. The treatments were introduced with great enthusiasm, and early studies showed positive results for both schizophrenia and depression. The major treatment modalities for functional psychoses throughout the world from the mid-1930s to the mid-1950s, these treatments helped to change the prevailing attitude of pessimism toward the treatment of the functional psychoses. However, sophisticated clinical research eventually failed to support the efficacy of these treatments. Insulin therapy and prefrontal leukotomy (lobotomy), neither of which ever had an adequate theoretical basis for explaining why they should work, have not been regarded as acceptable treatment measures since the 1960s. Repeated studies illustrated their lack of therapeutic results (Ross and Malzberg 1939; Rennie 1943; Gottlieb and Huston 1951; Ackner *et al.* 1957).

Used by Sakel from 1927 to 1933 in the therapy of morphine addiction, insulin coma therapy was later introduced for schizophrenia in 1934. Insulin increased the appetite and weight of patients and produced sedation in patients undergoing opiate withdrawal. From these clinical effects it seemed reasonable to Sakel to apply this treatment to patients with schizophrenia, in which appetite disturbances and agitation are so common. Since insulin intensified parasympathetic activity, produced a blockade of nerve cells, and strengthened anabolism, Sakel reasoned that the hypothesized endogenously deranged nerve cells of the schizophrenics would be restored to normal function, leading to recovery. Sakel reported in his initial studies 88% improvement in schizophrenics; others using his method also presented data supporting the treatment's efficacy (Dussik and Sakel 1936). Within a few years, however, a staggering number of reports, more carefully controlled and with follow-up data, seriously questioned the efficacy of the treatment and demonstrated that there were frequent dangerous complications (Kalinowsky and Hoch 1961). Though Sakel (1956) defended the usefulness of his treatment method against the vast number of studies that appeared from 1940 to 1955, he lost the support of the members of the psychiatric profession.

Meduna (1937) introduced convulsive therapy in 1934, basing it on the fallacious hypothesis that there is a negative relationship between epilepsy and schizophrenia. Clinicians had long observed that occasional cases of insanity improved when a patient suffered a spontaneous seizure. At first Meduna used camphor and, later, metrazol to induce convulsions.

The replacement of chemical convulsants by electric current was logical. After a series of animal experiments, the Italian psychiatrists Ugo Cerletti and Lucio Bini produced in 1938 the first electrically induced convulsion in humans (Fink 1988). Meduna, Cerletti, and Bini emphasized that the critical treatment factor was the neurophysiology of the seizure rather than metrazol or electricity. With its added convenience, better control, and reduced patient anxiety, electroconvulsive therapy became the favored method of convulsive treatment, gaining widespread use throughout the world. Initial reports of 70% positive results

with electroconvulsive therapy stimulated its extensive use in treating schizophrenics (Kalinowsky and Worthing 1943; Cook 1944). Over a period of time improvement in schizophrenics was found to be transitory and questionably better than the spontaneous remission rate (Hoch 1955).

In 1937 Verstraetin reported on the use of metrazol convulsive therapy in the treatment of manic depressive disease. Since then repeated studies, including carefully controlled longitudinal ones, have confirmed that convulsive therapy yields definite and consistent positive therapeutic results in the treatment of major depressions (Huston and Locher, 1948a, b). These studies suggest that the value of convulsive therapy lies in reducing the duration of the attack, although it does not prevent subsequent attacks. Electroconvulsive therapy remains the most efficacious treatment for severe depressive psychoses with marked suicidal tendencies; it is also used occasionally with severely catatonic schizophrenics (American Psychiatric Association 1968; Fink *et al.* 1974). We now know that convulsive treatment results in prolonged excitation of hypothalamic discharges to the thalamus and cerebral cortex, with a marked peripheral autonomic response. With the convulsion, excess catecholamines are released or produced within the limbic system.

Egas Moniz, professor of neurology at the University of Lisbon, who was born Antonio Caetano de Abreu Freire but took his pen-name from a Portuguese hero who fought the Moors in the Middle Ages, conceived in 1933 (Moniz 1936a, b, 1956) the idea of prefrontal lobotomy for schizophrenic patients from his work with clinical psychiatrists and neurologists and from Ramón y Cajal's neuron theory. He based his hypothesis on the existence of bodies of nerve cells connecting the thalamus with the frontal cortex. Leukotomy had its theoretical foundation in allegedly disturbed synaptic pathways between the prefrontal lobes and the thalamus. On the basis of cyto-architectonic charts and neurophysiological studies, he postulated that the higher psychic functions were localized in the prefrontal cortex, and therefore this was primarily accountable for the thinking disorder, delusions, and hallucinations in schizophrenia, while the emotional disturbance was localized in the thalamus and the sub-thalamic nuclei. Moniz (1937) severed the active fibers to the prefrontal cortex, transforming the patient's interpretation of the sensory and emotional inputs to the prefrontal lobes. He performed the first operation in 1935, soon reporting both "cures" and marked improvements in schizophrenic patients. The psychiatrist Walter Freeman and neurosurgeon James Watts (1942) popularized this procedure in the United States, though with much criticism. Few psychiatrists were able to replicate their optimistic therapeutic results. Furthermore, the procedure often resulted in excessive bleeding, postsurgical seizures, intellectual deficits, and a relatively high number of deaths.

On his own, Freeman (1957) developed the technique of transorbital lobotomy, which he claimed was a procedure that could be performed by a psychiatrist rather than a neurosurgeon. Watts severed his relationship with Freeman over this issue of psychiatrists performing the transorbital lobotomy. Freeman waxed increasingly evangelistic about his treatment with the transorbital technique and its alleged positive results. By the time Egas Moniz received the Nobel Prize in 1949 for his contributions in developing prefrontal lobotomy, the psychiatric literature was full of controversial reports disputing the treatment's efficacy (Shutts 1982). Elliot Valenstein detailed the often wretched history of psychosurgery in 1977 in an appendix to a U.S. government report on psychosurgery and then at greater length in his 1986 book *Great and Desperate Cures*.

Despite a few favorable reports of other methods of psychosurgery (Bridges and Bartlett 1977), lobotomy and these newer methods are rarely used today for any psychiatric disorders. A more recent neurosurgical technique, amygdalotomy, has been used for controlling aggressive behavior (Goldstine 1974), but litigation against the procedure and professional skepticism have hampered further neurosurgical investigation into psychiatric disorders and treatment.

Other Post–World War I Changes in European Psychiatry

Finally completed in London in 1923 as a major research and teaching center for English psychiatry, the Maudsley Hospital attracted a number of Americans for postgraduate study and scientific work (Lewis

1951). French psychiatry became more isolated after the war. Henri Claude at Salpêtrière and later the chair at the University of Paris continued a neuropsychiatric orientation, assembling a number of co-workers of various outlooks in an eclectic program.

The rise to influence of the anti-Semitic and anti-intellectual National Socialists in Germany in the 1920s and their ascension to power in 1932 resulted in the loss of Germany's leadership in academic psychiatry. By 1930 an extensive migration from Germany and her allies, mainly to the United States, resulted in dozens of prominent psychiatrists leaving Europe. Well-known figures such as Paul Schilder, Ladislav Meduna, Manfred Sakel, Lothar Kalinowsky, Franz Kallmann, Fritz Redlich, and Erwin Straus left. Willy Mayer-Gross, Erwin Stengel, and other emigré academic German psychiatrists made their home in England.

Rooted in the need for some form of treatment for the major psychoses, the emerging somatic treatments spurred the development of a school of biological psychiatry. Basic research declined during the worldwide depression of the 1930s, while, with funds in short supply, the quality of care for the chronically mentally ill in institutions deteriorated. Albert Deutsch's polemical 1948 book *The Shame of the States* highlighted these dire circumstances, with concern for the care of the mentally ill becoming a highly charged political and public issue. The failure of medical schools to develop departments of psychiatry in the 1930s reflected their fiscal problems. As a medical discipline, psychiatry was considered a minor priority.

Developments Following World War II

Leadership in world psychiatry shifted to the United States after the second world war, with English replacing German as the dominant international language in science and medicine. Psychiatry played a prominent role in the Allied forces' medicine during the war. Millions of civilians and soldiers had undergone unprecedented physical, intellectual, and emotional stress (Grinker and Spiegel 1945). Twelve percent of U.S. military inductees were rejected for psychiatric reasons. Combat psychiatric casualties were high for anxiety reactions, psychosomatic problems, stress disorders, and acute psychotic episodes, with many servicemen discharged for psychiatric reasons.

American psychiatry reorganized after the war under the leadership of William Menninger (1948) and others in major academic roles. Psychiatrists critical of the organization and lack of leadership in the American Psychiatric Association (APA), the major professional society, founded the Group for the Advancement of Psychiatry (GAP) in 1946 (Deutsch 1959), a feat accomplished without a schism in the APA. Members of GAP and APA leaders agreed on improving standards of care, establishing a working nosology, fostering the development of "university psychiatry" in medical schools, establishing systematic residency training, and emphasizing research. The federal government began to support education and research in psychiatry. American psychiatry, until then dominated by the concerns of institutional psychiatrists, extended its boundaries beyond hospitalized psychotic patients. University departments of psychiatry rose to prominence, assuming leadership roles in clinical practice, education, and research. The National Institute of Mental Health, founded in 1948, supported the development of new psychiatric training programs both in medical schools and for medical residents, while the Institute itself developed an important research program (Rosen 1968).

Environmental and psychodynamic views dominated American psychiatry in the post-war years from 1945 to 1960. In this period psychiatry in the United States was split into psychoanalytic/psychodynamic and somatogenic/organic schools of thought. Mutually exclusive, each had its own technical vocabulary, training programs, implicit philosophical orientation, and ideology. Even so, there were individuals, departments, and groups that held to no overall theoretical or ideological viewpoint, considering themselves instead eclectic and skeptical about psychiatric theories (Hoch and Zubin 1962). The 1951 and 1952 Conferences on Psychiatry Education, organized and conducted by the American Psychiatric Association and the Association of American Medical Colleges, focused on the major need for psychodynamics and personality development to become the basic organizing principles in psychiatric education and in explaining behavior, both psychopathological and normal (Whitehorn *et al.*, 1952, 1953).

After the war, psychoanalysis found a strong following in England, where Freud had gone into exile in 1938. Faced with a number of schisms in the movement there, psychoanalysis penetrated psychiatry much less than in the United States. Aubrey Lewis, the leader of postwar British psychiatry and director of the Maudsley Hospital, maintained a strong biomedical orientation with a major emphasis on descriptive psychiatry and strict diagnostic methods (Lewis 1967). Having rejected psychoanalysis before the war, Scandinavian psychiatrists had established a research orientation with extensive descriptive, family, follow-up, and epidemiological studies. These research traditions were to become important for understanding the connection between heredity and mental illness. In post-war France, where psychoanalysis has never been part of the psychiatric establishment, psychiatry under the leadership of Jean Delay and P. Pichot at the University of Paris made major clinical and biomedical discoveries.

Exploited as a tool during the war by the Nazi state, German psychiatry helped carry out Nazi eugenic policies and assisted in the murder of thousands of chronically psychotic and retarded patients (Reitlinger 1953; Cocks 1985). As German psychiatry declined during the Hitler regime, psychiatry in the United States assumed its currently dominant role in world psychiatry. Among the few outstanding German psychiatrists who survived the war was Kurt Schneider, well known for his study of psychopathic personalities, who regarded diagnosis as fundamental for all aspects of psychiatry. He was appointed to the chair in Heidelberg in 1946, where he remained until his retirement in 1955. Several other prominent German psychiatrists survived the war, including Karl Kleist, chair at Frankfurt from 1920 to 1950, and Karl Leonhard, his student and successor in the chair. In the 1957 first edition of his *Aufteilung der endogenen Psychosen* Leonhard first clearly distinguished between bipolar (mania and depression) and unipolar (depression only) forms of affective psychoses and presented his own system for classifying endogenous psychoses, basing his groupings on the dimension of bi- and unipolarity. Karl Jaspers maintained his philosophical studies in isolation, never returning after the war to psychopathology other than to revise his great phenomenological textbook (1913, 1957), still probably the best introduction to phenomenological psychiatry.

In summary, post-war American psychiatry was dominated by an environmentalist/psychoanalytic orientation with some attempts at biomedical integration, while the biomedical model dominated European psychiatry.

Biological Psychiatry circa 1950

Factionalism in psychiatry after World War II led a number of psychiatrists to develop an eclectic approach that attempted to assimilate what was significant and scientific from various schools of thought and to incorporate multiple physical, psychological, and social factors involved in the causation of mental diseases while maintaining a biomedical framework for psychiatry. In the United States the Association for Research in Nervous and Mental Diseases had come into being as an interdisciplinary group devoted to exploring a single neuroscientific topic in an annual meeting. From their first meeting in 1920 devoted to the encephalitis arising from the world-wide influenza epidemic, the Association's annual proceedings have surveyed many clinical and basic neuroscience areas: multiple sclerosis, schizophrenia (twice), epilepsy, manic depressive psychosis, cerebral localization, and a host of other subjects. Largely academically oriented, these investigations have had little influence on the practicing general psychiatrist.

The first textbook of broadly based biological psychiatry appeared in 1947, Nielsen and Thompson's *The Engrammes of Psychiatry*. An excellent textbook of eclectic psychiatry for its time, the book received little notice in the literature and was never widely used as a textbook. The authors' guiding principle, reminiscent of Griesinger, was "All function is physiology. The function of the brain is physiology, and, since all mental function depends on cerebral function, *the brain is the organ of the mind*. And all psychology is cerebral physiology." Engrammes (usually spelled elsewhere "engrams") were hypothesized functional units of nerve tissue, permanently altered by temporary excitation. Their attempt to explain psychopathology in terms of engram malfunction was not much accepted in the psychiatric community, as the book was

published just as psychoanalytic and psychodynamic conceptions were beginning to dominate American psychiatry.

Thompson, Nielsen, and A. E. Bennett—all neuropsychiatrists active in introducing somatic therapies to the United States—formed preliminary plans in 1944 for a society concerned with the biological bases of psychopathology. The first official meeting of the Society for Biological Psychiatry took place in June 1946 (Thompson 1954; Bennett 1972). After the founding of the Society there was a surge of research in biological psychiatry, with increasing numbers of papers in experimental psychiatry and psychopharmacology published in the major psychiatric journals and in the Society's journal *Biological Psychiatry*. The growing importance of biological psychiatry manifested itself in the establishment in 1960 of the Society for Psychophysiological Research, in 1961 of both the World Psychiatric Association and the American College of Neuropsychopharmacology, in 1974 of the World Federation of the Societies of Biological Psychiatry, and many other professional societies with a biological orientation organized in countries throughout the world.

In the Academic Lecture given to the American Psychiatric Association in 1955, R. W. Gerard expressed the prime axiom of modern biological psychiatry: "When experience leaves an enduring trace, it must be some sort of material imprint and, so to speak, *there can be no twisted thought without a twisted molecule*." Gerard emphasized the importance of the neural unit and of the pattern of relationship between neural units and the neurotransmission of mental disorders. According to Gerard, psychoses—particularly schizophrenia and the depressions—were primarily disturbances of the units of the nervous system related to inherited biochemical aberrations, while psychoneuroses were disturbances in the pattern of function and interconnection of the neural units. More physiological than chemical, the psychoneuroses result more from unfortunate relationships of the individual to his or her environment than from genetic factors.

Neurotransmitters as Chemical Mediators of Nerve Impulses: The Basis for Modern Psychopharmacology

We can here only synopsise the history of the discovery of neurotransmitters, chemical mediators of nervous impulses. In 1867 the German organic chemist Adolf von Baeyer first synthesized acetylcholine. In 1895 the British physicians George Oliver and Edward Sharpey-Schäfer published their paper demonstrating the existence of a pressor substance in the adrenal medulla, after giving a preliminary communication of their discovery in 1894 in the *Proceedings of the Physiological Society*. In 1897 John Jacob Abel, the first professor of pharmacology at Johns Hopkins, and Albert Crawford named Oliver and Schäfer's substance "epinephrine"; in the following year Abel succeeded in isolating epinephrine chemically—the first hormone to be so isolated—publishing his results in German in 1899. The German neurologist Max Lewandowsky made the first concrete proposal for a neurohumoral transmitter in 1898, and in 1904 Friedrich Stolz first synthesized adrenaline and Thomas R. Elliott suggested that nerve impulses were mediated chemically. John N. Langley suggested in 1905 that effector cells have excitatory and inhibitory receptor substances with the response to epinephrine depending on which type of substance was present. Henry Dale showed the inhibitory action of acetylcholine in 1914. Otto Loewi's brilliant research in the 1920s established that the peripheral release of specific chemicals mediated nerve transmission. Walter Bradford Cannon and Arturo Rosenblueth published in 1937 their *Autonomic Neuro-Effector Systems* in which they hypothesized the existence of what was later called norepinephrine as an inhibiting chemical agent antagonistic in effect to epinephrine. With these discoveries the door was opening into the world of modern psychopharmacology.

Modern Psychopharmacology

The modern era of psychopharmacology began in 1950 with Charpentier's synthesis of chlorpromazine in his search for more potent antihistamines. After its pharmacology had been tested, Henri Laborit (1951)

used chlorpromazine in anesthetic procedures, allowing prolonged surgery by producing hypothermia, and suggested its use in psychiatry. He regarded this agent as a “vegetative stabilizer” potentiating anesthetics and analgesics without the loss of consciousness, though the patients did become apathetic. Joseph Hamon (who later became the French surgeon-general), Jean Paraire, and Jean Velluz—colleagues of Laborit’s at Val-de-Grâce military hospital—reported in early 1952 on the first use of chlorpromazine with a psychotic patient, one Jacques Lh. Later in the same year the eminent French psychiatrist Jean Delay and his associate Pierre Deniker, who were then investigating newly synthesized compounds for the medical treatment of mental disorders, reported successfully treating psychotics (especially schizophrenics) with chlorpromazine (Delay and Deniker 1952; Deniker 1970). Elkes (1970) in England soon substantiated their findings. By 1954 chlorpromazine and reserpine, another tranquilizing agent, were in the forefront of psychiatric discussion (Borsa and Kline 1956). Since then the literature on these related compounds has mounted to thousands of articles. By 1956 chlorpromazine was well established as a valuable therapeutic agent (Malitz *et al.* 1956).

After experiences of undue enthusiasm over alleged spectacular improvements with insulin, convulsive therapy, and lobotomy, investigators had become more conservative, admitting the need for carefully evaluative methodologies, strict self-criticism, and the use of controls and double-blind studies. Most investigators regarded chlorpromazine as palliative rather than a cure for schizophrenia. Nonetheless, impressive results were reported. After a five-year follow-up, Winkleman (1957) reported continued remission or marked improvement in 75% of cases of schizophrenia. State hospital populations fell with the use of psychotropic drugs—something that did not happen with the introduction of insulin and convulsive therapies (Brill and Patton 1962). The increased discharge rates for schizophrenic patients with clinical improvement occurred long before and therefore could not have been a consequence of the later policies of deinstitutionalization.

The pattern of discovery of the first antidepressants resembles that for chlorpromazine. Iproniazid, an antitubercular agent of the 1950s, had been noted to induce euphoria in many patients. Loomer and Saunders administered it to seventeen chronic female schizophrenics at Rockland State Hospital, while Nathan S. Kline, who had already been working with *Rauwolfia serpentina*, treated ambulatory depressed patients (along the way coining the term “psychic energizer”). The Rockland Group and Kline succeeded in demonstrating its antidepressant action and in relating that to its inhibition of monoamine oxidase in the central nervous system (Loomer *et al.* 1958). So began the discovery of the second group of psychoactive drugs, the antidepressants. Iproniazid did produce unwanted side effects (it was linked to hepatic necrosis in about 1 in 3000 patients). Since monoamine oxidase (MAO) is the enzyme for the breakdown of the bioamines epinephrine and norepinephrine, other MAO inhibitors were synthesized and studied in the search for an agent with the greatest antidepressant and fewest side effects. Drugs fulfilling these criteria for MAO inhibitors included isocarboxazid, phenelzine, and tranylcypromine (Kline 1970).

Meanwhile, investigators continued searching for similar drugs. The Swiss psychiatrist and chemist Roland Kuhn investigated chlorpromazine and other antihistamines synthesized by the firm of J. R. Geigy in Basel. In 1956 he studied imipramine, then a coded agent, the pharmacologic action of which sensitized central adrenergic mechanisms while clinically it demonstrated marked antidepressant action. In 1957 Kuhn reported the positive results of its clinical use with depressives—to his surprise, since he had thought schizophrenics might respond to it (Kuhn 1957, 1958; Hordern 1968).

After controlled studies had clearly demonstrated the efficacy of these drugs, they were made available for clinical use (Lehman *et al.* 1958). These medications soon replaced electroconvulsive therapy in the treatment of schizophrenia and most depressive illness, though electroconvulsive therapy still was more effective than antidepressants in treating severe and suicidal depressions.

A third group of compounds was introduced to alleviate anxiety, a major symptom of the psychoneuroses—now designated the anxiety disorders. Looking for a longer-acting muscle relaxant than mephenesin, which he and Bradley had described in 1946, Frank Berger in 1954 developed meprobamate, a drug used first in musculo-spastic disorders and later for anxiety as a nonbarbiturate sedative without hypnotic features, public announcement about which was delayed until 1960 (Harris 1960).

Benzodiazepine compounds—chlordiazepoxide, diazepam, oxazepam, and their ilk—were also found to produce muscle relaxation, though they had a different molecular structure from meprobamate. Sternback of Roche in the United States originally synthesized chlordiazepoxide in 1947. J. M. Tobin used it as the first clinical benzodiazepine in late December 1957, with such astounding initial results that he began a long-term clinical study the next day (Hordern 1968). These drugs were soon widely used in treating anxiety, agitation associated with alcohol withdrawal, and other acutely disturbed states. Their low toxicity in large amounts, in contrast to the barbiturates and other sedative hypnotics, made them particularly valuable. Though in the first several decades after their introduction they were ineffective in treating the agitated psychotic states characteristic of schizophrenia and mania, high-potency benzodiazepines came to be regularly prescribed for such conditions.

A fourth group of chemicals, the lithium salts, turned out to be useful for treating mania. Various lithium salts had been in the pharmacopoeia for over a hundred years, having been introduced for treating a vast array of disorders, but with no known specificity for any particular illness. Since it often demonstrated toxic effects, lithium had fallen into disrepute after it was used as a substitute for sodium (Corcoran *et al.* 1949). The Danish physician Carl Georg Lange, famous for his 1885 vascular explanation of emotion, which became incorporated into the James-Lange theory of emotion, first used lithium carbonate explicitly to treat periodic depression in the 1880s, reporting on his results with 800 patients in an 1886 monograph written in Danish, a second edition of which appeared in 1895 with results now being reported for 2000 patients. This was not only the first use of lithium to treat depression, but the first unequivocal use of drug therapy for an explicitly psychiatric condition. Lange included the lithium salt in accordance with his belief that “alkalinisation of the blood would eliminate uric acid and would act prophylactically against recurrence of the clinical symptoms” (Johnson 1984). Though with the 1896 German translation of the second edition Lange’s ideas were exposed to a larger European psychiatric community, they seem to have had little effect. Without any knowledge of Lange’s earlier work, an Australian psychiatrist interested in mania, John F. J. Cade, postulated in the 1940s that a toxic factor might cause the illness and in turn be excreted in the urine. Cade showed that rats in whose peritoneal cavity urine concentrates from manic patients had been ingested showed definite toxic effects, while rats with urine concentrates from normal individuals did not. Urea alone produced toxicity, but not of the magnitude of concentrated urine. Uric acid, which is relatively insoluble, was extracted from the urine with lithium, which results in a greater solubility of the uric acid. Cade then noted that when the lithium urate was given with the urea and creatinine, the animals showed a marked reduction in toxicity. Studying the effects of lithium carbonate alone on the animal behavior of guinea pigs, Cade found that the usually active animals became lethargic within two hours while being fully conscious. This response lasted for one to two hours. He then administered lithium carbonate to both manic and schizophrenic patients who were agitated and hyperactive. The initial results were positive in reducing these symptoms. As psychomotor activity was reduced in the manic patients, their mood and intellectual functioning reached a near-normal state. Though the schizophrenic patients became less agitated, there was no change in the thinking disorder, delusions, or hallucinations. Continuing his studies with a greater number of manic and control subjects, Cade reported highly significant results. Nonetheless, European and American psychiatrists viewed his findings skeptically (Cade 1970), for how could lithium, a simple inorganic ion, have the ability to control, effectively treat, and prevent a major psychotic disorder? In addition, since these lithium compounds were old and unpatentable, the pharmaceutical companies had little interest in funding research into its efficacy.

Under the leadership of Mogens Schou, Scandinavian psychiatrists eventually followed up Cade’s work with newly developed techniques for evaluating the therapeutic efficacy and degree of toxicity of lithium treatment (Schou *et al.* 1954). Their work clearly established lithium as a valuable treatment for mania. American psychiatrists remained skeptical; lithium was not generally accepted as a treatment measure in the United States until the early 1960s.

Substances were also studied that, in small amounts, resulted in psychotic and hallucinatory behavior. The German pharmacologist and toxicologist Louis Lewin had already described the psychic effects of peyotl and similar substances in his classic 1924 monograph *Phantastica*—the name he gave to the hallucinogenic drugs

which were first grouped together and classified in his book. In 1938 the Swiss chemist Albert Hofmann produced lysergic acid diethylamide (LSD)—the first, and most prominent, of these chemically synthesized agents—in the course of a systematic investigation of partially synthetic amides of lysergic acid in the Sandoz Pharmaceutical Laboratories in Basel (Hofmann 1970). Sniffing LSD by accident in 1943, Hofmann discovered its psychoactivity. He then experimented with it on himself and found that it produced a peculiar restlessness, extreme activity of the imagination, and an uninterrupted stream of images. Hofmann did not publish the results of his experiment, though he became quite famous later. Hofmann and Arthur Stoll, the head of the Sandoz pharmaceutical laboratory in Basle, published the first paper on the synthesis of LSD in 1943, while Stoll went on to publish the first paper on the effects of lysergic diethylamide acid in 1947.

These studies on highly potent agents producing psychotic symptoms seemed to support the hypothesis commonly known as the “toxic theory” of schizophrenia, which postulated a metabolic error endogenous in nature that produced an abnormal metabolite with toxic features characteristic of the psychosis.

Neuropsychopharmacology (Neuropharmacology and Psychopharmacology): The Emergence of a New Science

In the research work described in the foregoing, the phenothiazines had been noted as producing neuroleptic effects, such as parkinsonian phenomena, in the central nervous system (CNS). Meanwhile, neurologists were also investigating many new compounds acting on the CNS for the treatment of convulsive, temporal lobe, and other neurological disorders. This convergence of interests stimulated pharmacologists to expand greatly their studies of drugs acting on the central nervous system. This became a major activity of pharmaceutical companies as well as of academic and research pharmacologists.

The Australian-born neuropsychopharmacologist Joel Elkes has reviewed the beginning of this new science in terms of his own personal development and his international experiences, describing how he was attracted by the early work in the 1930s and 1940s on the action of amobarbital and the amphetamines on the CNS and by Stoll’s research on LSD. In the same period more effective instruments for measuring the brain’s electrical activity through surface electrodes were being developed, resulting in the standard electroencephalogram (EEG) procedure for recording the brain’s electrical activity invented by the German psychiatrist Hans Berger in 1929 and confirmed by the British neurophysiologist Edgar Adrian in 1934. Though specific patterns of electrical disturbance were not found in the major psychiatric disorders, the EEG gave an entirely new view of epilepsy as an abnormality in the electrical activity of the brain. By the early 1950s techniques had been developed by Grey Walter, Herbert Jasper, Wilder Penfield, and others for recording the EEG directly from the cerebral cortex and brain nuclei (Schwab 1951). Elkes worked in this area studying electrophysiological responses of various parts of the brain to psychoactive compounds. He then had the opportunity to develop a Department of Experimental Psychiatry at the University of Birmingham in England. In 1953 he was the first investigator to verify the clinical findings regarding chlorpromazine shortly after the report on its use by Delay and Deniker. His reputation in this area grew, and in 1957 he was invited to create the Clinical Neuropharmacology Research Center at the National Institutes of Health (NIH) in Bethesda, Maryland. He accepted this position and soon established a Neuropsychopharmacology Research Center at St. Elizabeth’s Hospital for clinical studies to complement the research laboratories at NIH.

From the early 1950s interest in neuropsychopharmacology grew by leaps and bounds, with researchers from many disciplines making contributions. The important Macy Symposia on Neuropharmacology were held in five conferences from 1954 to 1959. In 1957 the World Health Organization convened a Study Group on drugs in psychiatry. The initial meeting led to further meetings on the international implications of brain research, culminating in the drafting of the Statutes for the International Brain Research Organization in the meeting at UNESCO House in 1960. In the United States the prestigious American College of Neuropsychopharmacology was established in 1957, with regular annual meetings and study

groups since then. In 1968 they published, under the editorship of Daniel Efron, *Psychopharmacology. A Review of Progress: 1957–1968*, a massive work subsequently issued as an updated review every decade, with the volumes charting the growth of the field decade by decade. 1957 also saw the founding of the most important international body, the Collegium Internationale Neuropsychopharmacologicum, whose journal, *Psychopharmacologia*, began publication in 1958.

Originally only a theoretical concept from Mendel, the gene assumed greater practical value beginning in the early twentieth century. The relatively recent ability to identify genes as specific sequences of DNA is one of the great triumphs of the reductionist model in biology (Crick 1966).

Until the decoding of the human genome at the end of the twentieth century, genetics in psychiatry was mostly limited to discovering prevalence rates—especially of the major psychoses—among family members over several generations. Charting concordance rates in identical and fraternal twins was the favored method, since such studies made it possible to separate genetic from environmental factors. The early milestones in the field are Ernst Rüdin's pioneering family studies in Munich (Rüdin 1916), in which he posited a two-gene model of inheritance for schizophrenia, and Franz J. Kallmann's 1938 *Genetics of Schizophrenia*, which favored single-gene transmission of the disease. In an important 1960s study of children placed for adoption of schizophrenic and normal mothers with nonschizophrenic fathers, L. L. Heston found that the offspring of schizophrenic mothers had a higher rate of schizophrenia as well as other forms of psychopathology, including epilepsy and mental retardation. None of the adoptees of nonschizophrenic mothers developed schizophrenia—and their psychopathology was minimal. The adoptee offspring studies afforded a new approach in the field, stimulating much further research.

Scandinavians have been in the vanguard of the continuing genetic-psychiatric research. Since the required medical and demographic data are more available there than in countries in which they are held more confidentially, large populations could be studied (Kringlen 1967). Scandinavians performed a number of important family studies of psychiatric disorders in the 1950s (Odegard 1963). Meanwhile, the National Institute of Mental Health had established a program for the study of hospitalized identical and fraternal twins that collaborated with the Scandinavian workers (Rosenthal 1970).

Though later studies did not support Kallman's high concordance rates for schizophrenia among identical twins raised together (86% as contrasted with 14% for fraternal twins), the concordance rate for identical twins has generally been reported as between 30% and 40%, which has led numerous researchers to conclude that there is a strong genetic predisposition for both schizophrenia and manic depressive illness. The stark difference in inheritance patterns strongly suggested that the two were independent diseases with completely separate etiologies.

From 1940 to 1975 a whole new field sprang into being from cytogenetics and molecular biology. Chromosomes could now be studied through chemical analysis as well as morphologically. Observing individual chromosomes through the much more powerful electron microscope, Tjio and Levan found in 1956 that the chromosomes in human beings numbered 46 per cell, rather than 48 as previously thought. The chromosomes could now be enlarged, mapped, and studied individually for structural abnormalities. Important for psychiatry in the research that followed was Jerome Lejeune's discovery of trisomy 21 in cases of Down's syndrome (Lejeune *et al.* 1959). While structural chromosomal changes have been discovered for rare neurological diseases with associated mental deficiency, the major mental illnesses lack any cytogenetic defects (Slater and Cowie 1971).

Watson and Crick's 1953 description of deoxyribonucleic acid's molecular structure ushered in the age of molecular biology with its trove of discoveries that have revolutionized medicine and biology (Cooper *et al.* 1982). Once DNA was identified as the basic substance for genetic transformation, chemical methods for studying the genetic material and its molecular structure were rapidly developed during the next 10 years. In 1961 Francis Crick found the protein nature for the genetic code, while François Jacob and Jacques Monod revealed the genetic regulatory mechanisms in the synthesis of proteins (Jacob and Monod 1961). In 1965 R. W. Holley discovered the structure of ribonucleic acid (RNA) (Holley *et al.* 1965). All four men won Nobel Prizes. The identification of alanine and adenosine as connecting links for DNA and RNA led to specification of the mechanism of the genetic code (Mayr 1982). These monumental experiments

and discoveries are now yielding important results for psychiatry (e.g., in Alzheimer's and Huntington's diseases). The recently achieved complete mapping of the human genetic code is yielding a wealth of knowledge about individual gene defects in mental disorders.

Biological Psychiatry and Developments in Neuroscience

Since the introduction of the major psychopharmacologic agents in the early 1950s, investigation of the biological foundations of psychiatry has become a growth industry. Though this has been called "the biological revolution in psychiatry," in many ways it has been more of an evolution encompassing remarkable discoveries and a burgeoning number of neurobiological hypotheses regarding the psychiatric disorders. Many clinically useful new psychopharmacologic agents have been introduced along with new techniques for measuring plasma levels of psychotropic medications and for determining both therapeutic effect and degree of toxicity: their mechanisms of action are similar to the original antipsychotic, antidepressant, and anti-anxiety drugs. With the introduction of Prozac and clozapine in the late 1980s and early 1990s these new compounds began to make a significant therapeutic contribution.

The neurobiological studies of the 1920s and 1930s were at the time believed to have little relevance for psychiatry, an attitude that changed dramatically with the impact of psychopharmacology on psychiatry in the mid-1950s. Psychiatrists and neurologists gradually accepted electrophysiological techniques, including the encephalogram, that proved particularly valuable in understanding and treating epilepsy. Electrophysiological technology has greatly improved in the last 30 years with better amplification, solid state electronics, direct recording from both cerebral cortex and deeper brain structures, evoked potentials, and rapid computer analysis and telemetry.

In a classic paper James W. Papez outlined, on largely theoretical grounds, a network of nerve centers associated with emotion that both formed a closed circuit and connected to the cerebral cortex. Neuroscientists have vigorously investigated this circuit, designated the limbic system, which consists of the hippocampus, fornix, hypothalamic mammillary bodies, thalamus, and cingulate cortex, and with completion of the circuit back to the hippocampus (MacLean 1955, 1973, 1990). Psychopharmacologic agents, experimental lesions, and neurotransmitter activity have all contributed greatly to understanding the physiological basis of the emotions, now even comprehended at the level of regional brain activity, cellular systems, receptor sites, and the formation of neurotransmitter substances (Cooper *et al.* 1982).

Greater knowledge about the functioning of the temporal lobes, where lesions may present a clinical picture resembling schizophrenia, led to increased understanding of the neurobiology of hallucinations (Rodin *et al.* 1957). In 1958 James Olds published a seminal paper on animal self-stimulation of the limbic system that led to the identification of positive and negative reward systems in the brain. Robert G. Heath (1963) and others, using stereotactically implanted electrodes, studied such reward systems in humans.

Psychoneuroendocrine studies have major implications both for psychopathology and for understanding the roots of human behavior. Manfred Bleuler concluded in his 1982 review of the field that (1) endocrine disorders are almost always accompanied by mental changes, (2) endocrine dysfunction may disturb total cerebral functioning, as may any serious illness, (3) endocrine changes may act on only a part of neural functioning to increase or decrease physiological effects on psychological functioning such as arousal, drives, and mood, and (4) bodily changes induced by endocrine illness may be experienced as psychological distress.

Interest in memory and its disturbances has increased with the growing population of the aged and the concomitant increase in dementias of Alzheimer's and cerebrovascular types. Sherrington's (1906) physiological concept of memory based on an interlacing neuronal network has been extended by concepts of reverberating circuits and, most recently, by studies of neurotransmitters (such as acetylcholine) and of enzymes and neuropeptides, with considerable research into memory localization. Klüver and Bucy's 1939 paper emphasized the role of the temporal lobes in the maintenance of memory. Macromolecules—proteins,

nucleic acids, polypeptides, and complex lipids—are now believed to represent an organic mechanism for memory storage, with the hippocampus crucially involved (O'Keefe and Nadel 1978; Bloom 1981). Evoked potentials have been shown to release patterns of electrical activity correlated with the activation of consciousness and specific memories (John *et al.* 1973).

Knowledge of the molecular structure and function of neurotransmitters—acetylcholine, norepinephrine, serotonin, dopamine, gamma-aminobutyric acid (GABA), histamine—grew along with methods for identifying their metabolic precursors, pathways, and end products (Bloom 1980). Such agents have regional loci in the brain: acetylcholine functions as a key neurotransmitter in the cerebral cortex, norepinephrine and serotonin in the hypothalamus, and dopamine in the basal ganglia. Solomon Snyder (1980) and others identified neurotransmitter receptor sites and attendant synaptic activity and cellular metabolism in animals, with extrapolations to human behavior. The chemical and neuronal activity of such circuits may act in unison, which could help to explain perception and complex memory patterns.

In neuropsychopharmacology, the active therapeutic agents have been extensively studied in animals to determine how they work, leading, for example, to an extrapolation from experiments on drug action in the brains of animals to the formulation of the “catecholamine hypothesis” of depression (Schildkrout 1965). Since antidepressants increase concentrations of norepinephrine and serotonin in interneuronal synapses, researchers began to hypothesize from the late 1950s that depression and mania might be associated respectively with decreased and excessive catecholamine availability at central adrenergic receptor sites. Dahlstrom and Fuxe's 1965 paper on neurons containing monoamine in the CNS stimulated a wealth of ongoing research on the role of bioamines in mental disease, most notably in the National Institutes of Mental Health research team under Julius Axelrod, the 1970 Nobel Prize winner for his discovery of the metabolism of epinephrine.

The ability of antipsychotic compounds to block dopamine receptors at the synapse led to the “dopamine hypothesis of schizophrenia,” which emphasized excess production or reduced uptake of dopamine at the synapse as a central mechanism in schizophrenia (Creese *et al.* 1978). Subsequent research showed this hypothesis to be too simplistic.

In the 1970s Terenius (1973) in Sweden, Snyder (1977) at Johns Hopkins, and Simon and co-workers (1973) at New York University almost simultaneously demonstrated opiate receptor sites using similar methods: homogenization of brain tissue, synaptosome extraction, and incubations with radioactively labeled opiates or antagonists. The binding was highly stereospecific, with an affinity for well-defined ligand sites, and correlated strongly with opiate potency for producing or antagonizing analgesia. In 1975 the International Narcotics Research Sub-Committee recommended the name “endorphin” (a contraction of the terms “endogenous” and “morphine”) for the-then-unidentified morphine-like factor (Bloom 1987). In the same year J. Hughes *et al.* identified the enkephalins, also neuropeptides, as a second family of endogenous opiates. These discoveries led to research attempts to isolate and characterize the opiate receptors involved in narcotic addiction. In 1976 Bloom *et al.* hypothesized that endorphins may play a significant role in other mental illnesses, such as depression, mania, and schizophrenia. Snyder and Goodman (1980) then went on to describe benzodiazepine receptor sites within neural tissue.

Brain imaging techniques—noninvasive methods yielding accurate pictures of brain morphology and its alterations—emerged in the early 1970s as major new laboratory tests in psychiatry and neurology (Andreasen 1989). Computerized tomography (CAT or CT scan) involves sending an x-ray beam through the brain to a set of rapidly changing detectors on the opposite side, which measure the various degrees of tissue density and construct a picture of three parts of the brain. The data is digitized and the scans broken into “slices” to improve the image's resolution. Using sophisticated software, a computer then constructs a picture of the brain in real time from the data fed to it, from which cerebral atrophy or deviance is readily detected. Large ventricles, present in degenerative diseases such as Alzheimer's, were also reported in certain groups of schizophrenics and depressives (Usdin and Hahn 1982; Paykel 1982).

Magnetic resonance imaging (MRI) yields even more-detailed pictures of brain morphology (Weinberger and Kleinman 1986). Its greatest value may be in the differential diagnosis of structural versus functional psychiatric disorders. Chronic schizophrenia commonly exhibits subtle structural changes

seen in the MRI but not with the CT scan. The relatively recent development of functional magnetic resonance imaging (usually just called fMRI) has in the last decade revolutionized the study of the brain in both its normal and disordered functioning by allowing noninvasive study of anatomical localization of function (Clarke and Dewhurst 1996).

Positron emission tomography (PET) monitors rapid metabolic changes within the brain (Phelps *et al.* 1981). Variations in glucose metabolism have been correlated with sleep, rest, thinking, listening, viewing, remembering, and motor tasks. A nonspecific pattern of hypofrontality found in schizophrenia and mood disorders has yet to be understood. Psychopharmacologic agents influence the PET findings, with early studies suggesting that antipsychotics produce a normalizing picture in schizophrenics.

Conclusion

The biological concept of mental illness has existed since the early days of the establishment of psychiatry as a medical specialty. Simultaneously a foundation for treating, a method of investigation, and a series of hypotheses for understanding mental disorders, the biological explanatory style has resulted in a vast quantity of information, some with historical significance for producing a scientific psychiatry, most (as in the other sciences) having negligible impact on psychiatry as a clinical and medical science. Still, fundamental questions starkly confront us. As we puzzle through the maze of neuroscientific data debated by the brain scientists investigating the mysterious black box of the brain—much still inapplicable to psychiatric issues—we threaten to lose sight of the patient as a sick person (Allport 1986).

Seemingly simple approaches like lithium therapy may have profound effects on major psychopathology. Cade's discovery of lithium treatment exemplifies the approach of the great nineteenth century French physiologist Claude Bernard (1855–1856, 1865), whose experimentation was shaped by the principle that bedside observations should guide one's research on laboratory animals.

The great German physiologist Johannes Müller introduced two new elements into physiology: the psychological and the comparative. In his *Handbuch der Physiologie* (1834–1840), the first textbook of physiology, he applied comparative chemistry and physics to physical problems for the first time in the history of science. In 1848—a year of general political unrest and revolution throughout Europe—three of Müller's closest students (Helmholtz, Brücke, and Du Bois-Reymond) actively criticized his vitalistic and other scientific views. Facing a group of students advocating a revolution in biological thought, Müller, dean of the Medical School at Berlin, found it difficult to keep the student demonstrations within tolerable bounds and impossible to maintain an open, calm discussion of the disputed subjects. These events significantly contributed to Müller developing a major depression. No longer able to function, he resigned his academic position (Altschule 1989). His spirit deflated, he remained for the rest of his life withdrawn and restricted in his scientific activities. He partially reconciled with Helmholtz, but never with Brücke and Du Bois-Reymond. His story demonstrates the importance of interpersonal relations—and of the loss of self esteem and prestige—in precipitating a major depressive illness, with its devastating consequences, and illustrates the perennial conflict between the idea of a biological substrate for behavior and the vicissitudes of human and experiential forces in psychopathology.

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Chapter 13

The Intersection of Psychopharmacology and Psychiatry in the Second Half of the Twentieth Century

David Healy

In The Beginning

In 1930, Bleckwenn described the response of acute catatonia to barbiturates.¹ In 1935, Meduna demonstrated a response of catatonic states to clinically induced convulsions.² This was followed by Bini and Cerletti's demonstration of the effectiveness of electroconvulsive therapy for catatonic states.³ In the course of the decade, Rolv Gjessing demonstrated that periodic catatonias respond to infusions of high doses of thyroxine.⁴ Gjessing's work complemented basic research in the late 1920s and early 1930s by Baruk and De Jong demonstrating an experimental induction of catatonia with agents such as bulbocapnine and later with mescaline and other psychotogenic agents. By the end of the decade even some of the arch skeptics in psychiatry such as Aubrey Lewis could state that a cure for one of the forms of schizophrenia, catatonia, had been found.⁵ Allied to the discovery of how to cure dementia paralytica, which in some settings had accounted for between 10% and 20% of admissions to asylums, the discoveries on how to model and treat catatonia marked the emergence of modern biological psychiatry.

War supervened and eclipsed research on catatonia. The Second World War had a number of other effects on psychiatry. It brought penicillin on-stream, and this led to the removal of dementia paralytica from psychiatry. It led to a migration of European psychoanalysts to North America, which contributed to the dynamic turn American psychiatry took after the War. The War also saw the deportation to the concentration camps of Claude Levy-Valensi, the professor of psychiatry in Paris, making Jean Delay the acting head of the department at the Sainte Anne Hospital in Paris. With the reports of Levy-Valensi's death, there was a competition for the post among Henri Ey, the best-known French psychiatrist of the time, Henri Baruk, and Jean Delay. Delay was chosen over Baruk or Ey. This choice followed a tradition of appointing neuropsychiatrists from the Salpêtrière Hospital to the post rather than asylum psychiatrists such as Baruk or Ey.

The War also brought about a pharmaceutical revolution. A range of other antibiotics was discovered in addition to penicillin, as well as oral hypoglycemics, antihypertensives, and other agents. These discoveries led Rhône Poulenc in France, looking for agents to combat tropical infections, to investigate a series of phenothiazine compounds. They discovered a set of phenothiazine antihistamines. The key ingredients for subsequent developments were then in place.

The Phenothiazines

The phenothiazine antihistamines looked promising as agents to use in anesthetic procedures to combat the effects of cardiovascular stress. The use of promethazine for this purpose led a French military surgeon,

Henri Laborit, to recognize that it produced a distinctive central effect; this was a potentially beneficial indifference of some sort. He encouraged Rhône Poulenc to optimize these central effects. In doing so, Paul Charpentier and Simon Courvoisier so produced chlorpromazine. The pronounced psychotropic effects of this compound led Laborit to encourage psychiatric colleagues at the Val de Grace Hospital to try it. A gentleman called Bernard B was the first to be given chlorpromazine.⁶ He responded quickly and well to a combination that included both chlorpromazine and barbiturates.

In the meantime, Pierre Deniker working with Delay had heard about chlorpromazine from his brother-in-law, an anesthetist, and obtained supplies from Rhône Poulenc. He originally gave it in Sainte Anne according to a protocol devised by Laborit for artificial hibernation—that is, chlorpromazine was used to enable the body to be cooled down with ice packs; chlorpromazine blocked the body's responses to the stress of hypothermia, and Laborit thought that artificial hibernation would combat stress more generally. The benefits of the new treatment were almost immediately apparent to the members of the university department working in the Sainte Anne, but it probably took nursing staff to notice that chlorpromazine was equally effective when given on its own without ice.⁷ Recognizing the importance of the discovery of a response to chlorpromazine on its own, Deniker and Delay rushed to press with a series of publications.⁸

At the same time Baruk was giving chlorpromazine to experimental animals and finding that it successfully induced catalepsy and produced experimental catatonia. The production of catalepsy or experimental catatonia was later to become the basis for the development of neuroleptic and antipsychotic drugs. The original publications by Delay and colleagues stressed the benefits of chlorpromazine in manic and delirious states. Later descriptions of these agents as antischizophrenic drew an incredulous response from Baruk; how could they be antischizophrenic if they caused catatonia, one form of schizophrenia⁹? Subsequent descriptions of neuroleptic-induced malignant syndromes in humans and acknowledgment that these syndromes were probably catatonic disorders did nothing to stop the schizophrenia juggernaut that had begun to roll. These developments illustrate the fundamental heterogeneity of the psychotic disorders and the marketing power of the schizophrenia concept.

Delay and colleagues almost certainly stole a great deal of credit from Laborit, but the involvement of one of the senior departments in the world, the Department of Psychiatry in Paris, in endorsing the distinctive benefits of chlorpromazine was probably essential at a time when the treatment of mental illness was seen as a barely legitimate therapeutic or scientific exercise. When chlorpromazine was licensed in North America, it was as an antiemetic agent, there was no such thing as an antipsychotic. Delay's prestige brought senior figures from Basel, North America, England, and elsewhere to Sainte Anne to witness what was happening. The initial views were that chlorpromazine was another sedative, albeit of a new type.

Laborit's rationale in asking Rhône Poulenc to look further into their phenothiazine series had been in the hope that they could produce a drug that would block all nervous synapses and that this might enable him to combat the variety of physical stresses associated with open-heart surgery. Chlorinating promazine was a simple means of achieving this effect because chlorination was a recognized strategy for increasing the toxicity of a compound. Chlorpromazine blocked a wide range of nervous processes; it altered heart rate, lowered blood pressure, stopped vomiting, was hypothermic, and also tranquillized. This led to its initial designation as a ganglioplegic agent.

Delay and colleagues distinguished the new sedative effects of chlorpromazine from which patients could easily be roused from those of barbiturates and other classic sedatives. Delay and colleagues also emphasized the effects of this drug on the nervous system rather than other bodily systems, leading to its redesignation as a neuroplegic agent. Nevertheless at this point it was commonly given as part of sleep therapy of one sort or another, in darkened rooms, and often in conjunction with barbiturates.¹⁰ The first attempts to produce further versions of chlorpromazine led to other sedative neuroplegics such as levomepromazine and thioridazine. The importance of sedation seemed to be confirmed by the example of reserpine, another antipsychotic discovered in the same period by Nathan Kline and colleagues at Rockland State Hospital in New York.¹¹

Although it was unclear what these new agents did, it had begun to become clear that they offered the promise of therapeutic benefit and financial return. In 1955, Smith Kline & French (SK&F) launched

chlorpromazine in North America, and there are some estimates that it grossed up to \$75 million of business in that first year, as almost all patients in all asylums were given the new treatment.^{11a} This led other companies into the market.

The Idea of a Neuroleptic

The role of sedation was challenged by the effects of prochlorperazine, a less sedative phenothiazine, which Rhône Poulenc and SK&F developed as an antiemetic agent. When given to French marines on military maneuvers, prochlorperazine produced what would now be recognized as dystonic crises. Paul Broussolle of Lyon was asked to investigate; and giving it to psychotic patients at the Vinatier Hospital in Lyon, he discovered that it was a neuroleptic agent with minimal sedative effects. It appeared indeed to be activating. This discovery catalyzed the development of the neuroleptic concept.¹²

In brief, the neuroleptic concept as outlined by Deniker and Delay in 1955 stemmed from a recognition that encephalitis lethargica had produced a range of extrapyramidal syndromes including Parkinsonism and akathisia, syndromes that these new phenothiazines also produced. Encephalitis lethargica also produced a clearing up of psychosis in some schizophrenic patients or at least a diminution of the intensity with which delusional beliefs were held or hallucinations were experienced. The use of phenothiazines appeared on this basis to Delay and Deniker to be a chemical form of encephalitis lethargica. Rather than paralyzing nerve endings, these agents were seizing nerves (neuroleptosis), in some way similar to the encephalitis infection. The word “neuroleptic” stemmed from Janet’s earlier designation of some therapies in psychiatry as psycholeptic.

Two years later the discovery of the neuroleptic properties of haloperidol, which were produced at astonishingly low doses, appeared to confirm Delay and Deniker’s concept.¹³ The term “neuroleptic” never properly took root within the United States. In 1953, Ciba’s Yonkman coined the term “tranquilizer” to distinguish the psychotropic effects of reserpine from those of sedatives.¹⁴ The development of meprobamate led to distinctions between the major tranquilizers, or neuroleptics, and minor tranquilizers, which included meprobamate and later the benzodiazepines. In the late 1980s, with the marketing of clozapine both of these terms, major tranquilizer and neuroleptic, were replaced by the term “antipsychotic.”

In the late 1950s, however, the field entered a period during which the production of extrapyramidal side effects appeared a welcome thing. Against this background, the description of Syndrome Malin des Neuroleptiques by Delay and Deniker in 1962 or tardive dyskinesia by Faurbye¹⁵ and others was not surprising. By this stage the phenothiazines and other neuroleptics were associated with the treatment of schizophrenia, even though it was abundantly clear that many schizophrenic syndromes responded to them barely if at all.¹⁶

Imipramine

Imipramine was one of a series of iminodibenzyl compounds that were developed in the late 1940s by Geigy pharmaceuticals as alternative antihistamines to Rhone-Poulenc’s phenothiazine series. The first, G22150, had been tried in a range of clinical populations and did not appear to be of particular use. Following the success of chlorpromazine, Geigy tried G22355, imipramine, an iminodibenzyl with the same side chain as chlorpromazine. In the course of a clinical trial of G22355 in a large group of schizophrenic patients at Münsterlingen Hospital in 1955, Roland Kuhn saw many patients became more disorganized. The company withdrew from the study. Analyzing the protocols from the study, however, Paul Schmidlin, a physician working with the company, on the basis of reported nursing observations, noted a possible mood-elevating effect in some patients. This hint led representatives of Geigy to re-approach Kuhn and ask him to try the drug out for depressed patients. He was initially reluctant to do so but subsequently did.

On 12th January 1956, the treatment is begun with 100mgs of Tofranil. On 14th January there was an acute symptom of delusion. On 21st January 1956: for three days the patient is a totally changed person. So since the 18th of January, six days from the beginning of treatment, all her manic behaviour and restlessness has disappeared. The day before

yesterday, she remarked herself, that she'd been terribly confused and as stupid as she had ever been before and she didn't know where it had come from but she was only glad that she was better now.¹⁷

This is an extract from the clinical notes of Paula JF, the first patient to receive imipramine as an antidepressant. Several weeks after recording these impressions, Roland Kuhn wrote to Geigy suggesting that imipramine was an antidepressant.¹⁸

Clearly, against this background it is difficult to sustain any absolute claim for Kuhn as the discoverer of the antidepressant effects of imipramine. He has, however, in general, been reluctant to acknowledge the role of any others in the discovery. Essentially his basis for claiming priority lies in the contention that what was discovered was not the antidepressant effects of imipramine so much as the contours of a depressive syndrome that would respond to an agent like imipramine. Kuhn argued that the clinical effects of imipramine validated the existence of a form of depression called vital depression (endogenous depression), which was to be distinguished from reactive or neurotic depressions. These distinctions were at the heart of the views of the Heidelberg school of psychopathology. As neither company personnel nor nursing staff had a background of psychopathology, none could have been expected, from Kuhn's point of view, to have appreciated what really was being discovered.¹⁹

The conventional story of the antidepressants is that their discovery was second only to the discovery of chlorpromazine as a major breakthrough in the management of mental illness. Combined, the use of these two groups of drugs dramatically changed the face of psychiatry. However, these impressions are misleading. Far from being interested in the possibility that imipramine might be an antidepressant, Geigy had been looking for an antipsychotic and could not see that an antidepressant offered much opportunity. At a time when compounds could pass through a clinical testing phase into clinical use within three months, imipramine took almost two years to reach the market from the time of Kuhn's first report, and even then it was marketed with what retrospectively looks almost like reluctance.²⁰

Geigy was not persuaded by the reports emerging from Münsterlingen, even ones as dramatic as the case of Paula JF. They had some difficulty understanding the significance of the concept of vital depression. They knew that electroconvulsive therapy (ECT) was available for this condition, and even Kuhn conceded that this was probably more effective than G22355 was likely to be. They were also faced with strong indicators that vital depression was not a common disorder. Estimates at the time can have been no greater than one hundred cases per million. This contrasts markedly with the current estimates of one hundred thousand cases per million.

They were also faced with the fact that majority opinion in Europe felt that the idea of an antidepressant was almost inconceivable: Depressive disorders were reactive in nature or related to some form of object loss, and accordingly a biological treatment could not be expected to remedy the problem.²¹ In addition, a range of other highly thought-of clinicians across Europe, including, for example, Hanns Hippus, had tried imipramine in doses up to 1500 mg per day with none reporting any comparable effects to those claimed by Kuhn.

It took an accident to further the cause of imipramine. Robert Boehringer, a shareholder in Geigy, became aware of the existence of imipramine and the claims for it. His wife was depressed, and he requested supplies of the drug. When she responded, he advocated its further development.²² Subsequently, Paul Kielholz from Basel and Roger Coirault from Paris tried it in clinical trials.²³ Both reported in the course of 1957 that imipramine did indeed have antidepressant effects. This, along with the emergence in 1957 of iproniazid (Marsilid) as an "antidepressant," finally led Geigy to market the drug in 1958. The imipramine story seems remarkable now, given the acknowledgment of the widespread nature of depressive disorders and the need for their treatment, along with an acceptance of the place of pharmacotherapeutic approaches in the management of these conditions.

Isoniazid

In 1951, two hydrazide derivatives, isoniazid and iproniazid, were introduced for the treatment of tuberculosis by the Roche, Squibb, and Lilly pharmaceutical companies. The impact of these two drugs was remarkable. The most dramatic stories came from New York's Sea View Hospital.²⁴ These reports electrified

the media, and *Life Magazine* ran a feature article²⁵ showing previously moribund patients dancing in the wards. These articles caught the attention of many. A range of psychiatrists around the United States was tempted to try these compounds for mental health purposes, given the effects of these drugs to boost appetite, cause weight gain, increase vitality, and improve sleep.²⁶ The conventional wisdom is that no indications emerged from any of these efforts.

Based on the Robitzek article and the issue of *Life*, however, the first discovery in the antidepressant field was in fact made in 1953 by Max Lurie and Harry Salzer. Following the suggestions that isoniazid appeared both to treat tuberculosis as well as to enhance the sense of well being of the patients that it was treating, Max Lurie also thought that it might be a useful agent for treating nervous disorders.²⁷ He and Salzer began using it in out-patient and hospitalized depressive cases. They reported a first series of 41 cases in 1953 and a second series of 45 in 1955, making 86 cases altogether. Of these cases, 42 had a previous depressive episode, 32 had prior treatment with ECT, and 22 were bipolar depressives.²⁸ Two out of three cases responded to isoniazid, and responders took two to three weeks to show their response.

Max Lurie appears to have coined the word “antidepressant” in 1952.²⁹ Kuhn did not describe imipramine as an antidepressant in the first instance. Under the influence of Jean Delay, the first tricyclic antidepressants were called thymoanaleptics or thymoleptics. When Nathan Kline later discovered the “antidepressant” properties of iproniazid, he termed this drug a psychic energizer rather than an antidepressant. The word antidepressant cannot be found in *Merriam Webster’s Third International Dictionary of the English Language*, published in 1966. In the second edition of the *Random House International Dictionary* (1987) it is suggested that the term appeared somewhere in the mid-1960s.

Lurie and Salzer’s work sank without trace. There were a number of reasons for this. First, isoniazid, while produced by Roche in 1951, had originally been synthesized in 1912. It was therefore not patentable. Eli Lilly, Squibb, and Roche all had versions of it. Second, by the time, Lurie and Salzer completed their second study, chlorpromazine (Thorazine/Largactil) had hit the market, and this looked as though it would be antipsychotic in large doses and an anxiolytic or antidepressant in moderate doses. Indeed subsequent trials have shown that chlorpromazine can be used in the treatment for depressive disorders.³⁰ There are equivalent results for many of the other antipsychotics.³¹ Against this background the notion of a specific antidepressant did not register, even though Lurie was treating outpatients, a potentially much larger market than was seen by Kuhn. A third reason for the failure of Lurie and Salzer’s work to have an impact was their lack of institutional support. They worked in private practice, and therefore no university supported their work. They were working in Cincinnati, then a bedrock of psychoanalytic thinking and practice. Being in private practice, they could not take the time off to publicize their work.

The significance of isoniazid is that it is not a monoamine oxidase inhibitor (MAOI). Had its antidepressant properties been more widely appreciated, the amine theories that have underpinned thinking on depression and the development of the selective serotonin reuptake inhibitors (SSRIs) could not have been developed in the same way. Lurie’s work with isoniazid was replicated by Delay and Buisson in Paris.³² Furthermore, other hydrazide tuberculostats that are not monoamine oxidase inhibitors, such as cynarizide, were also tried in the early 1950s and appeared to have antidepressant properties.³³

Reserpine

A similar fate befell reserpine. Against a background of reports that reserpine made people feel better than well and that it was good psychotherapy in pill form, Michael Shepherd and David Davies in the Institute of Psychiatry conducted the first prospective, placebo-controlled, parallel-group, randomized clinical trial in psychiatry using reserpine in anxious depressive outpatients.³⁴ They demonstrated clearly that it had antidepressant efficacy. This is of little surprise, as reserpine is a neuroleptic, and a great number of traditional neuroleptics including sulpiride, perphenazine, pimozide, thioridazine, chlorpromazine, flupenthixol, and others had been shown to be potentially useful in cases of depression, particularly cases with comorbid anxiety features.³⁵ More recent antipsychotics also appear to be efficacious in affective disorders.

The evidence of reserpine's antidepressant efficacy vanished for a number of reasons. One was that as of 1955, the concept of an antidepressant still did not exist. Ciba was not interested in the possibility of marketing it for depression. The treatment of the psychoses at the time was in the process of becoming respectable medicine, but the treatment of the less severe or minor nervous conditions remained much more contentious. Second, by the late 1950s there were 26 different versions of reserpine on the market, and hence no one company had an incentive to promote it for indications such as mood disorders or to defend it when it ran into difficulties.

Third, reserpine did run into difficulties. It was associated with a number of suicides in patients being treated for hypertension. Suicide was liable to occur acutely—within days of the individual being put on the drug. The physicians faced with the changes induced by reserpine reported that in some cases it appeared to trigger a depressive or a psychotic disorder. However, similar reports were being filed for chlorpromazine and other antipsychotics at the time, and a review of the problem by psychiatrists concluded that reserpine seemed to be doing nothing that other antipsychotics weren't also doing.³⁶

A contemporary review of the problems suggests that reserpine was causing akathisia.³⁷ The word akathisia, however, had not entered the psychiatric vocabulary at this stage, and general physicians who were faced with the phenomenon were unlikely to recognize what was happening. The sedative effects of reserpine on animals subsequently became a screening test for novel antidepressants. Many of the original tricyclic and MAOIs either blocked or reversed its effects. A number of the SSRIs do not block these effects of reserpine, and those agents that don't "pass" the reserpine test are also likely to cause akathisia. In addition to these clinical implications, reserpine's profile as an antidepressant has startling implications for hypotheses like the monoamine hypotheses of depression.

Iproniazid

Finally, there was the discovery of the antidepressant effects of iproniazid by Nathan Kline. This was a more successful development than the others previously outlined, but Kline also met with the same reluctance that Shepherd, Lurie, and Kuhn had before him. In late 1956, Jack Saunders, who had formally worked at Ciba but who had joined Nathan Kline in the research department at Rockland State Hospital in New York, along with Harry Loomer, who was a practicing psychiatrist at the hospital, embarked on a study of the psychotropic effects of iproniazid. The patient group included 17 largely retarded and regressed schizophrenic patients along with 7 "depressive" patients seen in Kline's private practice. By early 1957, Kline thought that the drug was promising and approached David Barney, the managing director of Roche in the United States, to alert him to the fact that iproniazid had promising psychotropic effects. Barney, it seems, was not interested. Iproniazid was a problem for Roche at the time. Its use in the treatment of tuberculosis was associated with a number of adverse mental state changes, leading the company to consider removing it from the market.

Kline, however, was in a different position than Lurie, Shepherd, or Kuhn. Iproniazid was on the market and selling well. He also had access to the right professional audiences, and as the discoverer of the psychotropic effects of reserpine and a Lasker Prize winner, he had a track record. On the basis of iproniazid's effects in these 24 patients, he reported at an American Psychiatric Association Regional Meeting in Syracuse New York in April 1957 that it had psychic energizing properties,³⁸ having briefed the *New York Times* the weekend before the meeting. Within months iproniazid was being widely used for its anti-nervousness properties.³⁹

In 1964, Kline was awarded a second Lasker Prize for this discovery. As part of the award, he was invited to write an article on iproniazid and its discovery for the *Journal of the American Medical Association*.⁴⁰ Saunders, taking exception to the portrayal of the discovery, sued for a portion of the Prize. There were several hearings and several contested settlements, before the case was settled after Kline's death in 1981.

The issue at stake was who had made the discovery of the "antidepressant" effects of iproniazid. Kline's case was that the antidepressant effects had been discovered by him when he was giving the drugs in his

private clinic, whereas the majority of the rest of the patients who got iproniazid from Loomer and Saunders had been schizophrenic. Saunders's claim was that he had understood that the drug was a monoamine oxidase inhibitor and that on this basis he expected it to have useful psychotropic effects. Max Lurie's work arguably trumped both sets of claims, in that isoniazid was antidepressant without being a monoamine oxidase inhibitor. In addition, Lurie's demonstration was a more convincing one than Kline's, and it is probable that Kline knew about Lurie's work through a number of New York psychiatrists who had tried isoniazid and also found it to have "antidepressant effects."⁴¹

Meprobamate

Just after chlorpromazine was launched on the American market, Carter-Wallace brought out meprobamate. This had been developed by Frank Berger, who in the course of its development recognized that it might be possible to treat anxiety with something other than a sedative. Meprobamate was a propanediol, a group of agents that had been noted to have sedative properties since 1905. With meprobamate, a distinction between the muscle-relaxing and hence tension-reducing properties of a drug and its sedative properties emerged. Meprobamate opened the way to the concept of developing a nonsedative muscle relaxant, and this led to the development of the benzodiazepines. In an effort to distinguish his new drug from older sedatives, Berger turned to the concept of a tranquilizer. Meprobamate's success as a tranquilizer led to the benzodiazepines becoming tranquilizers. The later benzodiazepine dependence crisis in the 1980s led to the eclipse of the notion of a tranquilizer and its replacement with the concept of an anxiolytic.

Meprobamate was an American drug in a way that none of the other drugs dealt with here were. This stemmed from the fact that in the United States the majority of psychiatrists were working in office practice, and meprobamate was the ideal drug for office practice. In Europe in contrast, psychiatrists were for the most part still confined to working in asylums. Meprobamate sold hugely in the United States but very little in Europe. Its success in the United States laid the basis for the emergence of the benzodiazepines, which Roche, in contrast to their approach to the antidepressants, eagerly marketed from the early 1960s.

The Middle Years

The success of chlorpromazine led to the development of a huge number of copy-cat neuroleptic compounds, including levomepromazine, thioridazine, chlorprothixene, perphenazine, prochlorperazine, trifluoperazine, fluphenazine, flupenthixol, thiothixene, pericyazine, haloperidol, droperidol, benperidol, pimozide, sulphiride, loxapine, and others. A range of compounds such as dipiperone, Mornidine, and Dartal never made it to the market owing to the fact that the marketplace was too crowded.⁴²

There was little connection between the use of these drugs and theories of psychosis. The dominant biological theories from the early 1950s through to the late 1960s were the transmethylated hypotheses. These had been formulated first by Osmond and Smythies⁴³ and later developed by Seymour Kety and others at the National Institutes of Mental Health. In brief, these theories postulated that there was an aberration of monoamine metabolism that led to the production of endogenous psychotogens that had the capacity to produce psychoses resembling those produced by LSD. The efficacy of chlorpromazine and other neuroleptics for both LSD-induced psychoses and naturally occurring psychosis stimulated this line of thought.

Work on the model psychoses induced by LSD, mescaline, phencyclidine, and other agents flourished from 1955 to the early 1960s.⁴⁴ LSD was also used during this period for therapeutic purposes as one weapon in a narco-analytic armory. As the use of LSD spread into and helped form the counterculture of the 1960s, it moved from prescription to proscription, and this fall from grace led to the eclipse of research with LSD and on the model psychoses. The transmethylated hypotheses had their acme in the mid 1960s.⁴⁵ By 1973, when the first dopamine hypothesis was proposed, they had been eclipsed.

The Dopamine Hypothesis of Schizophrenia

The dopamine hypothesis of schizophrenia forms the centerpiece of the antipsychotic story from 1975 through to 1995. Conventional histories ascribe first formulations of the dopamine hypothesis to Arvid Carlsson.⁴⁶ This early work by Carlsson and later van Rossum had minimal impact at the time.⁴⁷ It was only with the eclipse of the transmethylation hypotheses and the vacuum that followed this eclipse and the development of radioligand binding for dopamine receptors, which permitted the demonstration that all antipsychotics bound to the D2 receptor, that the dopamine hypothesis was born.⁴⁸ All of a sudden there was a rediscovery of the psychotomimetic properties of the amphetamines. The combination of the discovery of the D2 receptor and the psychotomimetic properties of the amphetamines led between 1974 and 1976 to the dopamine hypothesis of schizophrenia.⁴⁹

The dopamine hypothesis of schizophrenia along with the beta-adrenoreceptor downregulation hypothesis put forward by Vetulani and Sulser in 1976 to account for the action of antidepressants led to a new generation of drug development.⁵⁰ These hypotheses enabled pharmaceutical companies to rationalize the production of new drugs. They had new molecular assay systems that permitted the screening of hundreds and subsequently thousands of compounds per day, whereas before, using animal models, only a handful of compounds could be screened per week.

The dopamine hypothesis was developed by Crow and others in the United Kingdom into a psychopathological theory of schizophrenia.⁵¹ Crow proposed that there were two forms of schizophrenia, type 1 and type 2. Type 1, or positive schizophrenia, supposedly involved a pathology of the dopamine system, which could be corrected by antipsychotics, while type 2, or negative schizophrenia, involved brain cell loss leading to ventricular enlargement and the dementia of dementia praecox. This became an astonishingly influential hypothesis, though in fact it had little or no data to support it. Crow's proposal that schizophrenia began with positive syndromes and progressed to negative syndromes was simply not borne out by the evidence, while in addition there were good grounds to implicate neuroleptic agents in the production of negative effects.⁵²

The dopamine hypothesis persists to this day in the shape of claims that new antipsychotics are beneficial for negative schizophrenia. There are multiple historical ironies underpinning this claim. First, a compelling case can be made that the negative schizophrenia that new-generation antipsychotics are best at treating is the consequence of megadose regimes of neuroleptics administered during the 1970s and 1980s. Under the influence of the dopamine hypothesis of schizophrenia, in the belief that if the dopamine system was abnormal in schizophrenia and neuroleptics acted on this, any failure to produce a clinical response must necessarily mean that in some way patients were not absorbing the drugs properly, clinicians gave these drugs in increasingly large doses, culminating in what in the 1970s and 1980s were explicitly termed megadose regimes of neuroleptics. Whereas 300 to 400 mg of chlorpromazine had been used in the 1950s and 1960s, in the 1970s and 1980s, 3 to 4 grams of chlorpromazine or its equivalent of other drugs was not unusual. Haloperidol narcosis involving the administration of 10 mg of haloperidol intravenously hourly (probably equivalent to 1 gram of chlorpromazine hourly) was not uncommon.^{52a}

It was not until the end of the 1980s that such regimes were questioned on the basis of clinical trial results^{53a} and the new emerging positron emission tomography (PET) scan technologies.^{53b} Subsequent PET scan studies showed that treatment resistance was in fact more likely to be associated with high doses of antipsychotics rather than the reverse. To put it bluntly, clinicians were poisoning their patients. At just the same time, another antipsychotic, clozapine, which did not bind potently to D2 receptors, had re-emerged. Clozapine's reappearance cast further doubt on the dopamine hypothesis of schizophrenia. Clozapine was credited with bringing about a reawakening of schizophrenic patients unresponsive to other agents, but an alternative hypothesis is that owing to its pharmacology and complications with its administration, it was simply not possible to "poison" patients in the same way with clozapine, and a great deal of its benefits lay in the switch from megadose regimes of older agents to more reasonable doses of clozapine.

Paradoxically one of the greatest ironies was that the dopamine hypothesis, which appeared to provide such a ready means for drug development, was in fact associated with the emergence of no new antipsychotics. The flood of new compounds that had appeared on the market in the 1950s and 1960s slowed to

a trickle in the early 1970s and came to a full stop by 1974, just when the dopamine hypothesis was being formed. This was the year when SK&F accepted their first million-dollar settlement for a case of tardive dyskinesia.

Tardive Dyskinesia and Antipsychiatry

Tardive dyskinesia had first been described as a complication of antipsychotic treatment in 1960 by Uhrband and Faurbye.⁵⁴ Over the following years, the problem was increasingly recognized. George Crane of the National Institutes of Mental Health was particularly vocal in drawing attention to the problem.⁵⁵ The problem with tardive dyskinesias for clinicians was its visibility, which made it, along with ECT, a lightning rod for antipsychiatric sentiment and protests.

Tardive dyskinesia for this reason posed problems for the pharmaceutical companies. Clinicians could not be sued readily for the care they gave in psychiatry, even for a range of practices that caused widespread discontent, but tardive dyskinesia provided exactly the kind of side effect that could be demonstrated readily in a witness box and would leave jurors happy to award substantial damages. In the nature of things, however, it was companies rather than clinicians that would have to pay.

By the early 1970s, a crisis had developed, leading the American Psychiatric Association in 1973 to set up a task force to investigate the problem. This was chaired by Ross Baldessarini, who had put forward the first dopamine hypothesis in 1973, a dopamine hypothesis of tardive dyskinesia.⁵⁶

The problems for both the American Psychiatric Association and pharmaceutical companies have to be set against the backdrop of the emergence of antipsychiatry in the 1960s. The proudest boast of the psychiatrists who introduced the neuroleptics was that these new drugs had transformed the asylums so that jailers and wardens had been replaced by nurses and other therapy staff and lunatics had become patients. The new atmosphere enabled both sides to recognize the humanity of the other, and there was an ability to do therapy and talk to each other in ways that had not been present before. This was symbolized by the unlocking of locked wards, the knocking down of asylum walls, the removal of straitjackets from the mad, and a quietening of the asylums.

Yet by the late 1960s, psychiatry was facing an antipsychiatry, which questioned its very legitimacy. The antipsychiatrists agreed that the asylums were quieter but labeled this the silence of the cemetery. They agreed that patients were no longer straitjacketed, but argued that instead they were imprisoned in the community in a *camisole chimique*. Whence this ingratitude?

A number of factors can be identified. One was the very real side effects that neuroleptics caused. These included passivity syndromes, akathisia, which could lead to suicide and violence, and other problems. Few if any of these problems, however, could be held up as an unequivocal complication of treatment. The defenders of treatment could reply that these were simply manifestations of the illness. This is where tardive dyskinesia became so important, as, while subsequent research has shown that orofacial dyskinesias do occur spontaneously in schizophrenia, a jury was more likely to believe that this rather than anything else was a drug-induced problem. Tardive dyskinesia became a major weapon in the armory of antipsychiatry.

A further factor was an unrecognized change in the character of psychiatry that had come about under the influence of the new psychopharmaceuticals. To understand this requires a step back and a consideration of two developments.

In the course of the Second World War, psychiatrists associated with the military discovered that group therapies had a dramatic impact on the nervous disorders produced in soldiers by the War. These therapies worked best, it seemed, where they involved a dissolution of the hierarchies of pre-war European social and Army life. The more informal the setting, the better. American military psychiatrists, and in particular Karl Menninger, viewing this group therapy took home a message. The options were that groups work or that therapy works. Menninger opted for the message that psychodynamic therapy works. This led American psychiatrists returning from the war, and many of those who had manned the asylums during the war, to abandon the asylums and to set up in office practice, along with the immigrant analysts from Europe. The asylums

were left to European alienists. Power and influence in American psychiatry uniquely moved into the community. In so doing, American psychiatrists captured for psychiatry a vast range of nervous and psychosomatic complaints that had previously been the province of neurologists and internists with an interest in psychosomatic medicine.⁵⁷

The other key development stemmed from another war, one that began in 1914, a War on Drugs. This began with the Harrison's Narcotics Act, which made the opiates and cocaine available on prescription only. In 1951, the Humphrey-Durham Amendment to the 1938 Foods Drugs and Cosmetics Act extended this provision to all the new drugs produced in the pharmaceutical revolution following the Second World War, the new antibiotics, antihypertensives, antipsychotics, antidepressants, anxiolytics, and other drugs. Many were unhappy with the new arrangements. Many complained that a system designed for addicts was not appropriate for the citizens of a free country. A combustible set of ingredients had been put in place that led to an explosion in the late 1960s.

Antipsychiatry was born. Through the 1960s, antipsychiatric protests that mental illness was a creation, that madness did not exist, and that psychiatric treatment was a new form of political oppression grew more strident. The establishment response focused on demonstrating that the idea that mental illness did not exist was clearly wrong. But there were aspects to the claims that had merit and that went uncontested. Chlorpromazine and the new psychopharmaceuticals had led to a deinstitutionalization, but it was a deinstitutionalization of psychiatry and psychiatrists rather than patients. Compared with the 1940s, we now detain three times more patients than before and admit up to 15 times more patients than before; psychiatric patients spend a longer time in service beds of one sort or another than they ever did before; psychiatry treats vastly more people than were ever treated before; it treats categories of disorders never treated before; and there has been an explosion in the numbers of psychiatrists.^{57a} This state of affairs came about because of the conjunction between the capture of community nervousness by dynamic psychiatry and the sole availability of the new physical therapies for these conditions on prescription only.

Before 1900, psychiatry had dealt with a very small number of people who were termed lunatics, with the psychiatrists treating them being termed alienists. Modern psychiatry, however, sets its sights on between 10% and 20% of the community and treats conditions such as depression, anxiety, and personality disorders, which were never treated by former generations of psychiatrists. Whereas, before the 1950s, few people would have known anyone who had been incarcerated in a lunatic asylum or who was in receipt of psychiatric treatment, by the 1970s most people knew someone who had been in a psychiatric hospital and certainly knew someone who was being treated for their "nerves" in some way or other.

The antipsychiatric thesis that madness does not exist, clearly, when it comes to schizophrenia and manic depressive illness, has not stood the test of public opinion. But their other claim, that psychiatry had been drawn into the management of a range of quotidian conditions and into the government of the self, and that the community had not been asked whether it approved of this, is demonstrably correct.

There was an explosion. In 1968, the Tokyo University Department of Psychiatry was occupied by protesting students. It remained occupied for ten years. Psychiatric research came to a full stop. In 1968, students who were revolting in Paris marched on the offices of Jean Delay and sacked them. Delay, who had thought he would receive a Nobel Prize for the discovery of chlorpromazine, was forced into retirement. The psychiatric establishment was under fire and indeed appeared as though it might not survive. The antipsychiatrists Laing, Szasz, Goffman, Marcuse, Fanon, and Foucault were household names, struggling not just to transform psychiatry, it seemed, but to transform society.

It was against this backdrop that the tardive dyskinesia problem must be viewed. Tardive dyskinesia brought the production of antipsychotics to a halt. It took almost 20 years before clozapine emerged in the late 1980s onto the American stage. Clozapine has since been sold as a treatment for negative schizophrenia or treatment-resistant schizophrenia. But in fact its reappearance owes nothing to these factors and owes everything to the fact that it was the one antipsychotic that did not produce tardive dyskinesia. The emergence of a subsequent generation of antipsychotics including quetiapine and olanzapine, both of which were modeled on clozapine, stems from this fact also.⁵⁸ These were agents that were designed to act as antipsychotics without producing a significant risk of tardive dyskinesia.

The Selective Serotonin Reuptake Inhibitors

The climate regarding the antidepressants began to change in 1960, when a number of companies produced amitriptyline. Because process rather than substance patents were the norm of the time, Merck, Lundbeck, Roche, and a Czech group all produced this compound at much the same time. In Merck's case they tested amitriptyline for antischizophrenic properties. One of their clinical investigators was Frank Ayd. Ayd had been present at the first talk given by Kuhn in 1957 describing the antidepressant effects of imipramine. He was interested in possible antidepressants owing to a history of affective disorders within his family. To Ayd, amitriptyline seemed to be producing comparable effects to imipramine, and he suggested to Merck that they investigate its possible antidepressant effects.⁵⁹ Unlike Roche, Geigy, and other companies with "antidepressant" compounds at this time, Merck decided to develop both amitriptyline as an antidepressant and the antidepressant market. Ayd had written a book called *Recognising the Depressed Patient* in 1961.⁶⁰ Merck bought 50,000 copies of this and distributed it along with videos of Ayd interviewing patients. They recognized that physicians would need to be educated to the existence of depressive disorders and how they could be managed.

Despite this, the antidepressants remained the poor cousins of the psychotropic field. Their use remained minimal during the 1960s, with physicians and others more likely to interpret community nervousness as anxiety based and more likely to prescribe a minor tranquilizer than an antidepressant. It was only the subsequent recognition of benzodiazepine dependence that brought the antidepressants out of the shadows.

The emergence of the antidepressants as they are now understood parallels the development of the SSRIs. These compounds had their origin in observations by Paul Kielholz in the mid-1960s that of the available antidepressants, some appeared to get depressed patients well by being more drive enhancing, while others did something else, which at the time he expressed as a possible mood enhancement. Reviewing Kielholz's proposals as regards drive and mood enhancement, Arvid Carlsson suggested that the agents that were more drive enhancing were agents active on the catecholamine system, while those that were more mood enhancing had preferential actions on the serotonin system. This led to the suggestion that it might be worthwhile to create a selective serotonin reuptake inhibitor. Carlsson developed and patented the first of these, zimelidine, along with Hans Corrodi in 1971.⁶¹ The first SSRI on the market was indalpine, which was released clinically in France in 1978. Both indalpine and zimelidine, however, had to be later withdrawn because of toxicity, leaving the way open for a subsequent generation of SSRIs, which included fluvoxamine, fluoxetine, paroxetine, sertraline, citalopram, and others.

The SSRIs had their origins, therefore, in the fact that not all antidepressants were the same. Their marketing, however, has blurred these distinctions and has suggested that essentially the SSRIs are the same as the older tricyclic antidepressants (TCAs), except for a relative freedom from side effects and safety in overdose. The evidence does not support this. The SSRIs have benefits for a wide range of nervous conditions including post-traumatic stress disorder, social phobia, obsessive compulsive disorder (OCD), panic disorder, generalized anxiety disorder, body dysmorphic disorder, as well as mood disorders along with significant benefits in premature ejaculation. Their effects on mood disorders, in fact, are mixed, in that melancholic or hospitalized depressions do not respond well to SSRIs. The clinical trials submissions for some of these agents to the Food and Drug Administration did not include any successful trials in hospitalized depressives. This is not to suggest that the SSRIs are weaker drugs than the TCAs. They clearly are not. Drugs that produce effects in OCD, body dysmorphic disorder, and other similarly severe conditions cannot be described as weak. They are, however, different than the TCAs, and their range of actions does raise the question of whether these drugs are not broadly anti-nervousness agents working on some constitutional aspect of functioning rather than specifically antidepressant agents.⁶²

The designation of the SSRIs as antidepressants owed a great deal to the problems of benzodiazepine dependency.⁶³ Because of this, the word "tranquilizer" became compromised; clinicians were inclined to suspect that any anxiolytic would inevitably cause dependency problems. The way was open for the development of the antidepressant market, from the mid-1980s onward. From this period, review articles in the literature begin to appear where they had been infrequent before. From this period, articles in U.S. magazines began to

produce articles about depression where they had been about anxiety before.⁶⁴ From this period the word “antidepressant” begins to appear for the first time in dictionaries.

It is of interest that benzodiazepine dependency was never a problem in Japan.⁶⁵ There the anxiolytic market remains robust, and as of 2000, there were no SSRIs released for a mood disorder indication. In contrast in the West, the management of community nervousness became an antidepressant marketplace, and Peter Kramer’s *Listening to Prozac* in 1993 marked the discovery of the “antidepressants” by the community, the discovery of a set of drugs that had already been available for almost 40 years.⁶⁶ Japanese clinical practice in the meantime remained on the same trajectory that clinical practice worldwide had been on until the mid-1980s. In Japan, the concept of an anxiolytic remains respectable, and the market for anxiolytics is much greater than the market for antidepressants. The Era of Depression that we have lived through since the 1990s in the West has arguably been a politically and economically constructed period that bears little relationship to any clinical facts. This has been an era that has seen a huge change in popular culture with the replacement of a psychobabble of Freudian terms with a new biobabble about low serotonin levels and the like—a change that has incalculable consequences for how we view issues like criminal responsibility and how we rear our children.

The Arrow of History

The writing of history is clearly about establishing what happened. But an accurate assessment of what happened cannot be easily divorced from an assessment of the forces that led events to turn out as they did, and an accurate assessment of these forces should yield some measure of prediction about what will happen next.

Psychopharmacology and the Enlightenment

Psychopharmacology is not just a revolution that happened, it is a revolution in progress. The new drugs and the interaction between these drugs and the world in which people live have played a huge part in the formation of the current social order and are likely to play an ongoing part in maintaining or subverting it. The discovery of chlorpromazine by Delay and Deniker was the discovery of a drug that acted on a disease in order to restore a person to his or her place in the social order. In contrast, Laborit’s discovery of chlorpromazine the previous year was the discovery of a drug that produced an indifference that led taxi drivers to drive through red lights, breaking social rules.

Out of the same test tubes and laboratories from which chlorpromazine came, came LSD and the psychedelics, Valium and the benzodiazepines, and other drugs. These were not drugs that restore people to their place in the social order. These were drugs that had the potential to transform the social order.

By 1968, another drug, the oral contraceptive, had begun to transform the social order by changing relations between the sexes. In 1968, for the first time, the French clothing industry produced more trousers for women than for men. By 1968, feminism had appeared to challenge the colonization of women’s minds by men.

The revolutions of the late 1960s arguably saw the culmination of a project begun by Rousseau and Voltaire, the Enlightenment. This was a project that overthrew the traditional hierarchical order in society. It led to the dethronement of kings and gods. It claimed that the people should be ruled by the people and that an individual’s place in society should depend on merit. It claimed that individuals had rights in addition to duties. But this project had remained the preserve of white, middle-aged, and middle-class men. It had not extended to women, the young, ethnic groups, or others—until 1968. In that year antipsychiatrists and others protested against the colonization of the minds of ethnic groups by white Europeans, the colonization of the minds of the poor by the rich, the colonization of the minds of the young by the old. They castigated the new drugs as a means of controlling the young. Madness was supposedly the protest of the colonized.

Some of the politics of the time can be seen if one considers the example of “smart” drugs now. We live in a time when it is not possible to discriminate on the basis of sex, ethnicity, age, or religion, but we still

discriminate on the basis of intelligence. Bright kids go to good universities and are subsidized by the state to do so. Cognitive enhancers may well benefit less-able or older animals compared with younger and bright animals. Should cognitive-enhancing drugs become available, they will favor those who are less bright. Will they be made available to society generally? Or will their use be restricted to diseases such as age-associated memory impairment? Can disease ever be a value-free concept?

Psychopharmacology and psychiatry in the late 1960s were faced with a political problem: how to distinguish drugs that restored social order from drugs that subverted the social order. The decision was made to categorize as problematic and dependency producing any drugs that subverted the social order. This political rather than scientific decision set up a crisis a few years later when physical dependency on the benzodiazepines emerged. This broadened to an extraordinary crisis, which led to the obliteration of the tranquilizers and indeed almost the whole concept of anxiolysis. By 1990, physicians in Great Britain and elsewhere regarded benzodiazepines as more addictive than heroin or cocaine, without any scientific evidence to underpin this perception. In contrast, dependency on the antipsychotics or antidepressants, which had been well described in the early 1960s, had vanished. The *Diagnostic and Statistical Manual of Mental Disorders*, fourth edition, makes it impossible for there to be dependency on therapeutic drugs, even though tardive dyskinesia is a clear manifestation of drug-induced dependency. By the end of the 1990s physical dependency on SSRIs had emerged as a significant issue, with little indication of how the establishment would respond to it other than by denial.

Psychopharmacology and Science

In the face of the problems caused by tardive dyskinesia, psychiatry appeared to be saved by science. The D2-receptor-binding data published by Seeman and Snyder introduced a new language to psychiatry, a language of Big Science. In this New World, physicians and companies had common interests. Whereas previously psychiatrists and antipsychiatrists and patients were using what was recognizably the same language, this no longer applied. Both sides had been governed by the visible presentations of the patients in front of them. Now, to enter into a debate with psychiatry, you had to have a manifold filter machine and a scintillation counter at the very least and latterly capacities for functional magnetic resonance imaging or computed axial tomography. Far from this being a science that worked in the interests of patients, however, this was the science that was in place as megadose regimes of neuroleptics were instituted. No longer answerable, it seems, to how the patients in front of them actually looked, following the science, clinicians moved on to megadose regimes that may have caused as many brains to be injured as were ever injured with psychosurgery. This was a New World in which patients had become dependent on the genuineness of their experts, a world in which conflict of interest was to become one of the most resonant issues.

A further factor stems ghostlike from machinery that appropriately can be traced back to figures like René Descartes, Blaise Pascal, and others, who were behind the development of statistics and probability theory. Statistics began in the eighteenth century with the mapping of peoples rather than just the mapping of land. Once it became clear that environmental factors might interact with health and longevity, the new statistics began to underpin the notion of rule of the people by the people. These statistics led to the creation of social science and epidemiology and a moral movement in health and in psychiatry. It was this that laid the basis for the Enlightenment. The interaction of probability theory and statistics laid the basis for the insurance industry and increasingly sophisticated efforts to map and manage risk. We were on our way to being the Risk Society we have now become.^{66a}

The same forces led at the end of the nineteenth century to the first attempts to map the human individual, his or her attitudes and abilities, personality, or intelligence. Scales such as the IQ scale led to new concepts of norms and deviations from those norms, and psychologists emerged to take a place in the educational system, the legal system, and in the way we govern ourselves.

This was not just the replacement of theology and philosophy—qualitative sciences—by a new set of quantitative sciences. The new statistics set up something else. They set up a market in futures. A market

in risks. In the case of the IQ test, deviations from the norm were now something that predicted problems in the future. Parents sought out psychologists in order to improve the futures for their children. This was how we would govern ourselves in the future—through the marketplace.

Psychotropic drugs entered this new market in many different ways. The oral contraceptives, for instance, are clearly not for the treatment of disease. They are a means of managing risks. Where once, the risks of eternal damnation had been those that concerned people the most, now it was a much more immediate set of risks—indicating that we had switched one set of future risks as the key ones that determined our behavior for another, more immediate set. The best-selling drugs in modern medicine do something similar—they do not treat disease. They manage risks. This is clearly true of the antihypertensives, the lipid-lowering agents, and other drugs. It is true also of antidepressants, which have been sold on the back of efforts to reduce risks of suicide.

A key methodology or technology in modern medicine emerges from the combination of probability theory and statistics—the clinical trial. We are in an era popularly portrayed as an “evidence-based medicine” era. What can go wrong if we have clinical trial evidence to demonstrate what works and what doesn’t work, if we but adhere to this evidence? What more can we do than that?

Arguably, the term “evidence-biased medicine” would be more appropriate. Clinical trials in psychiatry have never shown that anything worked. Penicillin eradicated a major psychiatric disease without any clinical trial to show that it worked. Chlorpromazine and the antidepressants were all discovered without clinical trials. Haloperidol and other agents worked for delirium, and no one ever thought to do a clinical trial to support this. Anesthetics work without trials to show the point. Analgesics work, and clinical trials are not needed to show this. Clinical trials nearly got in the way of us getting fluoxetine and sertraline.

What clinical trials demonstrate are treatment effects. In some cases, these effects are minimal. One may have to strain with the eye of faith to detect the treatment effect. The majority of trials for sertraline and for fluoxetine failed to detect any treatment effect. This is not evidence that sertraline or fluoxetine does not work. Clinical practice clearly indicates that these drugs often do work. It is, rather, evidence of the inadequacy of our assessment methods. To show that something works, we would need to go beyond treatment effects to show that these effects produce a resolution of the disorder in a sufficient number of people to outweigh problems such as the dependency syndromes that these drugs also cause. If our drugs really worked, we should not have three times the number of patients detained now compared with before, with 15 times the number of admissions and lengthier service bed stays for mood and other disorders now than we had before chlorpromazine. This is not what happened in the case of a treatment that works, such as penicillin for general paralysis of the insane.

Aside from the inadequacy of our clinical trial methods, professors of psychiatry are now in jail for inventing patients. A significant proportion of the scientific literature is now ghost written. A large number of clinical trials done are not reported if the results do not suit the company sponsoring the study. Other trials are multiply reported so that anyone trying to meta-analyze the findings can have a real problem trying to work out how many trials there have been. Within the studies that are reported, data such as results from quality-of-life scales on antidepressants have been almost uniformly suppressed. To call this science is misleading.⁶⁷ It is business. Arguably, psychiatry did not vanquish antipsychiatry in the mid-1970s, but rather both were replaced by corporate psychiatry.

The power of pharmaceutical companies in this new marketplace is such that clinicians fail to notice the catatonic features in up to 10% of the patients presenting to their units.⁶⁸ As a consequence of this failure, there is a regular series of readily preventable deaths from neuroleptic malignant syndrome. Evidence of this sort, however, does not suit the marketing interests of pharmaceutical companies, and accordingly, it is not marketed in the way that is needed to influence clinical practice. Life expectancy for schizophrenia would in fact appear to be falling.⁶⁹ And in general psychiatric patients now are far more likely to die from their mental illness than they were before the introduction of modern psychotropic drugs.⁷⁰

One of the other aspects of the new medical arena is that the most vigorous and hostile patient groups of the antipsychiatry period have been penetrated by the pharmaceutical industry. Other patient groups have been set up *de novo* by companies. Part of the market development plans for many drugs now include the

creation of patient groups to lobby on behalf of a new treatment. Meetings are convened for pharmaceutical companies specifically to advise and train on how to set up such groups. Consider “N. A. M. I.” in the U.S.A. This “national alliance for the mentally ill” was formed by patients’ family members, to lobby for the recognition that mental illness is organic brain disease, requiring neurochemical treatments.

Psychopharmacology and New Markets

All of this is perhaps part of the normal rough and tumble among clinical practice, science, and business. But there is a further, even more important aspect of what is happening, which is contained in the following quote describing his depression rating scale from Max Hamilton: “it may be that we are witnessing a change as revolutionary as was the introduction of standardization and mass production in manufacture. Both have their positive and negative sides.”⁷¹

Rating scales have been such a feature of psychiatric trials and clinical practice for so long now that it is perhaps difficult to see that there are revolutionary aspects to what happened. Indeed there is now a profusion of rating scales and checklists in schools and all walks of life. We quantify aspects of sexual behavior, aspects of the behavior of children, and a multiplicity of things we never quantified before. Where once there was life’s rich variety, now children in our schools fall outside all sorts of norms. And in the case of children falling outside norms, we now have a range of data suggesting there are things that parents can do to bring their children back inside appropriate norms. Things that we can do to minimize the risk for our children’s future. Figures that, just like the figures for IQ, it is thought, will generalize to the population at large. Figures that make a market for Prozac and Ritalin.

The figures on treatment effects from rating scales used in our clinical trials have set up a new market. The dramatic increase through the 1990s of prescriptions of Prozac and Ritalin for children from the ages of 1 to 4^{71a} makes this clear. There is an extensive literature on how corporations make markets, but pharmaceutical corporations have not sold psychotropic drugs to children. The explosion of drug use in children is a manifestation of the force that makes markets, the force that underpins the market development of pharmaceutical companies. The treatment effects from clinical trials have been taken to be findings that generalize across the community—they are taken to indicate that these agents will return children within the set of norms, thereby minimizing future risks. What parent would not want to minimize future risks for his or her child?

The eating disorders offer an analogy for what is involved. Clearly, people have starved themselves for millennia, for a variety of reasons. Anorexia nervosa emerged as something different to previous starving behaviors in the early 1870s. The syndrome appears to have increased in frequency in the 1920s and 1930s and increased yet again in the 1960s, with new variants mushrooming. Competing theories have focused on the possible psychodynamics of the problem, the biology of the problem, or sociopolitical aspects of the problems. These competing theories have rarely spoken to each other, however.

What is rarely recognized is that in the 1870s Weighing Scales emerged and with them norms for weight and deviations from the norm and an awareness that deviations in the direction of what had formerly been thought to be healthy and beautiful carried risks. The insurance industry published these figures. In the 1920s, Weighing Scales increased in frequency, and the scales, with their norms printed on the front of them, appeared in pharmacies, drug stores, and other retail outlets. In the 1960s, scales were miniaturized, so that we all ended up with Weighing Scales in our homes.

Clearly, Weighing Scales do not create eating disorders, in that even blind individuals can develop anorexia. But it is impossible to imagine eating disorders on the epidemic scale that now exists without the presence of both Weighing Scales and modern normative ideas about weight. And it is easy to imagine the removal of the feedback from Weighing Scales as being in many cases therapeutic in its own right. These new figures and norms have been a means for women to govern their bodies in a particular manner.

But the selectivity of the figures also grounds a peculiarly modern neurosis. Just as figures for gross domestic product give us feedback from some areas of endeavor but not others and in so doing encourage the promotion of automobiles and the chopping down of trees, so also figures from this one area of life, which are easy to produce, have the power to control behavior. Markets can be set up in other areas, such

as air quality and wilderness. Until such time as they are, it requires great wisdom and considerable internal resources to factor these other values into our lives.

What of the future? The history of plastic surgery holds a clue. Plastic surgery began as a set of reconstruction procedures aimed at restoring a person to his or her place in the social order.⁷² It evolved into cosmetic surgery when the reliability with which certain procedures could be carried out passed a certain quality threshold.

The word “quality” features a lot in modern health care. It does not, however, refer to the good interactions between two human beings it might have implied in the heyday of 1960s humanistic psychologies. Quality nowadays is used in an industrial sense to refer to the reproducibility of certain outcomes. Big Mac hamburgers are quality hamburgers in this sense—they are the same every time. In the case of the antidepressants, the quality of the therapeutic act in this sense is currently poor. But this stands to change with the development of pharmacogenetics and neuroimaging. It is not that our drugs are necessarily going to be dramatically more effective, but the reliability with which we will be able to produce certain responses is going to be much greater.

Viagra gives an indication of what will happen when we get to this stage. Viagra produces quality outcomes—reproducible outcomes. When this happens, it becomes possible to abandon the disease concept. In the case of Viagra, pharmaceutical company executives talk openly about lifestyle agents rather than treatments for diseases. This is the world that lies in store for us. It is not the world of traditional medicine, where drugs treat diseases to restore the social order. It is a world in which psychopharmacological interventions will potentially change that order.

But risk management and lifestyle modulation through pharmaceuticals will inevitably run up against the traditional character of medicine—which has been about restoring people to their place in the social order. One of the most graphic symbols of this now is the fact that some medicines are available on prescription only. This arrangement, which was introduced for bad drugs to restrict their availability, now applies exclusively to good drugs. The arrangement was put in place so that physicians would quarry information out of pharmaceutical companies on behalf of their patients and would provide the counterbalancing wisdom to market forces.

Since this arrangement was first put in place, modern pharmaceutical companies and corporations have grown to be among the most profitable organizations on the planet. There has been a change from companies run by physicians and chemists to companies run by business managers who rotate in from Big Oil or Big Tobacco. The companies are advised by the same lawyers who advise Big Oil and Big Tobacco and other corporations.

In the case of the tobacco industry, it now seems clear that the legal advice in the face of the problems of smoking was not to research the hazards of smoking, as to do so would increase the legal liabilities of the corporations involved.⁷³ Similar advice given to the managers of pharmaceutical corporations would be completely incompatible with prescription-only arrangements. Advice like this would convert prescription-only arrangements into a vehicle for delivering adverse medical consequences with legal impunity. There is a considerable amount of evidence that Prozac and other SSRIs can lead to suicide in susceptible individuals.⁷⁴ Whether or not the reader agrees with this, it is difficult to disagree with the fact that there has been a controversy about whether there may be a problem or not. And since the controversy blew up, there has not been a single piece of research carried out to answer the questions of whether Prozac does cause suicide or not.

This has immense implications for all of us. Now that the human genome has been mapped, we have the possibilities of creating new markets. The knowledge from the human genome will set up important markets through which we will govern ourselves. It will tell us about some of the underpinnings to our beliefs—why we believe some of the things we do in the religious and political domains. But the products of this research will belong almost exclusively to pharmaceutical corporations. If they are advised in the way that they appear to be advised at present, this democratically important knowledge will operate against the interests of democracy.

The history of biological psychiatry is a history therefore in which there are forces at play that can change not only the kinds of drugs we give, not only the conditions we think we are treating, but also our

very selves who are doing the giving—forces that can change us as profoundly as we can be changed by a handful of LSD-containing dust. For these reasons, these changes deserve scrutiny.

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Section Three

Concepts and Topics

Concepts

Chapter 14

A History of Melancholia and Depression

Stanley W. Jackson

Introduction¹

In the terms *melancholia* and *depression* and their cognates, we have well over two millennia of the Western world's ways of referring to a goodly number of different dejected states. At any particular time during these many centuries the term that was in common use might have denoted a disease or a troublesome condition of sufficient severity and duration to be conceived of as a clinical entity; or it might have referred to a symptom within a cluster of symptoms that were thought to constitute a disease; or it might have been used to indicate a mood or emotional state of some duration, perhaps troublesome, certainly unusual, and yet not pathological, not a disease; or it might have referred to a temperament or type of character, involving a certain emotional tone and disposition, and yet not pathological; or it might have meant merely a feeling state of relatively short duration, unhappy in tone, but hardly a disease. Clearly the various states so denoted were unusual mental states, but they ranged over a far wider spectrum than that covered by the term "disease."

A caveat and circumscription of my topic, reiterated at the end, is here in order. In its 2,400 year history, "melancholia" has undergone many vicissitudes of meaning. In Greco-Roman antiquity it was often used quite broadly, to include states that we would probably deem "schizophrenic" or "schizophreniform" (see Simon's chapter). Moreover, there have been authors who have stressed the disorders of reason, imagination, and judgement more than the *affective* aspect; in what is today often termed "psychotic depression"; and still others who emphasized its "vegetative" and psychomotor signs and symptoms—just as can be found in cross-cultured psychiatry today. Still, there has been powerful historical continuity in the utilization of the terms which gives primacy to the *affective* disturbances of "melancholia" and "depression"—and, to a lesser extent "mania," which has often been used to characterize psychotic states generally. *Thus, I shall be concerned to trace the history of "melancholia" and "depression" in conditions in which the affective disturbance is deemed central, though impaired judgment and the "vegetative signs" may be mentioned as well.*

As a mood, affect, or emotion, the experience of being melancholy or depressed has probably been as well known to our species as any of the many other human feeling states. The wide range of terms, and the emotional variations to which they have referred, have reflected matters at the very heart of being human: feeling down, blue, or unhappy, being dispirited, discouraged, disappointed, dejected, despondent, melancholy, sad, depressed, or despairing. We have here a range of states that surely touches something from the experience of just about everyone. At least, from the discouragement or dejection over material and interpersonal disappointments to the sadness or despondency over separation and loss, to be human is to know about such emotions. We recognize much among such affective experiences as being within the normal range, however unusual or unhappy. To be melancholic or to be depressed is not necessarily to be mentally ill or in a pathological state. It is only with the greater degrees of severity or the longer durations that such

affective states come to be viewed as pathological, and even then the affective state is usually accompanied by other symptoms before being so judged.

These latter conditions—the pathological states—constitute the focus of this chapter. It is a history of clinical disorders over the centuries.

Melancholia was the Latin transliteration of the Greek *melancholia*, which in ancient Greece usually meant a mental disorder involving prolonged fear and depression, that sometimes merely meant “biliousness,” and that, along with its cognates, in popular and medical speech was sometimes used “to denote crazy or nervous conduct.”² This term, in turn, was derived from *melaina chole*, translated into Latin as *atra bilis* and into English as *black bile*. As one of the four humors in the humoral theory, the black bile was thought to be the crucial etiological factor in melancholia. Various other disorders were thought to be caused by the black bile, and they came to be referred to as *melancholic diseases*. The black bile was referred to as the *melancholic humor*. The temperament or character type given special status in the Aristotelian writings, and thought to be due to the black bile, was named the *melancholic temperament*.

The various forms of the term *melancholia*, taken with relatively little change from the Latin, began to appear in English writings in the fourteenth century. Terms such as *melencolye*, *melancoli*, *malencolie*, *melancholie*, *melancholy*, and others with only slight variations in spelling, emerged as synonyms for melancholia, with this latter as the basic term in medical thought. *Melancholie* in the sixteenth century and *melancholy* by the beginning of the seventeenth century became common in English as equivalent terms to *melancholia* for naming the disease, as did nearly identical terms in other vernacular languages; and these terms were also frequently used to mean the black bile itself. With the Renaissance rehabilitation of Aristotelian melancholia as a character correlate of genius or being gifted rather than strictly an illness, *melancholia*, *melancholie*, and *melancholy* came to be popular terms as well. In addition to denoting the illness, they were often used for almost any state of sorrow, dejection, or despair, not to mention respected somberness and fashionable sadness. During the seventeenth and eighteenth centuries *melancholia* seems gradually to have become restricted once again to the disease, while *melancholy* remained both a synonym for melancholia and a popular term used with a breadth and diffuseness not unlike our use of the term depression today. Remarkably similar trends occurred in many of the other vernacular languages of Western Europe. Hence we are examining the popular, as well as the medical, literature.

The term *depression* is a relative latecomer to the terminology for dejected states. Devised originally from the Latin *de* (“down from”), *premere* (“to press”), and *deprimere* (“to press down”), and carrying the meanings from these Latin terms of pressing down, being pressed down, and being brought down in status or fortune, this term came into use with these meanings in English during the seventeenth century. In that same century there were occasional instances of it being used to mean “depression of spirits” or “dejection.” But it was during the eighteenth century that *depression* really began to find a place in discussions of melancholia, with Samuel Johnson having a prominent role in this emerging trend.³ In contexts more closely associated with medicine, Richard Blackmore in 1725 mentioned the possibility of “being depressed into deep Sadness and Melancholy, or elevated into Lunacy and Distraction.”⁴ Robert Whytt in 1764 associated “depression of mind” with low spirits, hypochondriasis, and melancholy.⁵ David Daniel Davis in 1806 translated, from the French of 1801, Philippe Pinel’s *Treatise on Insanity*, rendering “l’abattement” as “depression of spirits” and “habitude d’abattement et de consternation” as “habitual depression and anxiety.”⁶ John Haslam in 1808 referred to “those under the influence of the depressive passions.”⁷ Samuel Tuke in 1813 included under melancholia “all cases ... in which the disorder is chiefly marked by depression of mind.”⁸

The nineteenth century saw an increasingly frequent use of *depression* and related terms in literary contexts to mean depression of spirits, melancholia, and melancholy; and the use of the same terms in medical contexts gradually increased. These latter uses were usually in descriptive accounts of melancholic disorders to denote affect or mood, rather than having yet acquired any sort of formal status as diagnostic terms. Wilhelm Griesinger around the mid-century introduced the term *states of mental depression* (*Die psychischen Depressionzustände*) as a synonym for *melancholia* (*Melancholie*), while using *depression* and its kin mainly to indicate affect or mood in the manner just mentioned.⁹ *During the latter half of the nineteenth century the descriptive uses of depression to indicate affect became increasingly common, but the basic diagnostic term was still usually melancholia or melancholy.* Much like Griesinger, Daniel Hack Tuke, in his

Dictionary of Psychological Medicine in 1892, listed *mental depression* as a synonym for *melancholia*, and defined *nervous depression* as “a term applied sometimes to a morbid fancy or melancholy of temporary duration,”¹⁰ but he dealt with clinical states of dejection under *melancholia*.¹¹ In the 1880s in his *Lehrbuch*, among the psychoses Emil Kraepelin began using *depressive insanity* (*depressive Wahnsinn*) to name one of the categories of insanity (*Wahnsinn*), and he included a *depressive form* (*depressive Formen*) as one of the categories of paranoia (*Verrucktheit*), but he continued to employ *melancholia*, and subtypes thereof, in a manner quite in keeping with his times and to use *depression* mainly to describe affect.¹² Parenthetically, he considered the melancholias to be forms of *mental depression* (*psychischen Depression*), Griesinger’s term.¹³ In 1899 he introduced *manic-depressive insanity* as a diagnostic term.¹⁴ Since that time some form or variant of the term *depression* has had a prominent place in most nosological schemes for mental disorders. The trend away from the use of the term *melancholia* and toward *depression* may have been furthered by Adolf Meyer. The report of a discussion in 1904 indicates that he was

desirous of eliminating the term melancholia, which implied a knowledge of something that we did not possess If, instead of melancholia, we applied the term depression to the whole class, it would designate in an unassuming way exactly what was meant by the common use of the term melancholia.”¹⁵

As just indicated, *depression* was increasingly to be found in psychiatric classifications toward the end of the century, and yet the basic diagnostic term for dejected states still tended to be *melancholia*. Then, with the emergence of the category of manic-depressive disease, the term *melancholia* became much less prominent, although it continued to be present in the form of *involutional melancholia*. This latter diagnostic term has since disappeared as a distinct disorder, reappeared, and then disappeared again. But the term *melancholia* has recently emerged once again, this time as a subtype of the *major depressive episode* in the newest classificatory system. This *depression with melancholia* has the implication of a more severe form of depression, and is characterized by symptoms much like those of the earlier category of *endogenous depression*.

The Vicissitudes of a Clinical Description

At the heart of this historical study is a clinical condition—call it a disease, a syndrome, or what you will. For the Hippocratics in the fifth and fourth centuries B.C.E., this clinical disorder was often associated with “aversion to food, despondency, sleeplessness, irritability, restlessness,” and was named *melancholia*.¹⁶ In another Hippocratic context, fear was added to sadness, and these two passions were given cardinal status as symptoms of melancholia; in addition, the idea of chronicity was introduced with the comment that these emotional disturbances being “prolonged” was what indicated that the person suffered from melancholia.¹⁷

In the medical writings of ancient Greece and Rome a convention gradually developed in which melancholia, mania, and phrenitis were conceived of as the three main types of madness. They were frequently compared to and contrasted with one another. It was usual to think of phrenitis as an acute disease and of melancholia and mania as chronic diseases. Phrenitis characteristically involved delirium and fever, while melancholia and mania were differentiated from it by a lack of fever. The introduction to chapters and treatises on melancholia came to include comments to the effect that melancholia was a chronic type of madness without fever (in implied contrast to phrenitis on both counts) and with the main symptoms of sadness and fear (an implied contrast to the elation and boldness of mania).

During the second century, the clinical description acquired further details, and took on a form that became more or less standard in Islamic and Western medical writings for nearly fifteen hundred years. The crucial contributions to this extended description were made by Rufus of Ephesus at the beginning of that century.¹⁸ He noted that those suffering from melancholia were gloomy, sad, and fearful, and he stated that the chief signs were fear and doubting, with a single delusional idea and yet quite sane on all other matters.¹⁹ He said that

some are anxious about loud noises, and some wish they were dead, and some delight in washing, and some had an aversion to any food or drink, or detested some kind of animal; and some believed that they had swallowed snakes and the like.²⁰

Some melancholics saw dangers where there were none; some saw advantages in objects in which there were none; some feared their friends, and others the whole of mankind. In addition, melancholics tended to turn from the company of others and to seek solitude. Rufus cited various delusions that were to become characteristic in later accounts of melancholia, such as the person who believed himself to be an earthenware pot, the person who thought that his skin had dried up and become like parchment, and the person who thought that he did not have a head. He referred to chronic dyspepsia as an important symptom, mentioned flatulence, and alluded to a tendency to commit suicide. He mentioned a longing for coitus in melancholia, and attributed it to melancholic flatulence. He noted blinking and protruding eyes, thickened lips, darkening of the complexion, development of hairiness, and speech difficulties. He commented that melancholia was more common in men than women, but that it was more serious in women when it did occur. It did not occur in adolescents, but it occasionally occurred in infants and in young boys; it was sufficiently common in the elderly as to seem to be an intrinsic feature of growing old. Furthermore, Rufus grouped cases of melancholia into three categories according to where he thought the basic site of the disease was: (1) a type in which "the whole body is full of a melancholy blood"; (2) a type in which "only the brain has been invaded"; and (3) a type in which "the hypochondria" were "primarily affected."²¹

Later in the second century, Galen²² declared that the most essential symptoms were contained in the Hippocratic statement to the effect that prolonged fear and sadness constituted melancholia. The remainder of his clinical description closely followed that of Rufus, whose writings on melancholia he acknowledged with considerable respect. He also added to the list of examples of delusions, emphasizing how varied and individual they were. He also took up Rufus's triadic classification, with one type thought to be a primary disease of the brain, and hypochondriac melancholia and the type involving the whole blood both thought to affect the brain secondarily.

Galen's shaping of Rufus's views joined Rufus's own presentation of melancholia to become the major influences in most accounts of melancholia over nearly a millennium and a half. In one combination or another, these two influences can be traced in the writings of the various medical compilers of the early medieval centuries²³ and in the works of various Arabic medical writers. A particularly significant figure among the Arabic authors on melancholia was Ishaq ibn Imran²⁴ in the early tenth century. Following Galen to a significant extent and explicitly drawing on Rufus's views in many ways, Ishaq left a work on melancholia that was, in turn, followed closely by Haly Abbas and Avicenna, among other Arabic authorities. It was this very work of Ishaq's that was translated by Constantinus Africanus to become the latter's *De Melancholia*²⁵; Constantinus's treatise had a significant influence on later medieval and Renaissance views on melancholia in the Latin West. Avicenna's chapters on melancholia in his *Canon of Medicine*²⁶ joined Constantinus's work as another key influence in that same era. Derived from Haly Abbas, who, in turn, had been strongly influenced by Ishaq, Avicenna's writings on melancholia were translated into Latin by Gerrard of Cremona. Subsequently, these works of Avicenna and Constantinus served to hand down Rufus's and Galen's views on melancholia and to maintain them as crucially influential even into the seventeenth century.

During the sixteenth and seventeenth centuries, several modifications were gradually made in the clinical accounts of melancholia. First, the sadness, and often the fear as well, came to be described as being "without cause" or "without apparent cause." Although this element can be traced in the occasional earlier description, it gradually became a standard feature during the sixteenth century. Second, references to guilt, sometimes explicit, sometimes implicit, crept into descriptions of melancholia with increasing frequency, beginning in the sixteenth century. Although Bright²⁷ in the late sixteenth century had taken considerable pains to differentiate the dejected state of melancholia from the similar state associated with "the conscience oppressed with sence of sinne," others were introducing such guilt-laden concerns into accounts of at least some cases of melancholia, and this became more common in the seventeenth century. Parenthetically, it is at least suggestive to find this feature emerging after the Reformation and to note its increasing presence in accounts of melancholia in the post-Lutheran era of greater emphasis on individual responsibility and stern Protestant emphasis on guilt and punishment. Third, the presence of a particular delusion had long been cited as a common symptom, and as early as Rufus it had been observed that the afflicted person seemed quite sane on topics other than that of his or her delusion. This latter point was not

commonly mentioned for a long while, but in the sixteenth century it began to be referred to more often, and during the seventeenth century it became a frequent descriptive observation. Along with these trends, costiveness came to be mentioned with increasing frequency. Often cited over the centuries as a causal factor, it gradually found a place among the symptoms of melancholia.

At the end of the sixteenth century, two leading medical men, Andre Du Laurens and Felix Platter, wrote on melancholia in ways that stood as authoritative in their day, were representative of Renaissance medical thought on melancholia, rested squarely on the foundations laid by Rufus and Galen, and became major sources for Robert Burton in his engaging and encyclopedic *The Anatomy of Melancholy* in 1621. Graduate, professor of medicine, and eventually chancellor of the university at Montpellier, Du Laurens published a treatise on melancholia in 1597 that was referred to again and again in the seventeenth and eighteenth centuries.²⁸ Professor of medicine, then dean of the medical school at Basel, and outstanding clinical teacher, Platter included an influential presentation of melancholia in his textbook *Praxeos Medicae*, which was first published in 1602, had several further editions in the seventeenth century and into the eighteenth century, and was repeatedly cited throughout that era.²⁹ Du Laurens defined melancholia as “delirium” or “a kind of dotage without any fever, having for his ordinarie companions, feare and sadnes, without any apparent occasion”; and then he added, “We call that dotage, when some one of the principal faculties of the minde, as imagination or reason is corrupted.”³⁰ Platter introduced his clinical description in somewhat similar terms, elaborating more on the theme of “sadness without cause.” Melancholia was defined as

a kind of mental alienation [*mentis alienatio*] in which imagination and judgment are so perverted that without any cause the victims become very sad and fearful. For they cannot adduce any certain cause of grief or fear except a trivial one or a false opinion which they have conceived as a result of disturbed apprehension.³¹

Although there were no such indications in Du Laurens’s treatise, Platter’s account mentioned themes of being bad, being damned, and fearing punishment. These features seem to have been reflections of the emerging trend of including guilt as a symptom, and they remind the modern reader of the self-criticism of many twentieth century depressives. Both authors followed the practice of citing a long list of noteworthy melancholic delusions, drawing upon “the Greeke, Arabian, and Latine writers” who had gone before them and adding new examples from their own clinical experience; in addition, they both emphasized how varied and individual these were for each melancholic. Both authors alluded to cases in which the derangement was limited, with Du Laurens doing so in terms that were becoming characteristic for descriptions of melancholia. The latter cited two cases in which the person seemed to be quite rational on topics other than that of his delusion. In one of these, the man “had not his imagination troubled, otherwise then in this one only thing, for he could speak mervailously well of any other thing”; and in the other, “in other points hee is able to talke very sensible.”³² Both authors emphasized the fearfulness in its various manifestations, at times to the point of avoiding others and becoming quite suspicious; and both emphasized the sadness, sometimes to the point of despair and even suicide. Sleeplessness and disturbed sleep were given their usual mention, with Du Laurens being particularly eloquent:

He is subject to watchfulness, which doth consume him on the one side, and unto sleepe, which tormenteth him on the other side: for if he think to make truce with his passions by taking some rest, behold so soon as hee would shut his eyelids, hee is assayled with a thousand vaine visions, and hideous buggards, with fantastical inventions, and dreadful dreames.³³

Du Laurens and Platter each gave particular attention to “Hypochondriake or flatuouse” melancholia, with its variety of gastrointestinal symptoms, weakness and tiredness, and other aches and pains.

Although the essentials of melancholia’s clinical description changed little during the seventeenth century, Thomas Willis played a significant role in two trends. After an extended account of the traditional list of fears and delusions that might plague a particular melancholic, Burton had stated, “Yet for all this, . . . *in all other things they are wise, staid, discreet, & do nothing unbeseeing their dignity, person, or place.*”³⁴ In this he was reflecting the extent to which the notion of a partial derangement had become common in writings on melancholia. Willis addressed this issue somewhat differently. He differentiated melancholia into

two types: a *universal* type in which “the distempered are *Delirious* as to all things, or at least as to most; so that they judge truly almost of no subject”; and a *particular* type in which “they imagine amiss in one or two particular cases, but for the most part in other things, they have their notions not very incongruous.”³⁵ This perspective was to become even more important during the eighteenth century, with the universal type of disorder becoming associated more with mania and the particular type emerging as the only type of melancholia. In fact, *partial insanity* was to become a central aspect of the very definition of melancholia.³⁶

Willis was crucially involved in another shift in descriptive content. This time a whole constellation of symptoms associated with melancholia was pruned away and given quite separate nosological status.³⁷ He took the syndrome known as hypochondriacal or windy melancholia—fear and sadness accompanied by flatulence, digestive disturbances, and various other aches and pains—and grouped these “hypochondriack distempers” with the hysterical disorders among the “convulsive diseases.” He observed that such hypochondriacal disorders were commoner in men, though not exclusive to them, and, conversely, that hysterical disorders were commoner in women, though not exclusive to them. Probably influenced by Willis’s views, Thomas Sydenham strongly advocated this notion that hypochondriacal conditions in men and hysterical conditions in women were closely related, even that they were essentially the same.³⁸ These two authorities set the stage for numerous authors in the first half of the eighteenth century to espouse similar views in a near cascade of writings on the subject.³⁹ This whole process led to the hypochondriacal symptom-complex being redefined as a separate disorder known as hypochondriasis or “the spleen,” which was less and less frequently thought of as a form of madness, although still often viewed as kin to melancholia. In this same era, beginning with Herman Boerhaave,⁴⁰ hypochondriasis began a career as a milder disorder on a continuum of severity that could lead to melancholia, a separate disorder, or even develop further into mania, another separate disorder. Eighteenth century medical authors began to comment that melancholia did not include symptoms of dyspepsia, such symptoms marking the disorder as that kindred disease, hypochondriasis.⁴¹

By the late eighteenth century, doubts were being expressed about melancholia being a partial insanity,⁴² but, at the turn of the century, Philippe Pinel⁴³ reaffirmed the idea of a limited derangement. He further noted that “the symptoms generally comprehended by the term melancholia are taciturnity, a thoughtful pensive air, gloomy suspicions, and a love of solitude.” While he observed that this disorder was “characterized by great depression of spirits, pusillanimous apprehensions and even absolute despair,” and that some melancholics manifested suicidal inclinations, he also noted that some cases involved symptoms more commonly associated with mania. Jean-Etienne-Dominique Esquirol⁴⁴ described melancholia along traditional lines as “that form of delirium which is characterized by moroseness, fear, and prolonged sadness.” Like his teacher, Pinel, he viewed it as a partial derangement. In contrast to Pinel, though, he was troubled by the tendency to lump together a minority of “mania-like” monodelusional cases with the more usual fearful and sad cases. Accordingly, he pruned away the former group, and reflected his concern about the history of the term *melancholia* by suggesting that the latter group be renamed *lypomania*. He then defined melancholia (or lypomania) as “a cerebral malady, characterized by partial, chronic delirium, without fever, and sustained by a passion of a sad, debilitating or oppressive character.” *After Esquirol, the descriptive outline tended to be restricted to that of a severe depressive disturbance.* As controversies arose about the status of the very concept of partial insanity, melancholia’s clinical description gradually lost its references to such an idea.

During the nineteenth century, although melancholia continued to be commonly associated with delusions, they gradually became less necessary to the accepted clinical description. Simple melancholia or melancholia without delusion emerged as a recognized subtype that might or might not worsen into melancholia with delusion. Increasingly, the emphasis was on the affective disturbance as the essential element in the clinical picture rather than on the delusional thinking. Conceived of as secondary to the dejected state with its distressed preoccupation, the retardation of thought and physical activity was increasingly viewed as an aspect of the descriptive core. Although, often enough, the delusional type was described as monodelusional, with increasing frequently the person was described as delusional beyond such limits; when delusions were present, it was increasingly recognized that they were mood-syntonic, and thus tended to be delusions of guilt and sin, other forms of self-derogatory delusions, delusions of poverty, delusions of serious physical illness, or nihilistic delusions.

Nineteenth century writings on melancholia reflected the emergence of a strong descriptive tradition, particularly as developed by Esquirol and as carried forward by such as Wilhelm Griesinger⁴⁵ and Richard von Krafft-Ebing.⁴⁶ Toward the end of the century this tradition was taken up and carried well into the twentieth century by Emil Kraepelin. During the nineteenth century these descriptive contributions increasingly entailed careful attention to the *course* of a disorder, perhaps reflecting the growing populations in psychiatric institutions and the concomitant increase in opportunities to follow the course of these illnesses over longer periods. *By the end of the nineteenth century Kraepelin was bringing the course of an illness into focus as a crucial source of perspective on and understanding of psychiatric conditions.*

At this juncture, we need to recall that there had been a long and intimate association between melancholia and mania, the latter characteristically involving a state of derangement with excitement, at times grandiosity, and at times wild behavior. Mania and melancholia were often likened to one another as chronic forms of madness without fever; and they were just as often contrasted to one another as having the opposite sort of symptoms. *Over the centuries, many an author observed that some cases of melancholia changed into mania and vice versa.* With Boerhaave⁴⁷ came the continuum of severity, ranging from hypochondriasis to melancholia to mania, and these conditions could change from one into the other by moving back or forth along that continuum. In the mid-nineteenth century, Griesinger⁴⁸ employed a variation of the Boerhaavian model, but with these conditions as stages of disorder within a single disease: the concept of a unitary psychosis (*Einheitspsychose*). Also around the mid-century, Jules Baillarger⁴⁹ and Jean-Pierre Falret,⁵⁰ each a leading French alienist and a student of Esquirol, related some of these two disorders to one another as aspects of a single cyclical disorder. *Finally, in the 1890s, Kraepelin⁵¹ brought mania and melancholia into an even more intimate connection, collecting most such states together under the rubric manic-depressive insanity, and using contrasting triads of symptoms to illustrate the cores of the respective clinical pictures: mania with its flight of ideas, exaltation, and overactivity; depression with its inhibition of thought, depression of feelings, and psychomotor inhibition.* In the Kraepelinian tradition that dominated the first half of the twentieth century, the extended description of depression also provided a continuing home for many of the signs and symptoms from past extended descriptions of melancholia, clinical elements that had never really left melancholia's clinical picture and yet were not necessarily all present in any particular case: sleeplessness, loss of appetite, loss of weight, constipation, loss of sexual interest, restlessness, irritability, anxiety, self-derogatory concerns, suicidal inclinations, and delusions. These descriptive trends have been argued about, removed and reinserted, added to and subtracted from, and refined in various ways; yet this general constellation remains familiar and relevant to those who have known depressed patients well.

Modes of Explanation

Over a period of approximately two thousand years, from the Hippocratic writings to the late seventeenth century, the predominant scheme for explaining diseases in general, and mental disorders in particular, was the humoral theory. In its developed form, this theory involved four humors—yellow bile, black bile, blood, and phlegm—which were associated with good health when in balance or equilibrium and with disease when there was an imbalance, an excess of one or more of the humors. Each humor was thought to be in the ascendancy in one of the four seasons, and each was characterized by a paired combination of qualities: yellow bile was warm and dry, black bile was cold and dry, blood was warm and moist, and phlegm was cold and moist. Of the four humors, the black bile, associated with the autumn and with the qualities of coldness and dryness, was the crucial one in the etiology and pathogenesis of melancholia. The substance of the brain was thought to be affected by an excess of black bile, which caused this cold and dry disease. An important variation in the pathogenesis occurred in hypochondriacal melancholia, one of the three subtypes, in which a local excess of black bile in the primary site, the hypochondriacal region, was thought to give off smoky vapors that rose to the brain, affecting it secondarily to cause melancholia.

The idea of a variant form of black bile—named unnatural black bile, melancholia adusta, or burnt black bile—was eventually added to this system of explanations. Derived from Rufus of Ephesus and developed

further by Galen, this notion led later physicians to think in terms of (1) natural black bile as one of the four basic humors, sometimes derived from basic foodstuffs and merely present, and sometimes as a thick and cold residue derived from the blood by a process of chilling, and (2) unnatural black bile, which was formed by the corruption, overheating, or burning of yellow bile. The former was the key etiological factor in classical melancholia with its dejection and fear; the latter was thought to account for a limited number of cases of melancholia in which excitement rather than dejection prevailed. Gradually this idea of an unnatural black bile, or adjust melancholy, was developed further to a situation in which a process of burning or combustion could affect any one of the four natural humors and so lead to the formation of burnt or adjust black bile. It became common to think of there being potentially four types of this adjust black bile, each corresponding to one of the natural humors. It was variously suggested that such a process might be caused by improper diets, physiological disorders, or immoderate passions. The burning process would lead to a hot adjust melancholy and, with cooling, eventually result in cold adjust melancholy that resembled natural black bile in its appearance and its effects.

Also important to the humoral theory, and to the pathogenesis of melancholia, was the spleen, which had a particularly significant connection with the black bile. In the Hippocratic writings, it was identified as “spongy and of loose texture” and thus having the capacity to “easily absorb fluid from the nearby parts of the body.”⁵² From there, despite the assertion by Erisistratus that it was an organ of no consequence, it eventually acquired the crucial status in Galen’s writings of a spongy organ that served to filter out “the thick, earthy, atrabillious humors that formed in the liver.”⁵³ The spleen’s normal function of filtering out the atrabillious humor served to maintain good health. Its defective function could lead to an excess of black bile in the system and so to a case of melancholia. Melancholic dregs in the spleen were thought by many to be the source of the smoky vapors that rose from the hypochondriacal region to the brain to cause hypochondriacal melancholia.

Another explanatory scheme, derived from ancient medicine and associated with Galen, was that of the *six non-naturals* or the *six things non-natural*.⁵⁴ Although varying slightly, they were usually (1) air, (2) exercise and rest, (3) sleep and wakefulness, (4) food and drink, (5) excretion and retention of superfluities, and (6) the passions or perturbations of the soul. Their role in a person’s life being proper or proportionate was associated with health, and being improper or disproportionate led to disease. This doctrine ranked alongside the humoral theory in the explanation of both health and disease but remained in active use well beyond the demise of the humoral theory. These factors were frequently given careful attention in considering the pathogenesis of melancholia, in outlining therapeutic plans for melancholic patients, and in managing their care. The doctrine, within its category of the passions or perturbations of the soul or mind, provided a way to take account of the role of the emotions, including grief and sorrow, in the etiology of disease.

Grounded in the Hippocratic writings, significantly contributed to by Rufus, and shaped by Galen and various later Galenists, these explanations lasted well into the seventeenth century. *By the late seventeenth century, though, the humoral theory was losing its preeminent place in medical explanations, and eventually these changes were reflected in the efforts to explain melancholia. With his conceptual roots in the relatively new iatrochemical notions, Willis⁵⁵ argued that melancholia was not caused by a melancholic humor, that is, the black bile. Instead of the traditional elements, qualities, and humors, he held that all bodies were composed of the five principles of the chemists: spirit, sulphur, and salt (the three active principles), and water and earth (the two passive principles). From their various motions and by their proportions in mixtures, these principles accounted for both normal phenomena and pathological conditions. Instead of humoral disequilibria, for his explanation of pathogenesis he turned to the doctrine of fermentation. He elaborated a chemical pathophysiology of the brain and animal spirits to explain the gloomy and disordered nature of the melancholic’s thoughts. The nervous liquor, which was the vehicle for the animal spirits and was usually mild, benign, and subtle, was changed to an acetous and corrosive condition with functional and, at times, structural pathological changes in the brain; this nervous fluid had become vinegary or sour as a result of fermentation. As to melancholia’s sadness and fear, the blood tended to circulate less well and to stagnate in the precordia, with reduced circulation to the head and extremities. The vital part of the soul became constricted in its function, and the animal part of the soul became less vigorous, to result in the sadness; both parts of the soul were “suddenly repressed and compelled as it were to shake,”*

with the fear as a result. *These new explanations were short-lived in theories of melancholia, however, and mechanical explanations soon began to displace them. In fact, there were hydrodynamic notions interwoven with Willis's iatrochemical ideas.*

The mechanical philosophy had gradually become a significant feature of seventeenth century science, and so the fundamental explanations of physical phenomena came to involve *the motion and interaction of the various particles of matter. As an aspect of this trend, mechanical principles, corpuscular notions, and hydrodynamic theories changed the nature and language of physiology during the latter half of that century.* The far-reaching impact of Harvey's establishment of the circulation of the blood gave special encouragement to the use of hydrodynamic ideas. *By the 1690s, mechanical theories were being adapted to explanations of melancholia, and by the early eighteenth century such theories had become central to such explanations.* Significant among the earlier efforts to so explain melancholia were those of Archibald Pitcairn,⁵⁶ Friedrich Hoffmann,⁵⁷ and Boerhaave,⁵⁸ each of whom developed a medical theory based on hydrodynamic principles, dynamic microparticles, and forces of attraction. They each rooted their notions of pathogenesis in various forms of disordered flow in their system of circulation (blood, lymph, nerve fluid). Pitcairn's and Boerhaave's views were essentially vasocentric, with the basic disorder in fluid flow being in the blood. While Hoffmann gave considerable attention to disordered blood flow in his explanations of disease, he veered toward a neurocentric view when he addressed mental disorders. For Pitcairn and Hoffmann the central theme in melancholia was a sluggishness or slowing of the circulation of the blood in the brain, resulting in a less lively nerve fluid and in the person become slow and sad. Boerhaave, too, thought in terms of a slowing of the circulation of the blood, but he reasoned that the lighter and more moveable parts of the blood were reduced in among, or eliminated by, the causes of melancholia and that the residual sludge then accounted for the slowed circulation and sad state. He retained the name *black bile* for this residual material thus mechanically derived.

By the mid-eighteenth century, the trend was away from the earlier corpuscularian notions and a vasocentric orientation and toward a neurocentric system with an ethereal nerve fluid in which irregular motions could lead to melancholia. Influenced by Isaac Newton's speculations on nervous transmission and by recent electrical investigations, some thought *that the nerve fluid might be electrical in nature.* Increasingly, it was an ethereal nerve fluid that did not flow but, instead, served as a medium for the transmission of oscillatory or vibratory motions. *Melancholia was no longer the result of a slowing of flow in the nerve fluid but, rather, a torpor or decreased mobility in a nerve fluid that did not flow.* William Cullen considered *that the nerve fluid might be electrical in nature, and constructed a theory of pathogenesis based on either too much or too little energy in the brain and mobility in the nervous fluid.* Associating the anergic behavior of the melancholic person with the idea of a depleted state, melancholia was thought to be the result of a depleted amount of excitement. Cullen's excited and depleted states are reminiscent of the charged and discharged electrical states of an emerging explanatory fashion.⁵⁹

Around the turn of the nineteenth century, Benjamin Rush⁶⁰ returned to a vasocentric orientation for the explanation of disease in general, including melancholia. The basic cause was to be found in the blood vessels of the brain, particularly the arteries, and led to morbid and irregular motions. Over the course of the nineteenth century, it was asserted, and reasserted, that mental disorders, including melancholia, were essentially diseases of the brain, with Griesinger's statement perhaps the most famous version of this credo:

Insanity itself, an anomalous condition of the faculties of knowledge and of will, is only a symptom Physiological and pathological facts show us that this organ [i.e., the one affected in mental diseases] can only be the brain; we therefore primarily, and in every case of mental disease, recognize a morbid action of that organ ... we must not speak of diseases of the soul alone ... but of diseases of the brain.⁶¹

The vast majority of authorities emphasized *hereditary factors* as the primary causative influences, with these factors leading to a "nervous constituting" or "irritable weakness" of the nervous system and so predisposing the person to melancholia. Depressing emotions, long continued, might cause stagnation and slowing of the circulation; or circulatory slowing might lead to lowered nutrition of the brain and so to a melancholic state. *In more general terms, a vasocentric emphasis was often maintained, but it was reconciled with a neurocentric orientation by an emphasis on the circulation of the blood in the brain, with*

resultant cerebral pathology. From the mid-century onward, though, there was increasingly neurocentric emphasis with references to problematic states of the "nerve apparatus" and to irregularities or inadequate levels of the "nerve-force." Mental disorders, including melancholia, resulted from interruptions or disturbances of the processes of proper nutrition, stimulation, and repose of the brain. Cerebral hyperemia or congestion of the cerebral vessels was thought to lead to excited forms of insanity; and cerebral anemia or a deficiency in the nutritive powers of the cerebral blood supply, and resultant nerve-cell decay, were thought to lead to depressed or melancholic forms of insanity. In another version, cerebral anemia led to psychic pain, thence to inhibition, and so to the symptom picture of melancholia. There were recurrent references to reduced nervous energy, lack of nervous energy, reduced nerve activity, lowering of the tension of the nerve energy, inefficiency or slackening in the mode of working of the nerve-elements, undue feebleness of nerve action, fatigue or exhaustion of the nervous system, and a lack of nervous force. *In summary, the century emphasized hereditary predispositions, degeneracies, cerebral anemias, cerebral irritations, nutritional deficiencies of the brain, depleted nerve energies, defective nerve functions, and schemes of nerve cell deficiency.*

In the twentieth century and beyond, efforts to explain melancholia and depression have brought into being their fair share of etiological hypotheses and hypothetical pathogenetic sequences. Often based on psychoanalytic and psychotherapeutic data, psychological explanations have come to have a more significant place than had usually been the case in the past. Against a background of inadequate or disturbed psychological nurturance in infancy and early childhood, with resultant personality developments entailing predispositions, themes of loss and or inadequate or diminished self-esteem have been thought particularly significant. Hostility and rage directed toward the self has waxed and waned as an explanation. Arguments have been put forward for various sociocultural factors as instrumental in the development of depression, often seeking to account for the same issues as the psychological explanations. *Adolf Meyer*⁶² *objected to the whole idea of disease entities and to the array of biological explanations proposed to explain them. Instead, he argued for the more modest notions of "situation, reaction, and final adjustment," a scheme of "reactions as part of an adjustment, a response to a demand."* His reaction types replaced Kraepelin's disease entities, and the *affective reaction types* became the nosological home for the various melancholic and depressive illnesses. Such views were taken up by many in the first half of the twentieth century. *Biologically based theories have continued to be prominent, however, in efforts to explain depressive disorders.* More-sophisticated genetic investigations have strengthened the argument for a hereditary factor in many cases. Endocrine studies and data on electrolyte metabolism supported other theories. Particularly prominent have been the themes and variations associated with the biogenic amine hypotheses. Earlier formulations of this sort suggested that depression was associated with a functional deficit of one or more neurotransmitter amines at critical synapses in the central nervous system. Although neuroscientists working in this realm have since argued that such a formulation is too simplistic, many of them seem convinced that some version of such a hypothesis will eventually prevail. *As one group of authorities has put it, "the depressive disorders seem to be a group of interrelated neuroendocrinometabolic disorders."*

A Few Themes and Many Therapies

Three basic principles and a small number of underlying themes have provided the underpinnings of a wide variety of treatment measures, both the giving of substances and the implementation of procedures. This was true in the medicine of ancient times, throughout the long reign of the humoral theory and Galenic medicine, and, to a surprising extent, during recent centuries as well. *Over many centuries, no matter what medical theory or other scheme of reasoning was being used, usually present has been the view that there was an optimal balance of factors that meant stability and health. An imbalance or disequilibrium usually meant disease.* And so, again and again, treatment measures were developed to return a state of disequilibrium to a state of equilibrium. This might be termed *the principle of equilibrium*, an ancestor of Bernard's homeostatic principle. Two other basic principles, secondary principles in relation to the primary principle of

equilibrium, have been: (1) *eliminating an excess, or supplementing a deficiency*, in order to reestablish a balance, and (2) *the principle of contraries*, whereby a quality (or qualities) was thought to be in excess and therapeutic agents of the opposite quality (or qualities) were prescribed to neutralize the excess and restore a balance.

In the context of humoral theory, with melancholia caused by an excess of black bile, a central theme was thus to eliminate this excess. Accordingly, one or another evocative procedure was thought to be indicated, with a reputed capacity to evacuate black bile constituting an essential qualification for being prescribed. When the entire blood was affected, Rufus of Ephesus⁶³ and Galen⁶⁴ advised blood-letting for the purpose of evacuation, but otherwise they thought that this procedure was only very occasionally indicated. Their preferred mode of evacuation was through purgation, with dodder of thyme, aloe, colocynth, and black hellebore variously mentioned. Some medicaments were suggested that were thought to cut or thin the thick humor and so facilitate the evacuant efforts of the purgatives. Evacuation by clysters was mentioned, as were medicaments that would serve evacuation as diuretics and sudorifics. Coitus was mentioned as both evocative and calming. The reestablishment of the menstrual flow or the hemorrhoidal flow was thought to facilitate the evacuation of the pathogenic humor. This pattern of evocative recommendations, with variations here and there, guided the therapeutics of melancholia over many centuries, even into the seventeenth century.

Much in the way of therapeutic advice was based on classical concerns with the regimen—the six non-naturals: air, sleep and wakefulness, food and drink, exercise and rest, evacuation and retention, and the passions—and was guided by the principle of contraries. The patient's diet should be planned so as to nourish him, while avoiding foods that favor the production of black bile. Warming and moistening effects against the qualities of melancholia were sought through a careful choice of food and drink. Massages with warm and moist ointments were prescribed for this cold and dry disease. Warm baths were advised for the coldness and dryness. If possible, the air should be warm and moist. Melancholia's wakefulness was to be countered with remedies for sleep. Measures were recommended to divert the patient from his delusional preoccupations or to correct his thinking. Pleasant company was advised against his inclination to solitude and diverting activities against his inclination to inactivity. The perturbations of sadness and fear were to be countered by a pleasant atmosphere, encouragement, and reassuring measures. Joy and gladness, as warm and moist passions, were sought in order to change the person from his cold and dry sadness. Protection against suicidal inclinations was urged. *As with most of the therapeutic measures outlined in this chapter, with only minor variations this regimen continued to be part of the treatment recommendations for melancholia over a period of fifteen hundred years or more.*

Rufus urged the importance of early recognition and prompt treatment of melancholia; guided by this view, Galen emphasized treatment with frequent baths and a moist, nourishing diet as sufficient to cure melancholia when it was recognized in its early stages. This less drastic treatment program continued to be recommended over the centuries, being joined by Paul of Aegina's⁶⁵ additional advice that "suitable exhilaration of mind" be provided.

For hypochondriacal melancholia in particular, with its various gastrointestinal symptoms, Rufus advised measures to relax the stomach, the promotion of a good digestion, and mild cathartics. Such patients should be warmed by the application of heat to the hypochondriac regions. Oribasius⁶⁶ recommended fomentations and poultices with a decoction of various medicaments reputed to soothe intestinal pains and diminish flatulence.

In the still Galenic medicine of the seventeenth century, blood-letting, purgatives, and, to a lesser extent, emetics were recommended for melancholia, with an eye to evacuating the black bile; often associated with these measures were traditional cautions that the purgatives should be gentle and that venesections should be undertaken with due respect for the patient's weakened state. Diet was to be light and easily digested, with due attention to warm and moist foods in this cold and dry disease. Also emphasized were cheerful company and diverting activities, warm bathing, and moderate exercise. It often seemed as though the prescriber had run down a checklist of the six non-naturals. Although he developed a rather different theory of melancholia in keeping with the chemical notions to which he subscribed, Willis⁶⁷ changed very little in the way of therapeutic practices. He recommended venesection in moderate quantity, gentle purgatives, and emetics, with the aim of relieving the body of its burden of pathological materials. He wrote

about stimulating and strengthening the animal spirits, which aim was to be served by his evocative remedies and by diverting the soul from its troubling passions and cheering up the person. Among other measures, he mentioned gentle hypnotics for sleeplessness and spa waters that contained iron and various remedies containing steel for the purpose of strengthening the nervous juice. Otherwise employing traditional remedies, Willis was innovative here in advising the use of these metals, perhaps reflecting the Paracelsian trend toward the use of metals in therapeutics.

*From Pitcairn in the late seventeenth century to Cullen in the late eighteenth century, we continue to find a remarkable consistency of therapeutic themes.*⁶⁸ Mechanical explanations for melancholia emerged and flourished, and yet they did little to change the treatment practices usually recommended. Blood-letting was usually advocated, but caution was urged in view of the melancholic patient's weakened state. Some authors thought that menstrual or hemorrhoidal flow should be promoted if they had been suppressed. Purgatives were consistently mentioned, but always with the caveat that they should be mild. Some mentioned emetics, again with warnings that they not be too strong. There was the occasional mention of materials containing steel or iron for their tonic effect. Hypnotics were only rarely suggested. Dietary advice was frequently given, with the emphasis on a light yet nourishing diet for a weakened person in need of strengthening. Exercise was frequently recommended, and sometimes riding or travel, or both, with the goal of energizing a debilitated patient. Providing cheerful conversation, diverting the melancholic from his fixed line of thought, and stimulating other emotions were each commonly mentioned. *The principle of contraries was often cited as the basis for a therapeutic regimen.* Other central themes that supported treatment recommendations, sometimes made explicit but often implicit, were the evacuating of pathological materials, the dissolving or thinning of a thickening in the blood so that a slowed circulation might return to normal, the enlivening of a weakened nerve fluid, and the strengthening and bestirring of a weakened and slowed-down person.

Later, as mechanical explanations lost much of their preeminent position, patterns of treatment still changed relatively little. Cullen's neural pathogenesis, along with his ethereal nerve fluid, his hints of electrical explanation, and his view of melancholia as a state of depleted excitement, had only minor effects on his treatment of melancholia. *As had various predecessors, he attempted to systematize new theories of physiology and pathogenesis without abandoning traditional therapeutic methods.*

There was increasing attention to "management" and psychological interventions in eighteenth century accounts of therapeutic advice for melancholia. Melancholia had long been approached in terms of a physiological psychology and thought to be rooted in a disordered physiology. Perhaps the influence of Georg Ernst Stahl⁶⁹ and Jerome Gaub⁷⁰ on an emerging psychosomatic orientation during this century contributed to this increasing evidence that medical authorities thought that psychological measures might crucially change this condition. On the other hand, some of this advice seems to have been derived from *the older tradition of attention to the passions (as one of the non-naturals)* on the basis of the principle of contraries.

At the turn of the nineteenth century, Pinel⁷¹ demonstrated more of a tendency to break with the traditional therapeutics of melancholia than perhaps any single predecessor. In addition to his familiar questioning of the "rigorous system of coercion" that he found in his own institutions, he expressed serious reservations about treating melancholic patients "in the usual way, by copious and repeated blood-letting, water and shower baths, low diet," and he developed grave reservations about medications in general and evacuants in particular, although he considered tonic remedies appropriate. *Instead, he advocated a program of moral treatment, that is, the development of a milieu and the implementation of attitudes designed to influence the troubled patient toward recovery.* For melancholic patients he emphasized the importance "of forcibly agitating the system; of interrupting the chain of their gloomy ideas, and engaging their interest by powerful and continuous impressions on their external senses." He advised pleasant surroundings and entertaining and diverting activities, although he was prepared to resort to "energetic measures of coercion" in the case of serious suicidal threat. He was also a strong advocate of the by-then-familiar art of counteracting debilitating passions by other passions of equal or superior force, a program usually guided by the principle of contraries. *Of particular interest here is the fact that these significant changes were primarily based on clinical experience, both his own and that of influential colleagues in the institutional setting. Other contemporaries, though, continued to follow a tradition of evocative therapies.*

Esquirol,⁷² Pinel's leading student, recommended much more a mixture of the traditional and the innovative. He advocated moral treatment in a way that marked him both as a student of his teacher and a leader in his own right. He outlined much that was familiar, especially detailed advice as to regimen in the tradition of the non-naturals. For all the mildness of his use of such measures, though, he still found a basis for various evocative remedies.

This mixture of approaches was reflected in the advice of both contemporaries of Esquirol and many who came later. Then there were increasing references to milder approaches in early cases and less severe cases, with psychological measures emphasized more and medications and other procedures less. The more severe the illness, the more the treatment measures resembled those of the past, although blood-letting was less and less frequently advocated. Opium was increasingly mentioned for sleeplessness and as a calming agent, only to be largely abandoned by the end of the century. In a change reflecting the increasing availability of hospitals for mental disorders, hospitalization was usually recommended for more severe cases, both as a protection against suicidal inclinations and as a means of removing the patient from the context in which his illness had developed. The principles of moral treatment were invoked for the care and management of both the milder and the more severe cases and for both those in and out of the hospital. Themes akin to the traditional attention to the non-naturals were often found embedded within the treatment advice, although usually expressed in much less explicit ways than previously. By the end of the nineteenth century, ideas of nerve weakness and depleted nerve energy were often providing the rationale for more frequent recommendations of tonics and stimulants.

By the beginning of the twentieth century, Kraepelin's⁷³ views on melancholia and depression were in the ascendancy. He built his therapeutic program with the "rest cure" as its foundation. He emphasized the removal of the patient from the context in which he had taken ill, to an asylum in more severe cases and "to a different boarding-place or into the associations of a happy family" in milder cases. The details of his program included bed rest, constant care, nutritious diet in small amounts at frequent intervals, warm baths rather than sedatives for insomnia, and precautions against suicidal inclinations. Hypnotics might be used if milder measures did not suffice. The "psychical influence" of those in attendance was emphasized, with a "gentle, friendly, and assuring" manner advocated for "alleviating distress, modifying the delusions, and relieving the anxiety." He advised against visits from relatives at the height of the disease. "Insight into the disease and the return of sleep and nutrition to the normal state" were thought to be indices of recovery.

*Meyer*⁷⁴ recommended an approach with an even more central role for psychological measures. He advocated a search of the reactive picture for points of modifiability, for foci for intervention and change. He conceived of treatment as "service in behalf of the patient," but he underscored the importance of the patient as a collaborator in the treatment endeavor. Then he outlined his own "common sense" version of psychotherapy, with kindly, humane overtones and involving a searching, practical use of the patient's life history and current situation. He gave careful attention to the hospital milieu and to how the patient might fit into the hospital regime and best be served by it. In the process, he mentioned such matters as attention to sleep and nutrition, occupational therapy, hydrotherapy, and recreational activities. He followed "a regime of work, rest, and play, socialization and discussion with physicians."

Most writings on the treatment of melancholia and depression during the first several decades of the twentieth century reflected the themes laid out by Kraepelin and Meyer, until the emergence of the "shock" treatments in the 1930s, first with metrazol and then with electricity. Psychological treatment measures—psychoanalysis and various psychotherapies—came to be used increasingly, both in inpatient and outpatient settings. More recently, antidepressant medications—monoamine oxidase inhibitors and tricyclic antidepressants—have entered the scene as valuable therapeutic agents. For bipolar affective disorders, lithium and anti-seizure medications have come into frequent use.

Further Considerations

As we have seen, the boundaries of what has been diagnosed as melancholia have varied considerably over the centuries. In earlier centuries, clearly a wider range of conditions was included within those boundaries

than has been the case since the early nineteenth century. By modern standards, a portion of those earlier cases would probably be diagnosed as schizophrenia, whether because depression within the experience of schizophrenia is now differentiated from major depressive disorders or whether as a reflection of efforts in more recent times to differentiate subdued and withdrawn states from subdued and depressed states. Certainly, the dilemmas of differentiation are sometimes so difficult that they have precipitated out the diagnosis of schizo-affective disorder. Sadness and fear (anxiety) have always been part of the syndrome of melancholia; depression and anxiety are commonly together as symptoms of modern major depressive disorders; and discouragement by whatever name along with anxiety in whatever form are surely common in the experience of suffering from schizophrenia.

An issue with some kinship to this one has kept recurring through much of the long history of melancholia. For many centuries, it took the form of whether the delusional thinking often present in melancholia reflected damage to the imagination or to the intellect. Perhaps to put it as a question as to whether melancholia entailed a thought disorder might stray into the realm of anachronism. *But the actual questions were: Was the damage to the imagination, with the reason or intellect correctly grasping the product of a deranged imagination? Or was the damage to the intellect, with the deranged intellect misconceiving what was being accurately conveyed by the imagination? In terms of the classical theory of cerebral localization, the "cell" doctrine,⁷⁵ was the damage to the anterior cell of the brain or to the middle cell?* Through the sixteenth century and into the seventeenth century, the balance of opinion favored the idea that the imagination was the faculty affected, with some suggesting that the faculty of reason might also become damaged, but only secondarily and depending on the extent and duration of the melancholic disorder. With the eighteenth century trend toward defining melancholia as partial insanity, there was an accompanying trend toward the view that the primary damage, albeit circumscribed, was to the intellect. *With the triadic scheme of faculties shifting from imagination-intellect-memory to emotions-intellect-will, the emotional disturbance was thought of as secondary to the circumscribed damage to the intellect. During the latter part of the eighteenth century, however, affects were increasingly given a central and fundamental place in considerations of mental life. This gradually led to assigning the emotions an importance that approximated that of the intellect—a far cry from the Stoic disapproval of affects!* By the early nineteenth century, as opinion was shifting away from the conviction that melancholia was definable as partial insanity; the tendency was less and less to conceive of the emotional state as being determined by primary damage to the intellect, and more and more to think of the primary damage being in the realm of the emotions with the intellect only affected secondarily. *As the nineteenth century progressed, this emerging notion of a primary affective disorder became central in considerations of melancholia, with delusional thinking not an essential feature, in fact only occurring if the melancholic disorder became more severe or more protracted. Eventually this trend led to the influential Kraepelinian dichotomy at the end of the century: nondeteriorating conditions (affective disorders) grouped together as manic-depressive disease and deteriorating conditions (thought disorders) grouped together as dementia praecox, later schizophrenia. In one form or another, a category of affective disorders has continued as a nosological home for melancholias and depressions, and a state of dejection has continued to constitute at least a part of their essence.* Although mood-syntonic delusions have continued to be common, delusions are not deemed essential to the diagnosis of an affective disorder. Affective disorders have continued to be differentiated from thought disorders, although this has not always been an easy task.

As we consider these various questions about where the boundaries of depressive disorders should be set, and what should and should not be included within these boundaries; *it becomes clear that depressive disorders have not achieved the status of disease in its more rigorous meanings.* A set of ideal requirements would ask for a well-patterned group of signs and symptoms that varied within relatively narrow limits, a body of predictably recurring pathoanatomic and/or pathophysiological findings, a specific and identifiable etiologic factor (or factors), a standard pathogenesis, and a predictable course and outcome. In the case of depressive disorders, for all the variations and for all the diagnostic difficulties that may occur, there has been a remarkable consistency of clinical content over the centuries and a significant coherence of symptoms and their relationships. In spite of some shifts and changes, at any particular time this content

has remained quite recognizably connected with its ancestors and its descendants. At the clinical level, the recurrence of relatively consistent patterns continues, most of the time, to allow the diagnosis of depressive disorder. The lack of a consistent pathological anatomy or pathophysiology, however, and the variety of predisposing and precipitating factors continues to mean that such a diagnosis—disease or not disease—is *of the nature of a clinical syndrome*. “Who was this sufferer before he became afflicted with a depressive disorder?” and “Who is he still?” continue to be crucial issues in understanding any specific instance of clinical depression. Much that prompted Meyer to argue for the status of *reaction type* rather than *disease* is still there to argue about. Moreover, much that supported the proponents of the endogenous–reactive dichotomy is still there to support them. Although the emergence of the germ theory of disease, of bacteriological and related fields, and of other important contributions to more rigorous standards for what is considered a disease has brought medicine to a different era, *medicine in general shares more problems with the clinician dealing with someone’s clinical depression than it often cares to admit*.

In conclusion, this account would be incomplete without at least a brief reference to the fact that, from time immemorial, when persons have been dejected, sad, melancholic, or depressed, they have been open to quite a range of reactions from other persons, all the way from rejecting and disapproving to accepting and concerned. Even allowing for the personalities and idiosyncrasies of the respondents, it still seems that the recurring tendency to dichotomous extremes and a continuum of response has reflected differences in the distressed persons. In melancholia and depression, from the Hippocratic writings down to the present, there have been clear indications that sadness or dejection was a crucial feature and yet that irritability and a tendency to turn away from other people were also common features. The “others” in the immediate world of the severely dejected person, whether the latter was grief-stricken or severely melancholic, have found themselves faced with a range of expressions of distress, whether explicit or mute, from appealing solicitations for care and nurturance to irritating demands for attention and “supplies.” These “others,” in turn, have found themselves reacting across a range from sympathetic comfortings and concerned efforts to provide care to irritated, rejecting responses and harsh exhortations. Often enough, the troubled, distressed person has evoked a concerned response, up to a point; beyond that, however, many “others” have backed away or otherwise changed the nature of their response. In attempting to understand these rather different manifestations of dejected states and the rather different responses “others” have experienced in response to the sufferers, many have sought to discern *the “messages” in the various signs and symptoms*. In a range from painful distress to insatiable neediness, from mute appeal to angry demand, they have thought that they discerned such inner meanings in the various clinical features of melancholia and depression. From the compelling effect of a needy distress to the repelling effect of an angry demand, their own responses have come to make better sense in these ways. If we think in terms of the endogenous–reactive dichotomy for a moment, however, some might be able to accept such ideas of communicative import much more readily for the reactive depressions than they would for endogenous depressions.

However objective we may become about *depression* or about a particular *depressed person*, however carefully we may manage to identify neurophysiologic and neurochemical factors in clinical depressions, someone else’s depression, defined as clinical or otherwise, is ultimately going to come home to us as a fellow human being who also has needs, who also knows something about personal losses, disappointments, and failures, who also knows something about being sad and dejected, and who has some capacity for distressed response to such a distressing state. *With such distress, we are at the very heart of being human*.

Notes and References

1. For many aspects of this study, a more detailed account may be found in the author’s *Melancholia and Depression: From Hippocratic Times to Modern Times* (New Haven, CT: Yale University Press, 1988). As with that larger work, the author is indebted in ways beyond number to Joan K. Jackson, Ph.D.
2. [Hippocrates], *Works of Hippocrates*, trans. and ed. W. H. S. Jones and E. T. Withington, 4 vols. (Cambridge, MA: Harvard University Press, 1923–1931), 1:1viii; W. H. S. Jones, *Malaria and Greek History ...* (Manchester: The University Press, 1909), p. 100.

3. In 1752 Johnson used the phrase “observed their depression.” Samuel Johnson, *The Rambler*, in W. J. Bate and Albrecht B. Strauss (eds.), *The Yale Edition of the Works of Samuel Johnson*, Vols. 3–5 (New Haven, CT: Yale University Press, 1969), 5:298. In 1761 in his diary he wrote of being “under great depression.” George Birkbeck Hill (ed.), *Johnsonian Miscellanies*, 2 vols. (Oxford: Clarendon Press, 1897), 1:26. In 1763, in writing about William Collins, he stated that “he languished some years under that depression of mind which enchains the faculties without destroying them, and leaves reason the knowledge of right without the power of pursuing it.” Samuel Johnson, *Lives of the English Poets*, ed. George Birkbeck Hill, 3 vols. (Oxford: Clarendon Press, 1905), 3:338. Boswell followed his lead, noting that, at the time of completing the Preface to his *Dictionary* in 1755, “Johnson’s mind appears to have been in such a state of depression.” James Boswell, *Boswell’s Life of Johnson ...*, ed. George Birkbeck Hill, 6 vols. (Oxford: Clarendon Press, 1887), 1:297. Although Johnson made these various uses of the noun “depression” that seem to foreshadow the language of late nineteenth and twentieth century psychiatry, he did not offer any such definitions in his *Dictionary*. On the other hand, in his *Dictionary*’s entry for the verb “to depress,” he made it clear that one meaning involved “to deject” or “to depress the mind,” and he included supporting examples from Locke, Addison and Prior. Samuel Johnson, *A Dictionary of the English Language ...*, 2 vols. (London: J. and P. Knapton; T. and T. Longman; C. Hitch and L. Hawes; A. Millar; and R. J. Dodsley, 1755).
4. Richard Blackmore, *A Treatise of the Spleen and Vapours ...* (London: J. Pemberton, 1725), p. 95.
5. [Robert Whytt], *The Works of Robert Whytt, M.D.* (Edinburgh: T. Becket, and P. A. Dehondt, and J. Balfour, 1768), p. 623.
6. Ph. Pinel, *A Treatise on Insanity ...*, trans. by D. D. Davis (Sheffield: Cadell and Davies, 1806), pp. 143, 149. For the original text, see Ph. Pinel, *Traite Medico-Philosophique sur l’Alienation Mentale, ou la Manie* (Paris: Richard, Caille et Ravie, 1801), pp. 143, 149.
7. John Haslam, *Observations on Madness and Melancholy ...*, 2nd ed. (London: J. Callow, 1809), p. 43.
8. Samuel Tuke, *Description of the Retreat ...* (York: W. Alexander, 1813), p. 216.
9. Wilhelm Griesinger, *Die Pathologie und Therapie der psychischen Krankheiten ...* (Stuttgart: Adolph Krabbe, 1845), pp. 152–208.
10. D. Hack Tuke (ed.), *A Dictionary of Psychological Medicine ...*, 2 vols. (Philadelphia: P. Blakiston, Son & Co., 1892), 1:354.
11. *Ibid.*, 2:787–798.
12. Emil Kraepelin, *Psychiatrie. Ein kurzes Lehrbuch für Studierende und Aerzte*, 2nd ed. (Leipzig: Ambr. Abel, 1887), pp. 281–287, 329–352, 213–241.
13. *Ibid.*, p. 213.
14. Emil Kraepelin, *Psychiatrie. Ein Lehrbuch für Studierende und Aerzte*, 6th ed., 2 vols. (Leipzig: Johann Ambrosius Barth, 1899).
15. [Adolf Meyer], *The Collected Papers of Adolf Meyer*, ed. Eunice B. Winters, 4 vols. (Baltimore: Johns Hopkins Press, 1951), 2:568.
16. Hippocrates, *Works* (n. 2), 1:263.
17. *Ibid.*, 4:185.
18. [Rufus], *Oeuvres de Rufus d’Ephese*, ed. and trans. C. Daremberg et C. E. Ruelle (Paris: J. B. Bailliere et Fils, 1879), pp. 354–359, 454–457. Here and throughout this study, unless it is indicated otherwise, translations are by the author.
19. This may be the earliest recorded instance of this view that melancholia entailed a limited degree of insanity.
20. *Ibid.*, p. 455.
21. *Ibid.*, pp. 358–359, 457.
22. Galen, *On the Affected Parts*, trans. and ed. Rudolph E. Siegel (Basel: S. Karger, 1976), pp. 89–94.
23. E. g., [Oribasius], *Oeuvres d’Oribase*, 6 vols., eds. U. C. Bussemaker and C. Daremberg (Paris: Imp. nationale, 1851–1876), 1:541, 4:97, 5:409–412; [Alexander of Tralles], *Oeuvres Medicales d’Alexandre de Tralles*, 4 vols., ed. F. Brunet (Paris: P. Geuthner, 1933–1937), 2:223–235; [Paul of Aegina], *The Seven Books of Paulus Aeginata*, 3 vols., trans. and ed. Francis Adams (London: Sydenham Society, 1844–1847), 1:44, 383–385.
24. Manfred Ullman, *Islamic Medicine* (Edinburgh: Edinburgh University Press, 1978), pp. 72–75.
25. Constantini Africani, *Opera ...*, 2 vols. (Basileae: H. Petrus, 1536–1539), 1:280–298.
26. Avicennae, *Liber Canonis De Medicinis ...*, trans. by Andreas Alpagus (Venetiis: apud Iuntas, 1582), pp. 204–205.
27. T. Bright, *A Treatise of Melancholie ...* (London: Thomas Vautrollier, 1586).
28. Andreas Laurentius, *A Discourse of the Preservation of the Sight: of Melancholike Diseases; of Rheumes, and of Old Age*, trans. Richard Surphlet (London: Ralph Iacson, 1599), pp. 72–140.
29. Oskar Diethelm and Thomas F. Heffernan, “Felix Platter and Psychiatry,” *J. Hist. Behav. Sci.*, 1965, 1, 10–23.
30. Laurentius, *Of Melancholike Diseases* (n. 28), pp. 86–87.

31. Diethelm and Heffernan, "Felix Platter" (n. 29), p. 15.
32. Laurentius, *Of Melancholike Diseases* (n. 28), pp. 102–103.
33. *Ibid.*, p. 82.
34. Robert Burton, *The Anatomy of Melancholy*, ed. Floyd Dell and Paul Jordan-Smith (New York: Tudor Publishing Co., 1948), p. 331.
35. Thomas Willis, *Two Discourses Concerning the Soul of Brutes Which is that of the Vital and Sensitive of Man*, trans. S. Pordage (London: Thomas Dring, Ch. Harper, and John Leigh, 1683), p. 188.
36. Stanley W. Jackson, "Melancholia and Partial Insanity," *J. Hist. Behav. Sci.*, 1983, 19, 173–184.
37. [Thomas Willis], *Dr. Willis's Practice of Physick, Being the Whole Works of that Renowned and Famous Physician*, trans. S. Pordage (London: T. Dring, C. Harper, and J. Leigh, 1684), pp. 69–92.
38. [Thomas Sydenham], *The Entire Works of Dr. Thomas Sydenham ...*, 3rd ed., ed. John Swan (London: E. Cave, 1753), pp. 408, 416, 421–422.
39. E.g., B[ernard] De Mandeville, *A Treatise of the Hypochondriack and Hysterick Passions ...*, 2nd ed. (London: Dryden Leach, 1715); Blackmore, *Treatise of the Spleen and Vapours* (n. 4); Nicholas Robinson, *A New System of the Spleen, Vapours, and Hypochondriack Melancholy ...* (London: A. Bettesworth, W. Innys, and C. Rivington, 1729); George Cheyne, *The English Malady: or, a Treatise of Nervous Diseases of all Kinds ...* (London: G. Strahan and J. Leake, 1733).
40. [Herman Boerhaave], *Boerhaave's Aphorisms: Concerning the Knowledge and Cure of Diseases* (London: A. Bettesworth and C. Hitch, W. Innys and R. Manby, 1735), pp. 312–320.
41. E.g., William Cullen, *First Lines of the Practice of Physic*, new ed., 4 vols. (Edinburgh: C. Elliot and T. Cadell, 1786), 4:177–180.
42. *Ibid.*, 4:168–170, 174–175. For further details on the theme of partial insanity, see Jackson, "Melancholia and Partial Insanity" (n. 36).
43. Pinel, *Treatise on Insanity* (n. 6), pp. 136–149.
44. E. Esquirol, *Mental Maladies. A Treatise on Insanity*, trans. E. K. Hunt (Philadelphia: Lea and Blanchard, 1845), pp. 199–233.
45. W. Griesinger, *Mental Pathology and Therapeutics*, 2nd ed., trans. C. Lockhart Robertson and James Rutherford (London: New Sydenham Society, 1867), pp. 209–272.
46. R. von Krafft-Ebing, *Text-Book of Insanity ...*, trans. Charles Gilbert Chaddock, intro. Frederick Peterson (Philadelphia: F. A. Davis Co., 1904), pp. 286–312.
47. Boerhaave, *Aphorisms* (n. 40), pp. 312–320.
48. Griesinger, *Mental Pathology* (n. 45), pp. 209–318.
49. Jules Baillarger, "Note sur un genre de folie dont les acces sont caracterises par deux periodes regulieres, l'une de depression et l'autre d'excitation," *Bull. Acad. Imperiale Med.*, 1853–1854, 19, 340–352 (31 Janvier 1854).
50. Jean-Pierre Falret, "Memoire sur la folie circulaire, forme de maladie mentale caracterisee par la reproduction successive et reguliere de l'etat maniaque, de l'etat melancolique, et d'un intervalle lucide plus ou moins prolonge," *Bull. Acad. Imperiale Med.*, 1853–1854, 19, 382–400 (14 Fevrier 1854).
51. Emil Kraepelin, *Psychiatrie. Ein Lehrbuch fur Studierende und Aerzte*, 5th ed. (Leipzig: Johann Ambrosius Barth, 1896), pp. 595–653; Kraepelin, *Psychiatrie*, 6th ed. (n. 14), 2:359–425. The important conceptual changes first appeared in the fifth edition and the now familiar terminological changes in the sixth edition. The English translation commonly cited is from the eighth edition: Emil Kraepelin, *Manic-Depressive Insanity and Paranoia*, trans. R. Mary Barclay, ed. George M. Robertson (Edinburgh: E. & S. Livingstone, 1921).
52. G. E. R. Lloyd (ed.), *Hippocratic Writings*, trans. J. Chadwick, W. N. Mann, I. M. Lonie, and E. T. Withington (Hammondsworth: Penguin Books, 1978), p. 85.
53. Galen, *On the Usefulness of the Parts of the Body*, trans. and ed. Margaret T. May, 2 vols. (Ithaca, NY: Cornell University Press, 1968), 1:232. See also Galen, *On the Natural Faculties*, trans. Arthur John Brock (Cambridge, MA: Harvard University Press, 1963), pp. 203–209.
54. The term *non-naturals* (not innate) was used to refer to a group of acquired environmental factors, usually six in number, the careful management of which was thought to be crucial to health in the sense that later came to be referred to as *hygiene*, and any of which could cause disease if imbalance or disproportion was the case. These were distinguished from the seven *naturals* (innate), which were the factors of normal function, the *basic science* of ancient medicine: the elements, the temperaments, the humors, the parts of the body, the faculties, the functions, and the spirits. These naturals were innate, constitutional factors that might be disturbed in disease or whose disturbance (particularly the humors) might be crucial in the pathogenesis of a disease. The non-naturals were also distinguished from the *contra-naturals*, which were the causes of disease in the usual sense of the term

- pathology*. Probably having their origin in a set of factors listed by Galen in his *Ars medica*, the non-naturals became standard and significant elements in later versions of Galenic medicine. The term (non-natural) and the phrase (six non-naturals) only came into common use in the wake of Latin translations of Arabic works largely based on Galen, but the term *non-natural* was used by Galen in works on the pulse, and he seemed to imply that both the term and the classification of factors antedated him. Despite intermittent discontent with the term, the non-naturals continued to receive significant attention in medical works well into the eighteenth century, and eventually concerns about such matters became the physical and moral (psychological) hygiene of more recent times. L. J. Rather, "The 'Six Things Non-Natural': A Note on the Origins and Fate of a Doctrine and a Phrase," *Clio Medica*, 1968, 3, 337–347; Saul Jarcho, "Galen's Six Non-Naturals: A Bibliographic Note and Translation," *Bull. Hist. Med.*, 1970, 44, 372–377; Jerome J. Bylebyl, "Galen on the Non-Natural Causes of Variation in the Pulse," *Bull. Hist. Med.*, 1971, 45, 482–485; Peter H. Niebyl, "The Non-Naturals," *Bull. Hist. Med.*, 1971, 45, 486–492.
55. Willis, *Soul of Brutes* (n. 35), pp. 188–201. For an introduction to Willis's use of the "Principles of Chemists," see Willis, *Practice of Physic* (n. 37), pp. 2–8.
 56. Archibald Pitcairn, *The Philosophical and Mathematical Elements of Physick* (London: Andrew Bell and John Osborn, 1718), pp. xvii–xxviii, 19–72, 186, 192–193, 288, 338.
 57. Friedrich Hoffman, *Fundamenta Medicinae*, trans. and intro. Lester S. King (London: MacDonald, 1971), pp. 6–13, 40–41, 70–72.
 58. Boerhaave, *Aphorisms* (n. 40), pp. 312–320.
 59. For a detailed account of various mechanical explanations in melancholia, of the first hints of electrical explanation, and of Cullen's views, see Stanley W. Jackson, "Melancholia and Mechanical Explanation in Eighteenth-Century Medicine," *J. Hist. Med. Allied Sci.*, 1983, 38, 298–319.
 60. For his theory of disease, see Benjamin Rush, *Medical Inquiries and Observations*, 3rd ed., 4 vols. (Philadelphia: Matthew Carey et al., 1809), 3: 1–66. For its application to diseases of the mind, including melancholia, see Benjamin Rush, *Medical Inquiries and Observations upon the Diseases of the Mind*, 3rd ed. (Philadelphia: J. Grigg, 1827), pp. 15–16.
 61. Griesinger, *Mental Pathology* (n. 45), pp. 1, 7.
 62. Meyer, *Collected Papers* (n. 15), 2:595–602.
 63. Rufus, *Oeuvres* (n. 18).
 64. Galen, *On the Affected Parts* (n. 22); Rudolf E. Siegel, *Galen's System of Physiology and Medicine* (Basel: S. Karger, 1968), pp. 321–322.
 65. Paul of Aegina, *Seven Books* (n. 23).
 66. Oribasius, *Oeuvres* (n. 23).
 67. Willis, *Soul of Brutes* (n. 35), pp. 188–201.
 68. Pitcairn, *Elements of Physic* (n. 56), pp. 192–193; [Friedrich Hoffman], *A System of the Practice of Medicine ...*, trans. William Lewis and Andrew Duncan, 2 vols. (London: J. Murray and J. Johnson, 1783), 2:302–303; Boerhaave, *Aphorisms* (n. 40), pp. 314–318, 322–323; [Richard Mead], *The Medical Works of Richard Mead, M.D.* (London: C. Hitch et al., 1762), pp. 90–94; Cullen, *First Lines* (n. 41), 3:266–267, 269–272, and 4:184–186.
 69. L. J. Rather, "G. E. Stahl's Psychological Physiology," *Bull. Hist. Med.*, 1961, 35, 37–49.
 70. L. J. Rather, *Mind and Body in Eighteenth Century Medicine: A Study Based on Jerome Gaub's De Regimine Mentis* (Berkeley: University of California Press, 1965).
 71. Pinel, *Treatise on Insanity* (n. 6), pp. 101–102, 180–184, 223–224, 228–231.
 72. Esquirol, *Mental Maladies* (n. 44).
 73. A. Ross Diefendorf, *Clinical Psychiatry: A Text Book for Students and Physicians, ...* (New York: The Macmillan Co., 1902), pp. 264–266. From the sixth German edition of Kraepelin's *Lehrbuch der Psychiatrie*.
 74. Adolf Meyer, *Psychobiology: A Science of Man*, foreword by Nolan D.C. Lewis, ed. Eunice E. Winters and Anna Mae Bowers (Springfield, Ill: Charles C. Thomas, 1957), pp. 156–186.
 75. In its simplest form this theory involved three faculties of the mind—imagination, reason, and memory—and localized them within the ventricles of the brain. The lateral ventricles considered as one cavity constituted the first or anterior cell and contained *imagination*.

Chapter 15

Constructing Schizophrenia as a Category of Mental Illness

Sander L. Gilman

Toward a Definition of the Scope of a History of *Schizophrenia*

How can we define the *illness* we label *schizophrenia*? As there seems to be no clear and definite answer to this question, I will assume the existence of a nosological category called “schizophrenia” and will also assume that this category was constructed historically.¹ Thus our present diagnostic criteria for *schizophrenia* evolve out of a constant analysis and restructuring of other concepts, which are formed to create the category of *schizophrenia*. Unlike most other disease entities in psychiatry, *schizophrenia* is still a label in search of a structure; it is a category applied to a rather large group of symptoms with an almost equal number of etiologies proposed for it.

Some histories of the concept of *schizophrenia* have tried to push this disease entity into the distant past in order to prove its historical uniformity. Nowhere is this inherently futile attempt more radical than in the brief history of *schizophrenia* prefacing the clinical discussion of the concept in Freedman, Kaplan, and Sadock’s *Comprehensive Textbook of Psychiatry* (1976). They begin “as early as 1400 B.C.” with “a Hindu fragment from the Ayur-Veda” that describes “a condition, brought on by devils, in which the afflicted is gluttonous, filthy, walks about naked, has lost his memory, and moves about in an uneasy manner.”² The authors make no attempt to understand that this description is the projection of mid-twentieth century diagnostic criteria into the historical past. This is not to reject such documentation as evidence for a set of symptoms. These clearly are linked by this text. What Freedman, Kaplan, and Sadock undertake is to define the disease *schizophrenia* in such a manner that this association of symptoms becomes the disease entity *schizophrenia*. Such a projection of mid-twentieth century labels into the distant past assumes some type of inherent continuity, not in the language used to describe the illness, but in the illness itself. This assumption pushes the concept of *schizophrenia* into the company of somatic pathologies, which is where, as I shall show, mid-twentieth century psychiatry would very much like to place it. It assumes that the perception of the illness is constant across space and time, does not reflect the presuppositions of culture, is in no way colored by the associations with the stigma of mental illness (or its glorification), and is basically invariable, a view this present history of schizophrenia cannot assume. Indeed the wide variation in the symptoms ascribed to this disease and seeming alteration over time would tend to argue against such views. Like the presentation of hysteria in nineteenth century Vienna, certain “classic” presentations of *schizophrenia* have become clinical rarities. “Waxy flexibility”—for nineteenth century psychiatry one of the most salient proofs of the existence of the disease entity that was called catatonia and that became (as I shall show) part of the definition of schizophrenia—has all but vanished from the late twentieth century presentation of the disease.³ Nor shall I assume that *schizophrenia* is merely a label for the social control of those perceived as at variance with the norms or goals of a society. *Schizophrenia* is an illness; it is probably a disease (rather

than a syndrome); perhaps even more likely “it” is a group of related diseases and disorders, the relations among which and specific etiologies of which are still unknown.

I shall thus begin my history of the concept of *schizophrenia* with the caveat elegantly expressed by Henry Monro in an essay published in 1856 on “The Nomenclature of the Various Forms of Insanity,” that the terminology applied to psychopathologies alters the perception of the illness itself. He observed that a philosophical and sufficient nomenclature for the various forms of Insanity is still a desideratum, and must, I fear, remain so, until the physiology and pathology of the brain are better understood, and the relationship of mental with cerebral phenomena more accurately determined.⁴

To this one can add, early in the twenty-first century, that such a sufficient nomenclature for *schizophrenia* may also depend on a greater understanding of the psychological phenomena that certainly also play a substantial role in shaping, if not causing, that illness or family of illnesses labeled “schizophrenia.” In his classic monograph on *schizophrenia*, Eugen Bleuler argued much the same point in his desire to abandon the designation of *dementia praecox* for the new label of *schizophrenia*.⁵

I shall examine the history of the concept of *schizophrenia*, that is, the nosological category coined at the beginning of the twentieth century that builds on nineteenth century psychopathologic categories. This view will run counter to positions such as that taken by Jane M. Murphy on the parallel existence of similar modes of behavior, perceived as abnormal, across many cultures. Indeed, such studies of medical anthropology use a normative definition of psychopathology generated by combining specific sets of signs and viewing them as symptoms of a unified disease entity. The creation of such a “disease entity” called *schizophrenia* is, however, an artifact of the ideologies implicit in nineteenth century European and American medical nosologies.⁶ It is not the semiotics of an “objective” set of symptoms that is of interest to the historian of *schizophrenia*, but rather the ideology associated with the entire structure of disease that is extrapolated (correctly or incorrectly) from this set of phenomena. Thus the cultures that Jane M. Murphy and other scholars of comparative medical anthropology have examined reflect different conceptual structures in organizing their understanding of signs into comprehensible patterns.⁷ It is the ideology ascribed to these perceived patterns (and the implication of this ideology for patterns of treatment) that is central to any history of the concept of *schizophrenia*. Thus H. Tristram Engelhardt is quite correct to see *schizophrenia* as a pattern of explanation rather than as a disease in itself or as an eidetic type of phenomenon.⁸ The very choice of the term *schizophrenia* as the designation of what has come to be the central focus for the study of mental illness in the course of the twentieth century was an attempt to create an innovative category out of the ideological presuppositions inherent in the various component categories subsumed by Bleuler into his new disease entity *schizophrenia*. It is the background to the creation of this term and the influence of this term that shall be the subject of my history.⁹

The Background of the Concept of *Schizophrenia*

While some may wish to trace the origins of the illness labeled *schizophrenia* back into the mists of time, it is clear that the central conceptual paradigm that *schizophrenia* replaced was *dementia praecox*. Indeed, Eugen Bleuler’s first major book on the topic of schizophrenia, published in 1911, is entitled *Dementia praecox or the Group of Schizophrenias*.¹⁰ He presented the shift in labels as central to the paradigmatic shift he perceived in the title of his book. *Schizophrenia* was no longer to be understood as the dementia of adolescence, even by the remotest association with the term *dementia praecox*. It is, therefore, in the tension between the concept of the dementia of adolescence and its antithesis that the first stage of the history of *schizophrenia* must be sought.

While specific psychopathologies of youth had been assumed as early as Thomas Willis’s *Two Discourses Concerning the Soul of Brutes* (1672), it was only in the mid-nineteenth century that the category of early dementia, *dementia praecox*, became the focus of attention. Willis sketched the course of the disease: young, lively, indeed even brilliant, individuals at the onset of puberty become stupid and morose. Late eighteenth

century “mad doctors” such as William Perfect, in *his Select Cases in the Different Species of Insanity and Madness* (1791), continued the image of a “puberty-neurosis” (indeed, even Jean Jacques Rousseau believed in a “*folie d’adolescence*”).¹¹

It was only in the nineteenth century that the category of a psychopathology of adolescence became embedded in a more highly evolved medical nosology. To the early nineteenth century observer it was clear that there was a dementia of old age (*dementia senilis*) and a dementia of mid-life (*dementia paralytica*). Or at least some nineteenth century medical nosologies saw these two categories as parallel, based on the seemingly shared symptoms of dementia. Thus the missing link for a comprehensive psychopathology of aging was the dementia of youth; or more specifically, since senile dementia and general paralysis of the insane were illnesses that appeared on the border of perceived shifts of states (from youth to mid-life, from mid-life to old age), it was necessary to create a category of adolescent dementia, *dementia praecox*. It is important to understand that the category of adolescent dementia incorporated all categories of psychopathology that appeared during this period of development. Thus as late as 1888 Thomas Clouston, in his presidential address to the Medico-Psychological Association (London), could speak of “adolescent insanities” and mean all psychopathologies affecting youth. In the early and mid-nineteenth century the syndrome of primary dementia (i.e., dementia following endogenous mania or melancholia) was set off from secondary dementia, that is, the dementia associated with general paralysis of the insane. The focus of these commentators, such as J. E. D. Esquirol, was on the manifestations of the symptoms rather than the course of the illness. Dementia in general was, however, defined by writers such as Etienne Georget (Esquirol’s student) as the terminal state of all incurable psychoses.¹² Thus, built into the concept of a dementia of youth was the implication of a negative outcome linked to early onset. This link is quite different from the implications for the other two segments of this trinity of developmental psychoses, since negative outcome and early onset had been linked in another category, that of masturbatory insanity.¹³

Masturbatory insanity, with all of its implications for the psychiatric nosology of the nineteenth century, helped color the early discussions of *dementia praecox*. One of the central links between the two categories lies in the fact that the masturbator, like the patient suffering from *dementia praecox*, was considered to be overly intelligent. Indeed, the charge that the act of reading caused masturbation is paralleled by the implication, in the early discussion of *dementia praecox*, that a child of extraordinary intelligence became “demented” through some unexplained means. Adolescence, as Patricia Meyer Spacks detailed in her study of *The Adolescent Idea*, also implied the focus on the sexuality of youth implicit in the category of *dementia praecox* but explicit in the category of masturbatory insanity.¹⁴ We can turn to the first “case study” of *dementia praecox*, or at least the first case study that employed the label “*dementia praecox*,” to examine the links of this form of dementia to other psychopathological categories in nineteenth century medicine.

Bénédict August Morel, best known for his popularization of the concept of degeneration during the mid-nineteenth century, seems to have been the first to have employed the label *dementia praecox*, in 1860:

An unfortunate father consulted me one day about the mental state of his 12-or 14-year-old son, in whom a violent hatred for the originator of his life had suddenly replaced the most tender feelings. He was despondent at being the smallest in his class, despite the fact that he was always the first in his compositions, and that without effort and almost without work. It was, so to speak, by intuition that he comprehended things, which he organized in his memory and his intelligence. He gradually lost his cheerfulness, became gloomy, taciturn, and showed a tendency toward solitude. His mother was psychotic and his grandmother eccentric to an extreme degree. I ordered the interruption of the child’s studies and his confinement in an institution for hydrotherapy. A most happy change occurred in the bodily state of the child. He grew considerably but another phenomenon as disquieting as those I have mentioned came to dominate the situation. The young patient progressively forgot everything he had learned; his so brilliant intellectual faculties underwent in time a very distressing arrest. A kind of torpor akin to hebetude replaced the earlier activity, and then I concluded that the fatal transition to the state of *démence précoce* was about to take place. This dreadful diagnosis is ordinarily far from the minds of parents and also physicians who care for these children. Such is, nevertheless, in many cases the sad termination of hereditary insanity. A sudden paralysis of the faculties, a *démence précoce*, indicates that the patient has reached the end of his intellectual life that he can control.¹⁵

Morel's case study of *démence précoce* is revealing because it stresses the relationship between extraordinary intelligence and the endogenous quality of the disease. The higher the native intelligence, it seems, the more predisposed one is to the manifestation of the illness. Morel saw early onset dementia as a constitutional problem. We can parallel this manner of seeing the patient as a member of a marginal group, here the highly intelligent, defined to a degree by its heightened potential for disease, to the category of masturbatory insanity. Thus Morel suggested removing intellectual stimulation as part of his course of treatment. This is parallel to the removal of sources of stimulation, such as novels, from the masturbator. But Morel also introduced the concept of heredity into the initial discourse about *dementia praecox*—not unexpectedly given Morel's general views concerning the relationship between inherent characteristics and environmental stimuli. But its introduction into the very inception of the category *démence précoce* provides the matrix for the later nineteenth century discussions of the concept. The disease of adolescence becomes one of the keys to an understanding of the cyclical patterns of psychopathology within human development. To isolate the scientific observer (who, of course, would be undergoing a parallel development) from potential inclusion in this category of marginality, a further qualification is introduced. The link between “genius,” “heredity,” and “psychopathology” is thus present in the earliest discussions of the concept of *dementia praecox*.

Morel's initial case can provide a model for other mid-century discussions of the psychopathology of adolescence, even though it is rarely cited until much later in the century, when the formulators of the concept of *dementia praecox* were searching for the historical context of their new nosological category. Parallel to Morel, the term “infantile dementia” was coined by J. T. Dickson in 1874 (following earlier English models), and Morel's term *démence précoce* actually reappeared in the title of G. C. Gauthier's 1883 Paris thesis.¹⁶ The concept is a commonplace in late nineteenth century nosologies, retaining many of Morel's implications. Richard Krafft-Ebing, in his standard textbook of psychiatry, raised the insanity of adolescence to the rank of the touchstone for late nineteenth century psychopathologies (replacing “general paralysis of the insane” as this became increasingly understood as a neurological rather than a psychiatric category):

I answer the question “what is the typical form of insanity” by saying that the insanity of adolescence is the typical form, because it most frequently ends in typical secondary dementia, without any other function being affected but mentalization, and because in its course we have all the forms of psychosis represented. . . . Almost all pure cases of secondary dementia will be found to have begun in the developmental (pubescent and adolescent) insanities. . . . Undue and unphysiological means through a forcing-house mode of education during adolescence without regard to the hereditary capacity and weakness of the organism tend toward dementia. The constant changes in each generation of modern civilized environment and the special efforts thus rendered necessary by the struggle for existence tend towards dementia through the strain they put on the most delicate of all organized tissues.¹⁷

Here it is not masturbatory insanity, but the identical categories from that “disease,” transferred to the “modern” disease of “neurasthenia,” that color the category of “dementia.” Again note that it is education and intelligence (or in this case the relative lack of intelligence in relationship to the pressure of the educational system) that provide the etiology for the psychopathology of adolescence. By 1891 when Alois Pick, professor of psychiatry in Prague, published his standard paper on *dementia praecox* (the paper that made this term the accepted nosological label for the psychopathology of adolescence), the concept as well as the term was fully accepted.¹⁸ Pick pointed to Morel and Gauthier as his forerunners. With Pick's paper the dementia of adolescence became the standard label for “secondary dementia,” a term that remained part of the vocabulary of psychiatric nosology until the turn of the century.

Toward a Synthetic Concept of *Schizophrenia*

The stage was thus set for the synthesis of a set of related concepts into the greater category of *dementia praecox*. The signifying signs of the dementia of adolescence remain constant, however. Following Morel's application of the classical dramatic unities to medical nosology (unity of cause, course, and outcome tied, if possible, to special lesion), the late nineteenth century provided a vocabulary of images for *dementia*

praecox. One set of images was generated by Karl Ludwig Kahlbaum, whose 1863 psychiatric nosology set the stage for the development of a general clinical psychopathology in the German-speaking lands.¹⁹ Kahlbaum (and his friend and collaborator of many years Ewald Hecker) described two clinical entities, *hebephrenia* (from the Greek for “frenzy” of youth) and *catatonia* (from the Greek “tension against”), which were later to be integrated into the overall category of *dementia praecox*. *Hebephrenia* was Kahlbaum’s label for pubertal psychoses; *catatonia* was employed to characterize a cyclic pattern of dementia that passed through manic, melancholic, and paranoid states and had a negative outcome. Kahlbaum was quite open in paralleling *catatonia* to *vesania progressiva*, his designation for general paralysis of the insane. He saw in *catatonia* a set of particular motor tensions as specific for that disease as those of tertiary syphilis are for general paralysis of the insane. Here he drew on the work of Antoine Laurent Jessé Bayle, who in 1822 stressed the association between syphilis and derangement, and Jean Pierre Falret’s concept of *folie circulaire*. Like Morel’s case study of *démence précoce*, Kahlbaum’s nosology was little read by his immediate contemporaries. It was only the writings of Emil Kraepelin and L. Daraszkiwicz that fixed Kahlbaum’s categories as components of an age-bound designation of dementia.²⁰ (Indeed, Kahlbaum’s categories became so firmly associated with this disease entity that one term for *dementia praecox* in France became the “maladie de Kahlbaum.”²¹) By this point it was clear that the complex of categories, although loosely associated, spelled out a disease called *dementia praecox*, and, using Kahlbaum’s designation, it was perceived to be a *paraphrenia*, a disease that is age-specific.

Kraepelin’s resuscitation of Morel’s label, *dementia praecox*, in 1893, following Alois Pick’s lead marked a most fascinating shift in the meaning and implication of this disease. For in employing an older, Latinate term (*dementia*) to form a cognitive superstructure for the various *phrens* evolved by Kahlbaum, Kraepelin signified a movement away from the idealization of Greek categories of mind that dominated much of the latter half of the nineteenth century. I mentioned Morel’s adaptation of the concept of the classical unities, which are aesthetic categories, for his definition of disease. Kahlbaum created or resuscitated a number of Greek (or at least Greek-sounding) terms for related, though independent, psychopathologies. Among them was the term *paranoia*, in use from the eighteenth century and of importance in the nosological systems of the German Romantic psychiatrists, such as Johann Christian August Heinroth. *Paranoia* was revitalized by Kahlbaum as the designation for the primary form of systematized delusions.²² Kraepelin, in using *dementia*, pointed toward a new set of images for the concept of *dementia* rather than that of Kahlbaum (while employing the structure of Kahlbaum’s nosology). Even Freud saw the vocabulary of Greek aesthetics as an appropriate one for the discussion of psychopathology. He borrowed the term *catharsis* from Jakob Bernays, one of the leading classicists of the period.²³

The vocabulary of the intelligentsia in the German-speaking countries during the latter half of the nineteenth century was peppered with Greek words or neologisms based on Greek. Following Johann Joachim Winckelmann and the rise of German neo-classicism in the late eighteenth century, Greek had the aura of being the tongue closest to the roots of human experience.²⁴ Especially in the area of psychopathology, in which the parallels to the literary world of the Greeks seemed self-evident, Greek stood for the hidden truth revealed by the observer, a truth rooted in history. Kahlbaum’s terminology (like Freud’s later use of Greek myth) revealed his reliance on the status of Greek. When Kraepelin subsumed the *phrens* (with its reference to the Greek concept of mind) to the Latin *mentalis* he consciously marked a shift in the conceptualization of *dementia praecox*. Indeed, he debated the question of the appropriate designation of the disease in his early writing, rejecting using the Italian designation *demenza primitiva* or subsuming one of the existing labels such as *dementia simplex* to his more general category before deciding on *dementia praecox*. What is of importance is that, even though Kraepelin adopted Morel’s designation, he did so while abandoning much of its traditional association with late nineteenth century French psychopathology. Valentin Magnan had stressed Morel’s association of this and other disease entities with the etiology of degeneration. What Magnan called *délire de persécution à évolution systématique*, a chronic delusional state, is Morel’s *démence précoce*. Magnan considered it related to a degenerative process. Kraepelin avoids all such oversimplification. The political undercurrents that set German and French psychopathology in consciously different directions following 1872 also shaped Kraepelin’s “reading” of Morel.

Kraepelin abandons all of the later French associations with Morel's views and restructures the notion to fit his own concept of the disease.

Tracing Emil Kraepelin's concept of *dementia praecox* is a complex undertaking. It is perhaps best linked to the category of "deterioration," which, at least in retrospect, seems central to his restructuring of the concept of *dementia praecox*. Kraepelin introduced the category of *dementia praecox* in a paper titled "The Diagnosis and Prognosis of Dementia Praecox" at the twenty-ninth congress of southwestern German psychiatrists in 1898. But he had begun reformulating this concept in his compendium of psychiatry published in 1883. In that edition *dementia praecox* was used in a narrow sense to refer to those patients who fitted Kahlbaum's and Hecker's definition of *hebephrenia*. *Paranoia* and *catatonia* were perceived as independent entities. By the fifth edition of his comprehensive handbook of psychiatry (1896)—the dominant textbook on psychopathology for the period through World War I—*dementia praecox*, *catatonia*, and *dementia paranoides* were subcategories of "processes of dementing" (*Verblödungsprozesse*). This trinity of interlocking diagnostic criteria replaced the independent categories of *hebephrenia*, *catatonia*, and *paranoia*. In addition, Kraepelin's earliest formulation of the etiology of *dementia praecox* pointed to its prior association with the psychopathologies of puberty and adolescence, especially masturbatory insanity. *Dementia praecox* was, for Kraepelin, a "degenerative" pathology. This tied into Morel's more general category for *démence précoce* and keyed it to a continuation of the understanding of this disease as having a somatic etiology. Kraepelin saw *dementia praecox* as the result of some type of "self-poisoning" (Kraepelin himself sets this term off in quotation marks). But it is a "self-poisoning" related to sexuality, or, at least, to the sexual organs:

Here it must be first pointed out what in the clinical descriptions must ever again be emphasized, that in our patients very frequently a lively sexual excitement exists, which makes itself known in onanism, debauches, and tormenting sexual ideas of influence. Especially of male patients one learns with striking frequency that for many years they have constantly masturbated. Formerly therefore certain morbid pictures belonging to hebephrenia were simply described as the "insanity of masturbation"; perhaps also part of the widespread ideas about the terrible consequences of onanism is connected with such experiences.²⁵

As Kraepelin developed his category of *dementia praecox* he shifted his attention from "deterioration" (another category closely associated with the sexual etiology of diseases such as masturbatory insanity and general paralysis of the insane) to the phenomenology of the disease. Kraepelin's understanding of the phenomenology of this disease category was relatively sophisticated, if static. It was he who incorporated (even if in response to other views) the linguistic phenomena classically associated with later discussions of schizophrenia. He described "derailing" of thought processes. He used the written and artistic products of his patients to document this "derailing." He described the altered structures of the patients' language, including their use of stereotypy and neologisms, and did not merely dismiss the altered language (and thought processes) of the patient as "word salad."

The concept of negative outcome was also altered in the course of his development of the *dementia praecox* concept. Deterioration came to mean a marked loss following the onset of the active psychosis rather than, as it had earlier implied, resultant idiocy and eventual death. But Kraepelin tied even this more marginal loss to some type of disruption of brain function, implicitly seeing it in some ways as parallel to the general paralysis of the insane. Though, like Morel and others who employed the term, Kraepelin viewed *dementia praecox* as endogenous, the ideological implications of this seemingly basic manner of perceiving *dementia praecox* had shifted at the close of the nineteenth century from Morel's time. Kraepelin took care implicitly to contrast this disease entity with *neurasthenia*, the disease of "civilization" that so dominated late nineteenth century psychiatric nosologies.

By the eighth edition (1909–1913) of Kraepelin's handbook, now grown to four large volumes, *dementia praecox* was covered in a segment of over three hundred pages. The disease had become a "special disease unit." It is important to note that by the date of this edition, general paralysis of the insane had moved from the stormy waters of psychiatry into the safe harbor of neurology. Kraepelin's restructuring of *dementia praecox* placed this disease center stage in the concerns of the psychiatrist. But in addition Kraepelin, in this definitive presentation of his views, attempted to move this illness from a somatic, degenerative

disease (bearing the stigmata of masturbatory insanity, even by analogy) into the realm of the new psychology. He made the distinction, borrowed from Paul Julius Möbius, between endogenous and exogenous causes of *dementia praecox*. For Kraepelin, shortly before World War I, dementia praecox became a “peculiar destruction of the internal connection of the psychic personality.” The etiology of this “destruction” could lie either within or without the patient. This movement toward a new psychology of dementia praecox was due to the rise of the psychoanalytic view of psychopathology, and specifically to the competing view of *dementia praecox* as having a psychogenic rather than a somatic etiology.

The Appearance of Schizophrenia

The eighth edition of Emil Kraepelin’s handbook of psychiatry reflected the publication, in 1911, of Eugen Bleuler’s now classic study *Dementia Praecox, or The Group of Schizophrenias*. Bleuler, director of the famed Swiss teaching hospital of the Burghölzli in Zurich, was one of the first followers of Sigmund Freud to apply the “new” teachings of psychoanalysis to the major psychoses.²⁶ Both Bleuler and Freud viewed *dementia praecox* as an organic or constitutional disease, as did Kraepelin, but both placed renewed emphasis on the meaning and organization of symptoms. In one of Freud’s first psychoanalytic papers (1894), he had suggested that “unbearable ideas” gave rise to hallucinatory psychoses by means of repetition of the idea as an hallucinatory wish fulfillment.²⁷ In 1896 this concept allowed Freud to formulate a dynamic interpretation of a case of chronic paranoia.²⁸ In this case, Freud formulated the concept of projection latent in his earlier interpretation of psychosis. In general, these early theories reflect Freud’s belief that psychopathology is the consequence of the conflicts arising from the faulty repression of drives. Freud used the term *dementia praecox*, or its various constituent parts (e.g., paranoia), as the nosological label for some of the psychopathologies he was examining. It was only in 1911 that Freud turned to a detailed analysis of a case of *dementia praecox*, and that case study, together with Bleuler’s monograph, determined the direction of much of the psychological literature on schizophrenia for the next three decades.

Bleuler broke, at least overtly, with the descriptive accounts of *dementia praecox* as provided by Kraepelin. Indeed, he and his contemporaries perceived his monograph as a total break with the clinical psychiatry of the later nineteenth century. Bleuler focused on the question of “deterioration” and its supposed centrality to Kraepelin’s understanding of *dementia praecox*:

There is hardly a single psychiatrist who has not heard the argument that the whole concept of dementia praecox must be false because there are many catatonics and other types who, symptomatologically, should be included in Kraepelin’s dementia praecox, and who do not go on to complete deterioration. Similarly, the entire question seems to be disposed of with the demonstration that in a particular case deterioration has not set in previously but only in later life.

Thus Bleuler rejected not only the term *dementia praecox*, but also *dementia dessecans*, *dementia sejunctive*, *dementia primitiva*, *dementia simplex*, *dementia apperceptive*, and *paradementia*. He coined the new term *schizophrenia* and placed it parallel to Kraepelin’s *dementia praecox*. He defined it as

a group of psychoses whose course is at times chronic, at times marked by intermittent attacks, and which can stop or retrograde at any stage, but does not permit a full *restitutio ad integrum*. The disease is characterized by a specific type of alteration of thinking, feeling, and relation to the external world that appears nowhere else in this particular fashion.

However, Bleuler’s discussion of “deterioration” does not differ much from Kraepelin’s. The main differences are two: Bleuler wanted his definition to be perceived as more “liberal” than Kraepelin’s, and he shifted the burden of the disease that he called *schizophrenia* from its full symptomatology to the much more limited focus of “thought, feeling and the relation to the external world.” The focus of this interrelationship for the turn of the century is to be found in the patient’s language. Freud had drawn attention to the various modes of language present in the conscious and subconscious, and through his very introduction of the “new” language of psychoanalysis, provided a mode of treatment that was itself language based. Language disruption thus became for Bleuler, following Freud, the central marker of the schizophrenic thought process.

But why did Bleuler choose *schizophrenia* as the label for this “new” entity? Partly it was an attempt to relate his nosological category to those generated by Kahlbaum and to isolate Kraepelin as a “blind alley” in the history of the disease; partly it was an homage to Freud, whose use of Greek terms reflected the Viennese fascination with the tradition of Greek neo-classicism and the readings, not of Latin myth, but of the “more original” world of Greek mythology. Latin had a relatively low status, associated as it was with the language of imperial expansion and royal corruption, states all too familiar to late nineteenth century inhabitants of Austria or Germany (which saw itself as the new *Imperium*). Rome, represented by its language, was too much in mind among liberals in pre-World War I Europe; Greece, with the German myth of its role as the originator of Western civilization, could be called upon to free the mentally ill from the Roman chains of *dementia praecox* and its “inevitable deterioration.” German (and indeed, Swiss) popular mythology, which in the late nineteenth and early twentieth century called on Greece for the origins of liberalism, could be incorporated into the new disease entity, the “splitting” of the “psychic functions,” *schizo—phrenia*. The power of this avant-garde designation, lodged to no little degree in the fact of its very newness, was such that it immediately captured the popular fantasy.²⁹

However, the return to Greek marked a parallel movement to Kraepelin’s early flight from Greek into Latin. With Bleuler’s return to Greek, there was a natural sense of continuity between the older, pre-Kraepelinian categories and the new label. But *schizophrenia* did not immediately drive *dementia praecox* out of the marketplace. These two labels competed until mid-century, when *schizophrenia* replaced *dementia praecox*. The standard American survey of the work done on this disease entity was first labeled *Dementia Praecox. The Past Decade’s Work and Present Status: A Review and Examination* when it was first published in 1948.³⁰ Subsequent editions employed the term *schizophrenia*. The ideological importance of Bleuler’s break with Kraepelin can be measured by the very use of this term. Indeed, by the time Karl Jasper’s systematic overview of psychopathology appeared in 1913, *schizophrenia* was the accepted designation for this disease among those psychiatrists who saw themselves as innovators, whether “Freudians” or “phenomenologists.”³¹

Bleuler, however, maintained much of Kraepelin’s understanding of the disease. He divided it, as did Kraepelin, into a limited set of component segments—Kraepelin’s *paranoia*, *catatonia*, *hebephrenia*—and gives independent status to Kraepelin’s *simple schizophrenia*. But Bleuler also created a hierarchy out of Kraepelin’s more static description of the status of the various symptoms of schizophrenia. He designated one set of symptoms as primary or “fundamental.” All of these are related to the alteration of language. These symptoms were, for Bleuler, necessary but not sufficient for the diagnosis of the disease. By 1973, in the World Health Organization’s *International Pilot Study of Schizophrenia*, only 10 percent of the patients examined showed the classic Bleulerian thought disorders. The shift may well be one parallel to the disappearance of “waxy flexibility” from the clinical picture of catatonia or may reflect Bleuler’s embeddedness in the Freudian model that stressed the centrality of language. Bleuler made a distinction between such symptoms and “basic” symptoms that are necessary for the diagnosis of schizophrenia. For Bleuler these “basic” alterations in association, affectivity, and ambivalence (as well as autism), all illustrated by linguistic examples in his text, were the *Grundsymptome*, or basic symptoms, with the more “classic” symptoms such as hallucinations, illusions, and catatonic stupor relegated to incidental (or “accessory”) roles.

It was the question of the reliability of Bleuler’s “basic symptoms” which led Kurt Schneider to propose a series of so-called “first-rank” symptoms as early as 1925.³² Each of these symptoms (e.g., auditory hallucinations, somatic passivity, disturbed thinking) had pathognomic value and reflected the more traditional conceptualization of the symptomatology of *schizophrenia*. Schneider thus stood as much in the tradition of Kraepelin as did Bleuler. For even though he accepted the significance of the psychological component, he stressed the importance of the patient’s symptoms as an indicator of the disease rather than of its outcome. He moved away from the category of “deterioration” and into the “pure” phenomenology of the disease. His more conventional set of symptoms formed the basis for the post-World War II phenomenological category of *schizophrenia* in Great Britain and the United States.

Eugen Bleuler stressed a continuum between the “normal” and the “psychopathological,” seeing the appearance of “schizophrenic” symptoms even among non-schizophrenics (e.g., in the form of displacement

or stereotypes). He emphasized the totality of the psychological setting. Following Freud's lead, Bleuler saw *schizophrenia* as a psychopathology represented by a loss of harmony between the various groups of mental functions and expressed in linguistic malfunction. Like Kraepelin, he believed that the ultimate etiology for the disease (or group of diseases) would most probably be metabolic, but that personality structure and psychogenic factors shaped the form of the symptoms. Unlike Kraepelin, he dismissed any distinction between endogenous (for Bleuler, "process") and exogenous (for Bleuler, "reactive") forms of *schizophrenia*. In abandoning this distinction, Bleuler also abandoned any attempt to distinguish the origin of the disease.

Bleuler moved the discussion of *schizophrenia* into the sphere of dynamic psychiatry. Kraepelin's image of the illness was inherently static; Bleuler wished to understand the symptomatology of the illness in terms of its psychological content as well as its appearance. Thus he perceived the "loosening of associations" as the central symptom. This loosening was a sign of the "splitting" of the basic functions of the personality. While focusing on the symptoms (which he saw as psychogenic), he avoided (indeed, as did Freud) any discussion of the etiology of the disease. Bleuler's central role in the discussion of *schizophrenia* was to move the disease entity ever more in the direction of a psychological category.

Sigmund Freud, in his classic study of *dementia paranoides* written in 1911, suggested that *dementia praecox* was the result of a complex set of projections.³³ The psychopathology of Daniel Paul Schreber, the German jurist, was interpreted by Freud as the rejection of Schreber's deep-seated homosexual wish and its projection onto the world in the form of a negative projection. Later, in his paper on narcissism (1914), Freud refined this concept, applying his libido theory and seeing paranoia as the result of an early libidinal fixation at the autoerotic stage.³⁴ The disease is thus the "return of the repressed," or at least of the attachment of libido (and associated drives) to the ego.

For Freud the question of *dementia praecox* had become a question of psychological mechanisms at work. When, in the adult, sexual frustration forces the patient to regress to the earlier point of development at which the fixation had taken place, an abnormal narcissistic state is created that generates *paranoia*. *Paranoia*, that subcategory of *schizophrenia*, became for Freud an overarching category. Bleuler, writing at more or less the same time as Freud, came to quite different conclusions, even though both departed from quite similar objects. For, just as Bleuler's study is laced with images and words taken from the schizophrenic, Freud's study departed from a reading of Schreber's autobiography. The literature on the "Schreber case" is extensive.³⁵ Suffice it to say that Freud used the literary product of the schizophrenic as the key to an understanding of the disease. Rather than having the patient before him, he had the patient's published account of his illness—published, one might add, as part of Schreber's attempt to be released from the institution in which he was being held. (Freud was evidently introduced to the text by Carl Jung.)

For Freud the language of the schizophrenic becomes the necessary substitute for the patient. Since schizophrenic patients cannot be approached through an external erotic attachment (they are thus incapable of using the language of transference), it is through their writing that an understanding of the disease process can be had:

Since paranoids cannot be compelled to overcome their internal resistances (hence free association proves most difficult), and since in any case they only say what they choose to say, it follows that this is precisely a disorder in which a written report or a printed case history can take the place of a personal acquaintance with the patient.

It is not merely, as with Bleuler, that language is the primary (or one of the major) signs of this illness; rather it is only through the fixed representations of the language of the patient that any insight into the illness can be had. Freud shaped much of the discussion concerning the concept of schizophrenia during the early decades of the twentieth century. His understanding of the mechanisms of regression and projection provided much of the formal structure for the reinterpretation of the central structures of this disease.

Freud's view colored and shaped much of the concern with the products of the schizophrenic that dominated the literature (and its reception into the wider public domain) during the coming decade. In Heidelberg Karl Jaspers devoted a large segment of his discussion of *schizophrenia* to the products of the

schizophrenic—to the schizophrenic’s speech, art, and writing. While there had been a literature on the writing and art of the schizophrenic during the late nineteenth century, much of this had been devoted to an antiquarian interest in the products of the insane as representatives of another (inherently inferior) culture, parallel to the objects collected for ethnological museums from among colonized peoples.³⁶ With the Heidelberg school, specifically in the work of Karl Willmanns and two of his assistants, Hans Prinzhorn (in 1922) and Wilhelm Mayer-Gross (in 1924), there was a shift to an understanding of these objects as keys to the existential world view of the *schizophrenic*.³⁷ Thus the object, whether painting, poem, or autobiography, became the representation of the altered perception of the world. It became the key to an understanding of the disease *schizophrenia* and, indeed, became *pars par toto* the disease itself. The representation of altered communicative states became the key for an insight into the disease.

It is in the work of Carl Gustav Jung, perhaps even more than in Bleuler’s, that the movement from a primarily descriptive to a dynamic understanding of *dementia praecox* can be had.³⁸ In his 1907 *Psychology of Dementia Praecox* Jung, still closely allied to Freud, postulated the importance of the conception of dissociation for the formulation of his understanding of this illness.³⁹ Using word association tests, Jung saw the ideas dissociated by the patients as dynamically determined. Jung saw the deep structure of the illness as a series of “complexes” that determined the physiognomy of the disease. But he saw the complexes of *dementia praecox* as inherently different from those of other psychogenic illnesses such as hysteria. Language revealed to Jung the deep structure of the complexes associated with *dementia praecox*. To explain the etiology of the disease (and why it did not respond to the “talking cure”), Jung relied on a quite different model. He saw the complexes present as producing a toxin that influenced brain action. Thus he accounted for the inherently negative prognosis in the disease. (This was, of course, quite the opposite of Bleuler’s view, who postulated some brain toxin as the cause of the disease.)

Jung refined his views, incorporating into them the sense of the inherent predisposition. In 1913, his work on *dementia praecox* led to his differentiation of various psychological types, since in trying to distinguish between the categories of “hysteria” and *dementia praecox* Jung needed to find further categories for difference between these two illnesses, rooted, as he perceived them, in complexes.⁴⁰ It was only well after his break with Freud, in the early 1920s, that the fragments of Jung’s understanding of *dementia praecox* coalesced in his work on the collective unconscious—the most important development in the direction of the aesthetic interpretation of *schizophrenia*. As we have seen, the focus on the aesthetic production of the schizophrenic is an important feature of nineteenth and early twentieth century psychiatry.

Jung used the objects and concepts of the schizophrenic to point to the archetypal structure of the disease. For the schizophrenic’s view of the world revealed an unencumbered image of the primal structures of perception shared by all human beings. These mythopoetic structures, similar to Freud’s use of myth, represent a collective sense of self. The schizophrenic may well be able to present these collective perceptions in a less mitigated manner than the non-schizophrenic. The schizophrenic thinks archaically. Jung returned to a nineteenth century model of madness, one subscribed to by, among others, Charles Darwin in his study of expression (in which the insane reveal the psychological ontogeny of the species *Homo sapiens*).⁴¹ But Jung relied on the linguistic and artistic manifestations of illness, not the expression of the insane, for the basis of his theories. Schizophrenics are thus atavistic, at least in the formulation of their world view. And this primitivism is reflected in their production of words and art. The double-edged sword of post-World War II images of the schizophrenic is cast in this view, for the schizophrenic may be ill, but he or she may also be “closer” to the wellsprings of human experience. It is this view that helped shape the view that the schizophrenic is perhaps more a seer than a patient.

From Parergasia to the “Divided Self”

If there is a “mainstream” in the development of the concept of *schizophrenia*, it is rooted in the debate between Kraepelin (and those who see Kraepelin as having had a purely somatic understanding of the disease) and Bleuler (and those who see Bleuler as having had a purely psychogenic understanding of the

disease). It is evident that the dichotomy traditionally perceived between Kraepelin and Bleuler is an artifact of the reception of their views (and the need for later theories to rewrite the history of this concept to give them a sense of historical embeddedness). In truth, these two major views were tempered by a series of theories, many departing from the two “rootstock” theories, which, however, shaped the later evolution of the concept and which must therefore be examined in any history of the concept of *schizophrenia*. Surely the most influential, at least during the lifetime of its promulgator, was the further redefinition and relabeling of *schizophrenia* as *parergasia* by the Swiss-American psychiatrist Adolf Meyer.

With Adolf Meyer we literally move our concern with European theories of *schizophrenia* across the Atlantic Ocean.⁴² Meyer, who, like Bleuler, studied with the chairman of the department of psychiatry in Zurich, August Forel, made his reputation in the United States. He paralleled Bleuler in rejecting Kraepelin’s conceptualization of *dementia praecox*, and, like Bleuler, attempted to abandon that designation through the introduction of a new term—*parergasia*, literally “incongruity of behavior.”

Meyer’s understanding of *parergasia* had a great influence on the formulation of later definitions of *schizophrenia*, at least in the United States. He stated that the illness had to be understood holistically and traced its presence throughout the development of the individual up to the moment of its actual onset. He also saw exogenous precipitants as playing a central role in the etiology of the disease. It was Meyer who later coined the term *schizophrenic reactions* to place emphasis on the origin of the illness outside of the patient. While Meyer labeled his categories “dynamic” because they traced the development of the disease over time, he also saw them as “psychobiological” because he considered biological as well as psychological aspects of the disease. He traced the progress of the disease, however, in the accumulation of “bad habits” and the inability for any constructive adjustment of these habits. The view that *parergasia* is but an accumulation of bad habits stressed the continuity with the prior life of the patient. Thus Meyer’s views were consistent within his own theory of the illness.

Meyer wished to abandon the “European” rigidity that he found in Kraepelin’s theory of *dementia praecox*. Relying on neither specific pathognomonic signs nor “deterioration” as the certain indicator of the disease, Meyer’s subtypes proliferated, especially in the 1952 *Diagnostic and Statistical Manual* of the American Psychiatric Association. Categories such as *pseudoneurotic schizophrenia* (coined by Hoch and Polatin in 1949) and *pseudopsychopathic schizophrenia* (coined by Hoch and Dunaif in 1955) proliferated under Meyer’s influence.⁴³ The image of schizophrenia as a disease of development still haunts Meyer’s formulation, but even more important, the image of the schizophrenic as unable to deal with the daily realities of the world and thus taking refuge in the world of madness laid the groundwork for one of the more interesting critiques of the concept of mental illness, that of Thomas Szasz, which appeared decades after Meyer’s death in 1950.⁴⁴ Szasz’s critique of the concept of schizophrenia, however, like his more general critiques of the conceptualization of mental illness, rests on the question of the volition of the patient. Szasz, trained in a world in which Meyer’s views dominated the “official” discourse of American psychiatry on schizophrenia, simply carried Meyer’s views out to their extreme. For Szasz mental illness is the mask used by some individuals to disguise their bad habits.

Parallel to Meyer, Harry Stack Sullivan, who died the year before Meyer and had a status among many American psychoanalysts equivalent to the position Meyer had among American psychiatrists, evolved his own understanding of the dynamics of schizophrenia.⁴⁵ Sullivan abandoned the drive-repression theories of Freud and saw the development of schizophrenia in the interpersonal sphere. Disease results from faulty interpersonal relationships rather than the repression of drives. Sullivan, like Meyer, studied schizophrenia in an asylum setting; unlike Meyer, this led him to evolve a truly psychodynamic definition of the disease. Based on the work of Bleuler and Freud, Sullivan saw the organization of the disease on an interpersonal basis. In many ways Sullivan began the twentieth century interest in the role of the family in the genesis of *schizophrenia*. The creation of the schizophrenic personality is undertaken (as Meyer observed) over the course of the individual’s development; rather than resulting from the inability of the individual to deal with the faulty habits (or repressed drives) resulting from intrapersonal development, however, it is the result of the patient’s reflection of the “reflected appraisals” coming from the parents. If a child is exposed to “uncanny” experiences resulting from poor care, a tension state occurs that is internalized as the sense of

the “bad” self. This tension, which may be repressed, surfaces in the first stage of the disease and results in the disassociation of the personality. He wrote in 1924 that

attempts at regression to genetically older thought processes—to infantile or even prenatal mental functions—successfully to reintegrate masses of life experiences which had failed of structuralization into a functional unity, and finally led by that very lack of structuralization to multiple dissociations in the field of relationship of the individual not only to external reality, including the social milieu, but to his personal identity.⁴⁶

Sullivan saw *schizophrenia* as mainly a disorder of life rather than as a disease with a specific etiology. Though, like Bleuler, he regarded *schizophrenia* primarily as a disorder of thought processes, Sullivan stressed the origin of the disorder in the life history of the patient. Thus Sullivan set the stage for the later theories of R. D. Laing.

Like Freud, Sullivan relied on the subjective perception of the patient as the determinant of the structure of the disease. Indeed, Sullivan’s case histories constitute perhaps the richest source for an understanding of his work. These were not retrospectively compiled by him but recorded as a dynamic process and then published. In Sullivan’s concept of *schizophrenia* the dissolution of the initial experiences of the patient had to be undertaken by a participant analyst rather than merely by a passive one. For this the language of the patient had to be understood as well as respected. Sullivan distinguished between thought processes and the social or communicative device of language. He saw in the language of the schizophrenic the magical, autistic language of childhood. Sullivan’s views on the language of the schizophrenic paralleled the increasing interest in the language of psychopathology.

The work of Kurt Goldstein was initially on brain-damaged patients; then, in a seminal volume on the language and thought of the schizophrenic edited by J. S. Kasanin (1944) (to which Sullivan also contributed) he applied his earlier model to discussions of the schizophrenic’s loss of the “abstract attitude” of thought and language.⁴⁷ In that same volume a classic paper by E. Von Domarus postulated schizophrenic language as a regression to a “paralogical” stage of thought (parallel to Jung’s search for a paralogical set of universals in the thought and language of the schizophrenic).⁴⁸

These two views, that the language of the schizophrenic reflected either earlier stages of social development or a pre-logical state of language, reflected the influence of the Russian L. S. Vygotsky, whose ideas on concretization of schizophrenic language were introduced into the English-speaking world by Eugenia Hanfmann and Jacob S. Kasanin in 1936.⁴⁹ Vygotsky, using an object-sorting test, saw a parallel between the concept formation of normal adolescents and adult schizophrenics in the manner in which they grouped objects. They shared a set of “pseudo-concepts” that are used inconsistently, relying on an incomplete or incorrect sense of the meaning of the concept. Thus schizophrenics are, according to those interested in their language, merely incomplete adults—flawed, as are adolescents.

Thus Sullivan continued to associate *schizophrenia* with its nineteenth century origin in the debate about age-specific definitions of disease. In his *Conceptions of Modern Psychiatry* (1953) Sullivan qualified his postulate that *schizophrenia* is a result of early childhood experiences.⁵⁰ He returned to the view that this disruption can take place during adolescence as well as childhood. The individual who is constantly rebuffed during this period, whose character is formed through a series of negative experiences, can become just as disordered as the infant rejected by its mother. Adolescence—like childhood, a fragile state of development—was perceived by Sullivan as potentially endangering the individual. The result of the disease is a return to the infantile (or adolescent) state, at which point the roots of the disease had established themselves. This view, expressed as early as his first paper (1924) on the topic of schizophrenia, stressed the relationship between symptoms and early developmental errors. But linked to this understanding of the relationship between adolescence and illness is yet a further echo of past views. For in this paper Sullivan stated “that there is a hereditary predisposition to the schizophrenic dissociation.” Thus, while Sullivan stressed the interpersonal error that results in the disease, the fact that any number of individuals could have experienced similar maltreatment and not have become schizophrenic is accounted for by some type of genetic predisposition.

It is in the work of Frieda Fromm-Reichmann that the concept of *schizophrenia* held in the tension between the world of Freud and Sullivan is most elegantly revised.⁵¹ She traced the etiology of the disease

in the “schizophrenogenic” parent (specifically the mother) and the course of the disease as a regression to an earlier period to find an autistic sense of security. Her work reflected the view of Sullivan that the schizophrenic was indeed capable of forming a transference. The patient, while desiring contact, seems to withdraw from it, signifying a basic hostility. This is reflected in the transference. The image of a positive outcome in the disease, indeed the myth of a necessarily positive development through the model of *schizophrenia* offered by Sullivan and Fromm-Reichmann, had its apotheosis in Joanne Greenberg’s 1964 novel and resultant film *I Never Promised You a Rose Garden* (1964, published using the pseudonym Hannah Green), which chronicles a therapy for the treatment of schizophrenia at Chestnut Lodge.⁵² It was here that the family of the schizophrenic became the subject of study (as, later, at R. D. Laing’s Kingsley Hall). The novel and the film had a remarkable role in altering the popular concept of *schizophrenia* away from the image of a negative outcome and, indeed, linking it to an image of a positive outcome.

In the work of the British object relations school of psychoanalysis around Melanie Klein the evolution of Freudian (or at least neo-Freudian) concepts continued in quite a different direction.⁵³ Indeed the entire evolution of object relations theory concerning schizophrenia provides a case study for the extraordinary diversity of views within a single “school” of thought, itself rooted in one aspect of Freud’s views. For the Kleinian school could be expanded, in terms of the dialogue of views concerning the etiology of *schizophrenia* in early life experience and its dynamic recapitulation of these experiences. Although some of the members of this “school” stressed the primacy of repression (as did Klein) while others stressed the interpersonal nature of the etiology of the disease (such as W. R. D. Fairbairn, D. W. Winnicott, and Harry Guntrip; in the United States, Otto Kernberg), all centered their views on the earliest stages of infancy. Klein saw the schizophrenic as rooted in the “paranoid-schizoid” stage of infantile development, situated during the first three months after birth as the infant “splits” its focus, creating an idealized “good” object in the world through the projection of its own libido and a “bad” object, projected onto the denying mother. In normal development, the “good” fantasies dominate; in the abnormal (schizophrenic) case, the “bad” dominate due to the presence of a nongratifying mother. This view was picked up by Gregory Bateson in a series of articles on the mode of the transmission of the sense of distance from the nongratifying mother to the infant, a mode Bateson labeled the “double bind.”⁵⁴ Klein saw the infant’s anxieties as the source of and parallel to the later symptomatology of the schizophrenic. She extrapolated the existence of “pathological envy” as part of this modality.

Within the Kleinian school, the model of *schizophrenia* soon assumed the central focus for the study of all psychopathology. Specifically W. R. D. Fairbairn saw schizophrenia, or at least the “schizoid personality structure,” as the basis of all psychopathology.⁵⁵ For Fairbairn the infantile “ego” (actually a version of Freud’s libido) searches for objects in reality. The dynamics of human development are thus always in relationship to external realities, as these realities reinforce or deprive the infantile ego. The external objects must remain “good” and thus are internalized. Fairbairn saw the development of the individual in three stages: infantile dependence, with its identification through the internalization of the object; a transitional stage (adolescence) in which the struggle for autonomy is undertaken; and the final stage of maturity, with its differentiation between the self and the other. The fixation at either the earliest stage or the transitional stage is due to the actual (rather than fantasized) relationship with the mother.

W. D. Winnicott’s views paralleled these issues.⁵⁶ He stressed the ability to draw the line between the sense of self and the image of the other. For Winnicott, however, the source of the infant’s anxiety is the sense of the potential destruction of the self. This view, which is rooted in Klein’s understanding of the source of infantile anxiety, is in direct contrast to the interactional model postulated by Sullivan (and later Bateson and Laing). For Winnicott the “good enough” mother is sufficient to shield the infant from this overwhelming sense of its own fragility.

R. D. Laing, whose work spawned a cult of the “schizophrenic as victim,” is rooted very much in the tradition of seeing the schizophrenic as the result of a long process of pathology in which the patient plays a basically marginal role.⁵⁷ These theories, while parallel to the work of the object relations theorists, are much more concerned with family structure as the source of pathology. Laing’s work, beginning with *The Divided Self* (1959), stressed the “mystification” within families that rely on denying the experience of one of its members in order to preserve the sense of control.⁵⁸ Laing called his work “the divided self,” reinterpreting

the implications of “*schizo-phrenia*,” which had ceased to be a technical term by the 1960s. While Bleuler had introduced the term to stress the fragmentation of mental functions, Laing anglicized it to remove it from the jargon of medical science (as employed in popular usage) and stressed the “splitting” of the object. Thus the term, which initially referred to the damaged language of the patient, came to imply a sense of “truthfulness” in the communication of the schizophrenic, at least in regard to the illness being a statement about the damaged world in which the patient developed. A cult of the “schizophrenic as seer” evolved from Laing’s work, manifested indirectly in novels and plays about the inner world of the schizophrenic (such as Heinar Kipphardt’s *März*) as well as in the work of Laing’s collaborators, such as Joseph Berke and his “pet” patient Mary Barnes.⁵⁹ The image of the schizophrenic as artist dominates the discourse of both Berke’s account of Mary Barnes’s therapy and her own self-image (clearly patterned after her therapist’s expectations)—an image that relates both to the older, romantic image of the mad as creative individuals and to the newer image of the “schizophrenic as seer.” The schizophrenic sees differently, but more incisively, into the confusions of the world and can reproduce this sense of confusion in works of expressive quality. Uwe Peters suggested that Mary Barnes was most probably not schizophrenic, even by Laing’s broad definition, but rather was mimicking her brother’s schizophrenic symptoms.⁶⁰ Nevertheless Laing’s view dominated the popular understanding of the illness during the 1960s.

Laing’s work must be understood within the greater context of the “adolescent” model for the disease. Even though Sullivan had stressed the “interpersonal” nature of the origin of the disease, it was only in the 1950s that concentrated effort was focused on the families of the schizophrenic. Centered at Yale (under the leadership of Theodore Lidz), the National Institutes of Mental Health in Washington (under the leadership of Lyman C. Wynne), and Stanford (under the leadership of Gregory Bateson), these studies attempted to place the disease within the family as an illness of development. Lidz centered on the question of the emotional instability of the family of schizophrenics and the parents’ orientation toward their own families of origin.⁶¹ It is the family which fails to provide the necessary support structure during development, providing faulty models of identification.

Bateson coined the concept of the “double bind” to describe the situation in which the child is placed by the family.⁶² Two orders of messages are expressed simultaneously by the parent, which, however, contradict one another. The disease is thus viewed as part of a pathological family structure, in which the individual “labeled” schizophrenic is but the victim of the family structure.

Wynne’s work began with an eye toward the organization of such family roles.⁶³ He outlined the pattern of relationships among the members of the family of the patient. Based on an understanding of the nature of development as contradictory—moving on one hand toward the establishment of individual identity and on the other hand toward relating with other individuals—Wynne saw three possible models for human interaction: mutual, nonmutual, and pseudo-mutual. It is the “pseudo-mutual” category that for Wynne serves as the basis for the schizophrenic personality, revealing a faulty sense of interpersonal relationship. Thus the schizophrenic’s family is highly rigid and completely determined by assigned roles. Wynne then turned to a series of studies (together with Margaret Singer) to show the link between patterns of family structure and schizophrenic thought disorder.⁶⁴ They found that the patterns of interaction within the schizophrenic’s family were determined by erratic and inappropriate types of distance and closeness, a sense of meaninglessness and emptiness, as well as a consistent denial of reality. During the 1970s Wynne turned to the question of the genetic and biochemical basis of *schizophrenia*, a movement that paralleled the general fascination with the biological model during the late twentieth century.⁶⁵ The implications of this model and the research undertaken to support it will form the final chapter in our history of the concept of *schizophrenia*.

The Genetics and Biology of Schizophrenia

The 1970s saw the virtual abandonment of innovative interest in psychoanalytic and family theorizing on the etiology of schizophrenia.⁶⁶ Freud’s theories became more the subject of literary and historical interest and less the impetus for further work on the nature and origin of the psychoses. This was in no small part

due to the dominance of the biological model for the definition of disease in general and the need felt on the part of the psychiatric community to situate itself within the “mainstream” of the Western medical model.⁶⁷ A general sense of the “decline” of psychoanalysis set in, echoed by the popular press, and a renewed interest in the biology of *schizophrenia*, reinforced by the patterns of research funding in the United States and Great Britain, which stressed this aspect of *schizophrenia* research. This general social trend, coupled with a fairly idealized understanding of the nature of genetics as the antithesis of “nurture” theories of illness, placed this research, which had paralleled the development of psychoanalytic models, in the center of late twentieth century concerns.

Two major questions were raised within this research: the first related to the role genetics had in the transmission of the disease and the second to the actual biochemistry of *schizophrenia*.⁶⁸ While each did not necessitate an understanding of the other, the two aspects of the “biology” of *schizophrenia* became linked in many attempts to reconceptualize (or “rescue”) *schizophrenia* from the dominant psychoanalytic model. As we have seen, however, the “psychoanalytic” model in all its diversity was itself never totally free from a biological component, for the early theories of *dementia praecox* (for example, in Kraepelin, Freud, and Sullivan) always assumed a constitutional factor in the disease. The genetic approach became important scientifically with the epidemiological work of Ernst Rüdin, the founder of psychiatric genetics, who assembled statistical evidence used to advocate the eugenic sterilization of schizophrenics.⁶⁹ Rüdin, however, as early as 1916 noted that any simple pattern of “dominant” or “recessive” genetic transmission (based on the somewhat primitive Mendelian model available to him) could not explain the patterns of occurrence.

The basic work on this question—work that dominated both German- and English-language research—were the studies of schizophrenic twins undertaken by Rüdin’s student Franz Kallmann.⁷⁰ As late as 1983, Kallmann’s twin study was cited in H. Munsinger’s *Principles of Abnormal Behavior* as the historic study of the incidence of *schizophrenia*.⁷¹ In Kallmann’s studies many of the basic problems associated with the ideology of genetic studies of pathology (or, indeed, of the “normal,” as in Cyril Burt’s IQ studies) can be examined.

Based on a detailed statistical analysis of the family histories of *schizophrenics* from 1893 to 1902, Kallmann concluded in 1938, shortly after he was forced to leave Nazi Germany because of his “racial” identity, that there was a substantially greater risk of the disease appearing within these families than in other groups. Kallmann’s work in Germany was based upon a huge sample of 1,087 *schizophrenics* and 12,777 of their relatives.⁷² In 1946 Kallmann reported his first “twin study,” a survey of 691 pairs of twins, of which 174 were monozygotic. Kallmann’s total pool of information extended to the relatives of these twins, so that he had information on 5,804 subjects.⁷³ Kallmann’s study revealed that if one member of a pair of identical twins was *schizophrenic* there was an approximately 86 percent chance that the sibling would also be impaired, while there seemed to be only a 15 percent chance of fraternal twins both manifesting the illness. In addition, the figures revealed that with two *schizophrenic* parents, the child had a 68 percent chance of being impaired. Since there was not a higher concordance between inheritance and illness, Kallmann suggested that the transmission of *schizophrenia* was caused by a single recessive gene together with specific (but multifaceted) constitutional factors. Thus all *schizophrenics* had this recessive gene, but not all of those who possessed the gene became *schizophrenic*. This would account for the discordance of the 40 percent of identical twins in cases in which at least one sibling did not become schizophrenic.

Kallmann’s study “proved” to a large number of researchers that there was indeed a recessive gene directly responsible for the disease. In 1984 Lewontin, Rose, and Kamin (respectively a geneticist, a neuroscientist, and a psychologist) raised two major questions about Kallmann’s research.⁷⁴ The first has to do with the simple question of the relationship between the twins. With no independent verification of their relationship it could well be that the figures reflected a set of biases of the informants; if there were a greater chance of being viewed as impaired, one would repress the actual nature of the relationship between the siblings. More important is the question of the very definition of “*schizoid*” in Kallmann’s work. He never provided a clear definition of his diagnostic criteria, observing only that *schizophrenics* are

“an unceasing source of maladjusted cranks, asocial eccentrics and the lowest type of criminal offenders.” His answer is found in the ideological association of the study of genetics and the eugenics movement:

In this way psychiatry would accomplish its part in making the biological quality of future generations an important matter for medical concern and activity, by decreasing not only the number of schizophrenic patients, but also the number of heterozygotic taint-carriers, such as schizoid eccentrics, criminal adventurers or other members of the lunatic fringe.⁷⁵

For Kallmann social behavior and therefore social control were the determinants for the definition of the *schizophrenic*.

The problems raised by Kallmann's study, and by the later attempts to see the perceived patterns of *schizophrenia* occurring within families, are evident. While later researchers, such as Bööck, followed through Kallmann's views with some variations, it was in the so-called “Danish twin” study, headed by Seymour S. Kety, which began in 1962, in which the most conclusive proof of a genetic predisposition was thought to be found.⁷⁶ These studies have been pointed to over and over again as “proof” of the genetic basis of the disease. The researchers traced the relatives of a group of hospitalized schizophrenics who had been adopted as children. They then compiled a parallel control group of individuals matching the psychiatric patients who had never been hospitalized. A detailed search of the Danish records was undertaken to compile a family psychiatric history of each group. Thus records were found on 150 relatives of the 34 index cases and 156 relatives of the control group. The researchers discovered a substantially greater relationship between the occurrence of the disease in the index group and its relatives. Indeed, 8.7 percent of the relatives of the index group showed impairment, while only 1.9 percent of the relatives of the control group did. Again the figures seemed to indicate the absolute genetic determinism of the illness. In point of fact, Kety's study expanded the definition of *schizophrenia* to include diagnoses such as “inadequate personality” so that no true correlation could be shown. Lewontin et al argued in *Not in Our Genes* that the social placement of these children may well have played a role in the appearance of the disease, as the Danish placement structure tended to match socioeconomic backgrounds when referring children to potential adoptive parents.⁷⁷ One should also note that, although Kallmann found a much higher incidence of the occurrence of the disease (a fact criticized by Kety), the problem haunting both his work and the later twin studies is the definition of the illness. Absolute relationships between illness and inheritance depend on the definition of the illness.

The inability to pinpoint the “*schizophrenic gene*” led some researchers to search for a model that sees the liability for *schizophrenia* as inherited rather than the disease itself. The work of P. E. Meehl in searching for such a model is typical.⁷⁸ He sees *schizophrenia* as the social result of the existence of an inherited neural deficit. Thus, the illness has a somatic cause (an inherited central nervous system deficit) but manifests itself over time. Such attempts to span the “nature–nurture” division cannot be shown to be accurate until the reality of the “neural deficit” can be proven.

The belief that there must be some constitutional cause for *schizophrenia* has been closely linked in the history of the concept to the mechanisms by which the disease is produced. As early as Kraepelin's belief that *dementia praecox* was a metabolic disorder, there has been a desire to pinpoint the mechanism by which the symptoms are generated, even if no firm etiology could be found. The discovery in 1934 of the etiology of phenylketonuria as a specific enzyme deficiency caused by a specific gene provided a further historical model (parallel to the influence of the model of general paralysis of the insane on late nineteenth century theories of *dementia praecox*). Indeed the power of this model was such that even Kraepelin's metabolic theory was countered completely only with the work of S. S. Kety, who in 1969 argued that the metabolic errors found in schizophrenics were artifacts of the poor diet and lack of exercise of the asylum setting.⁷⁹ Similarly the identification of a schizophrenic body type (the domination of the “pyknic” body type) by researchers such as Kretschmer and Sheldon may well have its roots in the sequels of asylum life rather than in the nature of the disease process.⁸⁰

The irony is that while there was an attempt to follow through the assumption, rooted in the very core of the concept of *schizophrenia*, that the illness has some type of genetic mode of transmission as well as

a specific somatic presentation, it was in the practical question of treatment that one of the most startling indicators of the somatic basis of the disease was found. (This is important because the somatic roots of the disease may reveal the mechanism by which the genetic error causes the symptoms.) It was found that antipsychotic neuroleptics had an effect on the presentation of the symptoms associated with *schizophrenia*. Why this was so was the subject of much speculation. Earlier theories of a fault in brain chemistry, such as Osmond and Smythies's proposal that *schizophrenia* was the result of an error in the metabolism of the neurotransmitter norepinephrine, had a specific cultural dimension.⁸¹

With the rise of the "drug" cult after World War II and the introduction as cult drugs of LSD (lysergic acid diethylamide) along with other hallucinogenic drugs such as amphetamine, atepin, and mescaline came the promise of a biochemical error as the root of *schizophrenia*. The similarity between the chemical configuration of LSD and the methylated derivatives of neurotransmitters even led the form to be labeled as "psychotomimetic," as if the hallucinogens were producing identical psychological states to *schizophrenia*. The view that the body produced its own endogenous hallucinogens as a means of escaping the conflicts of family and the confines of society arose from later work that was influenced by R. D. Laing's views of the "prophetic" aspects of the disease and was linked with the cultic aspects of LSD use. The search for this endogenous hallucinogen moved from norepinephrine to the metabolism of serotonin, again because of the supposed similarity between known hallucinogens (such as bufotenin) and serotonin.⁸²

Studies of brain chemistry during the 1960s—studies that ignored brain structure and concentrated on the biochemistry of the brain—proposed other errors as the root of schizophrenia. There was interest in the catecholamines, specifically in the presence of DMPEA (3,4-dimethoxyphenylethylamine) in the urine of an index group of *schizophrenics* (but not in the urine of a control group).⁸³ Again, what seemed to be a specific quality of the biochemistry of *schizophrenia* revealed itself to be an artifact of hospitalization, for the index group was not on a controlled diet and the biochemistry of their urine reflected this rather than any specific metabolic error in the group. Indeed, studies that attempted to correct for this biochemical error in the patient population showed that even additives supplementing the "lacking" biochemical factors resulted in no behavioral change.⁸⁴ Later studies that attempted to correct for the discrepancy in diet brought the entire theory further into question.⁸⁵ Lewontin, Rose, and Kamin associated the search for the *schizophrenic* gene and the discovery of *schizophrenic* urine as a reductionist search for the holy grail of the disease, the simple and direct answer that will provide a unified field theory for the disease. Many other such reductionist theories have been offered: Stein and Wise's 6-hydroxydopamine hypothesis that links the disease to specific neural systems, Murphy and Wyatt's theory of lowered monoamine oxidase activity, Heath's theory of the existence of an abnormal blood protein, taraxien, in *schizophrenics*.⁸⁶

None of these has proven to be the single answer. Indeed, the biochemical studies have for the most part been attempts to reduce the disease to a specific biological model. The difficulties of such a position, given the protean nature of the various concepts of schizophrenia, is evident. Manfred Bleuler, Eugen Bleuler's son and a major researcher on the nature of schizophrenia in his own right, observed as follows:

For nearly 100 years, the group of schizophrenic psychoses have been intensively studied, yet they appear to many to be totally baffling and insufficiently researched. A shocking antithesis! Too little thought has been given to how much this antithesis results from our own prejudiced thinking. We conceive ourselves, our personalities, and our own egos as being steady and firm. The fact that we could disintegrate mentally by way of natural processes—as the schizophrenic does—is a monstrous, uncanny concept.⁸⁷

Indeed, it is this fear of the amorphous nature of the disease, of the *schizophrenic* process, that drives the biological scientist to evolve a specific, limited (and limiting) understanding of the disease. The complexity of the psychological presentation of the disease, its shifting from age to age in terms of its manifestations, does not lend itself quite as simply to such a reductionist approach. As we have seen, however, the most complex conceptualizations of the disease have always reflected the intellectual and cultural presuppositions of their age. In our times, so dominated by the biological model with its one-to-one relationship between cause and effect, it is little wonder that such views have come to hold center stage.

Conclusion

I began my history of the concept of *schizophrenia* with the caveat that I was going to sketch how a group of blind fakirs saw an elephant that they all agreed was called *schizophrenia*. Each described the part he grasped and could not understand how others could be so foolish as to fail to perceive their own segments in the same manner. Sadly, when we look at the various descriptions and theories of *schizophrenia*, it is clear that no elephant can be constructed from the often contradictory views proposed and held. Rather there is a dialectic at work in the construction of the disease concept. Theories react to other theories and to the position of various models in the culture of a specific place and time. No composite theory of *schizophrenia* can be proposed and perhaps none will ever be generated, certainly not one that will unify all of the views discussed here. The best one can do is to understand how the various concepts have evolved historically and how, on one level or another, they relate to each other.

Notes and References

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for an analysis of the metaphysical suppositions of the medical model in psychiatry, especially as it relates to the concept of schizophrenia.

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Chapter 16

The Concept of Psychosomatic Medicine

Herbert Weiner

Nature teaches me by these sensations of pain, hunger, thirst and so on ... that I am not only lodged in my body as a pilot in his ship, but that I am closely united to it, and so to speak so intermingled with it that I seem to compose with it one whole.—René Descartes, *Sixth Meditation* (1641)

All diseases may, *in some sense*, be called affections of the nervous system.—Robert Whytt (1751)

Introduction

A historian of medicine¹ and several physicians² have written histories of psychosomatic medicine. Though their writings discuss the origins and definition of the term or the development of the activities of those who subscribe to its ideas, none of these authors has stated why such a comprehensive and self-evident approach that attends to sick persons, not merely to diseased organs, tissues, cells, or the pathogens that infect them, is still not medical orthodoxy in the Western world. The historical, conceptual, and cultural forces that have prevented the development of a medicine for the living sick, and not only for their defective cells, have only been implied but have not been made explicit.

A note of clarification seems justified at this point. A comprehensive medicine for sick persons is not a *second* medicine. We already have two medicines; one is the predominant form—for mindless bodies—and the other is for disembodied minds. In the last 50 years the attempt to bridge the gap between these two forms of medicine has been called psychosomatic medicine. But why should this gap exist at all? Physicians and many historians have answered that it is rooted in the metaphysics of René Descartes³; the “problem” of mind and brain–body dualism remains as insoluble as it ever was. Any attempt to solve it, and thereby to close the gap, is doomed to failure. This is because it is fundamentally a *metaphysical*, not a scientific, issue.

But the reasons for the two irreconcilable medicines lie not only with the mind–body conundrum, but also with the manner in which physicians have always gone about their main self-assigned tasks: the diagnosis, explanation, and treatment of disease. The ultimate explanation and verification of disease is to be sought in anatomical structures after death. These structural changes explain the patient’s symptoms and the pathogenesis of his disease. Ever since Hippocrates and Galen physicians have sought a single causal explanation of symptoms and signs in terms of anatomical change in function (e.g., the movement of the uterus stirring up the humors explains the symptoms of hysteria).⁴ Giovanni Battista Morgagni and Rudolf Virchow correlated symptoms with lesions in organs and cells in such a manner that the lesion defines the disease.⁵

With Hippocrates begins our medical methodology of explaining symptoms as structural alterations and of explaining the latter in terms of a hypothesized general disharmony of material elements.⁶ Physicians were to seek material explanations for disease, symptoms, and signs in the same manner as the anatomist Mundinus recorded not what he observed but what he believed existed in his search for the bodily location

of the soul.⁷ The proponents of the structural tradition in medicine have in part used the so-called mind–body conundrum to reinforce their axioms, to disregard the personal lives of patients, and ultimately to proclaim that man is merely a machine (as did Julien Offray De La Mettrie⁸ and the iatro-mechanists who preceded him). According to this line of thought, strongly reinforced by Bichat, Claude Bernard, and Louis Pasteur,⁹ it was the function of the physician to locate the altered, damaged, or worn-out part of the living machine—be it organ, cell, gene—and “fix” it.

But most patients have symptoms without signs or anatomical lesions: the symptoms result from disturbances in one of the many functions carried out by persons, functions (such as reproduction, digestion, respiration, work, play, and sleep) that only living beings, not corpses, are able to carry out.¹⁰ The actual dualism in medicine is not between mind and brain–body but between the study of sick persons and the study of corpses spread out on the pathologist’s table. The pathologist is the final arbiter of diagnosis. He studies structural alterations in dead bodies but he is unable to study their functions (William Harvey¹¹ would have been at pains to describe the circulation of the blood in a corpse!). Corpses and machines do not experience pain, joy, or thirst; nor do they demonstrate elevations of blood pressure, racing hearts, dry mouths, or complain of sleeplessness. None of these changes in function is necessarily or at all associated with structural changes in organs. And, above all, machines or corpses do not warrant compassion.¹²

Inappropriate for studying function in living beings, the corpse is an even poorer means for studying the factors that sustain health. Lost in the metaphysical shuffle about his dualism are Descartes’s statements¹³ that the preservation of health is also the function of medicine—an activity that cannot be carried out on corpses. (Until this day medicine, in its reigning form, defines health negatively—as the absence of disease.¹⁴)

In addition to its intellectual roots as briefly outlined, medicine has become increasingly specialized over the centuries. The patient’s body (structure) is partitioned into ever smaller units upon which the specialist focuses his undivided attention. Even Adolf Meyer’s “psychobiology” ignored psychosomatics, as E. R. Wallace points out.

Psychosomatic medicine has until recently attempted to bridge a gap between two forms of medicine and its ever more specialized practitioners in the face of a long tradition in medicine and of a metaphysical problem that cannot be solved by casting a vote for one of its solutions. What has recently emerged is that psychosomatic medicine is much less concerned with the pathophysiology and morbid anatomy of disease than it is with living persons carrying out—successfully or not—their duly assigned functions of a spiritual, social, psychological, and physical nature; while living at a particular historical time, in a particular social and ecological niche, within a particular family, each person with a unique genetic endowment, personal and educational experiences, sensitivities, and relationships. It concerns itself not just with the patient, but also with the manner in which physicians approach their patients—an approach that is in turn determined by their own social, personal, and educational backgrounds as well as by their theoretical beliefs.

The question is not whether psychosomatic medicine, as we know it today, has any validity, but—as I asked at the beginning—why its orientation is not the dominant or accepted form of medicine in the Western world. The answer to this question is that modern medical science adheres to a limited view of biology—a quantitative, structural, and reductionistic perspective on life and living matter that is basically static: do not the four constituent bases of DNA arranged in groups of three like beads on a string ultimately explain all of the complex structures of living organisms? But even the genome is, in operation, fluid and mobile, not static; genes not only code for proteins, but also move about and regulate each other. Quite apart from the conceptual inadequacies of the static, reductionistic, structural view, the medical sciences have eschewed a broad organismic view of biology—how complex organisms interact with each other and the environment with an irreducible individuality.

The Origin of the Term “Psychosomatic”

Margetts¹⁵ wrote that the adjective “psycho-somatic” was first used by Johann Christian August Heinroth¹⁶ in discussing a specific symptom—insomnia. (Note that the term was then hyphenated¹⁷; in the twentieth century the hyphen was dropped). During the remainder of the nineteenth century this adjective surfaces

infrequently. When it does so it is used to refute a dualism of mind and body and, in the most general terms, to describe the mutual influences between body and mind,¹⁸ or to discuss the symptom of dyspepsia (by Ottomar Rosenbach).¹⁹ By the end of the nineteenth century Daniel Hack Tuke employs the term somewhat more concretely to refer to a “medicine for mind and body,” not further explained.²⁰ The subject matter of psychosomatic medicine became defined in the first third of the twentieth century in the United States and Germany; further refinement of its definition and content continued through the twentieth century.²¹

The central conceptual issues that pervade current psychosomatic medicine have preoccupied thoughtful physicians for centuries; they are as old as the study of sickness, as awareness of the bodily correlates of feeling states. For several thousand years keen medical observers have noted the role of the passions (i.e., emotions) as antecedents or fellow-travelers of disease. For an equally long time, philosophers and psychologists have concerned themselves with the origins and classification of the passions. Physicians, guided by Hippocrates, have assumed axiomatically that passions and temperament, like disease and symptoms, stemmed from organs in the body. Until it became evident that the emotions were psychological (mental) experiences, no psychosomatic medicine could exist. Locating the source of the emotions was a crucial first step in assuming that one mental faculty could be associated with altered bodily function or disease. The next step was to determine what external or internal factors incited emotional responses in persons—a line of investigation not systematically begun until the nineteenth century and that continues to date. Deeming emotions pathogenic for centuries, physicians have failed to realize that they serve a crucial role in the biology of the organism, alerting it to danger and injury, signaling defeat or victory, and being mobilized before and during conflict or before or after the loss of support and comfort. Emotions are intrinsic to the existence and survival of animals and persons in health and disease.

Before much progress could be made in the study of emotional and other psychosocial factors, diseases needed to be classified—not all fevers are due to one bacterium. General categories such as fever, dyspepsia, or even chest pain are poor topics for inquiry. The various forms of dyspepsia had to be discriminated into gastric and duodenal ulceration, dyspepsia without ulceration, gall bladder disease, gastritis, esophagitis, and duodenitis. Only then did it become possible to study the variable role (if any) of psychosocial and emotional factors in the etiology, pathogenesis, and pathophysiology of diseases. Only recently has it also become clear that most diseases actually consist of two or more subforms, thus clarifying many of the past controversies in psychosomatic research, for even diseases show variation.

The Definition and Content of Psychosomatic Medicine

In 1942 the Society for Research in Psychosomatic Problems was formed. It took over publication of the three-year-old journal *Psychosomatic Medicine*, founded under a grant from the National Research Council, with Helen Flanders Dunbar as editor. The first article published in that journal contains explicit statements about what psychosomatic medicine does and does not pretend to be: it was to comprise the psychological approach to medicine at large in all of its general and special forms; to study the relationship between the emotions and bodily processes; to eschew the distinction between mind and body; and to carry out psychophysiological research. In short it was principally to add a new clinical and investigative psychophysiological dimension to all of medicine; as such it was a special field with its own (psychodiagnostic and psychophysiological) techniques, which were integral to the rest of medicine. The editors took pains to set themselves apart from psychiatry. They also stated that psychosomatic medicine was not a medical specialty claiming territorial priority over any particular part of the body or group of diseases; and they explicitly eschewed taking any position on the mind–body problem. (However, Dunbar and another of the editors, Stanley Cobb had taken monistic positions.²²)

In view of Dunbar’s 1935 survey *Emotions and Bodily Changes*²³ and of the historical roots of the psychosomatic enterprise, it does not surprise that this initial statement emphasizes the role of the emotions and their physiological correlates. Curiously, though, nothing in this definition hints that a group of Dunbar’s colleagues at Columbia University—Agnes Conrad, George E. Daniels, George Draper,²⁴ and

Charles D. Murray—were at the same time studying the role of psychological factors (formulated in psychoanalytic terms) in chronic gastrointestinal diseases such as ulcerative colitis. During this decade, Franz Alexander and his many colleagues had begun his psychoanalytically derived observations on patients with essential hypertension, peptic duodenal ulcer, hyperthyroidism, neurodermatitis, rheumatoid arthritis, bronchial asthma, and ulcerative colitis. It seems clear that the leading figures in psychosomatic medicine in the United States were predominantly psychoanalytically oriented clinicians studying the role of depth-psychological factors in the pathogenesis of physical diseases while overlooking many illnesses with bodily symptoms but without physical lesions. Their interests lay in the *psychogenesis* of these physical diseases and in finding new ways of *treating* patients, not in the psychophysiology of the emotions. In the next two decades (1940 to 1960) psychosomatic medicine in the United States focused predominantly on physical disorders and disability, anteceded or aggravated by psychological factors, in which some aspect of the person—either his personality²⁵ or his unconscious conflicts²⁶—not his diseased organ, was the center of the physician's concern. In that sense, psychosomatic medicine has always implied a philosophical position: the personal and the humanitarian, not just the technical, approach to patients. A year after the editors of the journal published their position, Edward Weiss and O. Spurgeon English published the first American textbook of psychosomatic medicine, defining it somewhat differently²⁷:

The relatively new concept of psychosomatics is an approach to medicine which is as old as the healing art. It is not a speciality but a call to pay as much attention to the mental without neglecting the bodily; the role of psychosocial factors in the etiology, pathogenesis, course and prognosis should be considered as seriously as the role of physical, chemical and microbiological ones.

Weiss and English enunciated a broader (multifactor) perspective on the etiology of disease and added the role of social factors, not only psychological ones, to the list.

In the next year (1944), a more concrete definition of psychosomatic medicine came from another quarter—internal medicine. Henry A. Christian was the editor of the fifteenth edition of William Osler's *Principles and Practice of Medicine*,²⁸ the first chapter of which defines psychosomatic medicine as

that part of medicine which is concerned with an appraisal of both emotional and physical mechanisms involved in the disease processes of the individual patient with particular emphasis on the influence that these factors exert on each other and on the individual as a whole.

The editor points out that the medical student is biased by his study of bacteriology and pathology only to think in terms of physical disease, but then finds that patients describe symptoms and reactions without “demonstrable lesions of body structures.” Every general practitioner knows this. The technology of medicine causes the physician to “neglect the patient's personality and surroundings” to the patient's dissatisfaction. This edition of Osler's textbook begins by describing the “functional diseases of the nervous system,” in which he includes neurasthenia, anxiety neuroses, psychoasthenia, psychoneurosis, hysteria, joint pains, traumatic and occupational neuroses, tremors, habit spasms and tics, migraine, neuralgia, and periodic and sleep paralyses. Note that this psychosomatic medicine is a medicine of symptoms without bodily lesions, but it does not include the etiologic or pathogenic contributions of psychological and social factors in bodily disease. Yet, in 1892 Osler wrote, in the first edition of his textbook, that the onset of rheumatoid arthritis was so often accompanied by shock, worry, and grief that their association was unlikely to be a chance one.

It is ironic that most of the earliest practitioners of psychosomatic medicine in the twentieth century concerned themselves with the psychological contributions to diseases characterized by discernible anatomical lesions (they unfortunately called these “organ neuroses”). They neglected to study the functional bowel and musculoskeletal disorders and the hyperventilation syndrome, all of which constitute the most common complaints that bring patients to physicians.

On the other hand, the definition just quoted emphasizes the primary role of the emotions in disease. It limits their presumptive role in pathogenesis to the neurotic and psychophysiological disorders. And it takes no stand on the mind/brain–body issue.

Despite the fact that the first editors of the journal *Psychosomatic Medicine* wished to avoid controversy about the mind–body problem, that insoluble issue has returned to haunt its theoreticians and practitioners. Thus, in addition to the overstatement contained in the unicausal concept of psychogenesis and the failure to solve the mind–body controversy, psychosomatic medicine in the twentieth century initially failed to:

1. Add a significant biological dimension to medicine by incorporating evolutionary concepts. Specifically, it initially failed to add the study of the dynamic relationship of man to his natural and human environment (in health and disease), despite Dunbar’s having written that “the criterion of psychosomatic health is maintenance by the organism of homeostatic [*sic!*] equilibrium within itself and within the environmental field.”²⁹

Furthermore, it failed, in an evolutionary sense, to recognize the individuality of each person as being fundamentally irreducible. (Individual variation is the source of evolution. Natural selection is not able to operate unless populations present a row of individual differences among their members.)

2. Define its clinical operations. If the term psychosomatic is to be taken seriously, it should incorporate within its purview every illness and disease in which bodily symptoms are manifest. To be specific, it should include:
 - (a) The classical diseases in which anatomical alterations occur or new structures arise (i.e., cancer).
 - (b) The physiological accompaniments of the emotions (feelings and moods). Fear and anxiety produce racing and pounding hearts, increased respiration, and dry mouths. They dilate pupils, prevent sleep, and cause tense muscles, diarrhea, and a flow of urine. Depression constipates, and diminishes sexual desire and appetite.
 - (c) The hysterias that paralyze limbs, blind, numb, produce pain and convulsions, or alter swallowing. (Hysterical symptoms prevent actions, not muscular movements; perceptions, not sensations.)
 - (d) Neurasthenia and hypochondriasis.
 - (e) Illnesses manifested, not by any disturbance of structure, but by pains and aches (most frequently in the head and muscles), impotence, frigidity, diarrhea, constipations, sleep and appetite disturbances—bodily symptoms without signs of structural alterations.

Nonetheless, the preoccupation with the role of psychological factors in structural disease—the main concerns of medicine—have been uppermost in the minds of the first practitioners of psychosomatic medicine. Their initial diffidence about psychiatry is also curious because bodily symptoms (alterations in food intake, weight, digestion, and sexual function) are central to the recognition and understanding of the manic and depressive disorder.

Toward a Medicine of Living Persons

A curious dichotomy appears in Hippocratic medicine. Its approach to diseases and their causes is inferential and correlational: symptoms are to be correlated with material changes in the body. But its ethos consists of prescriptions about the relationship of the doctor to his patient: it is the patient who should not be harmed, taken advantage of, or treated mischievously. These ethical prescriptions have nothing to do with the explanation of disease. Plato³⁰ enjoins physicians to consider the (whole) patient, and not only a part of him, in order to cure disease. But he does not tell the physician how to do this. The same injunction appears and reappears in medicine and pertains more to treatment and the physician’s behavior than to diagnosis or etiology of disease.

The school of Salerno prescribed the manner in which health was to be maintained, predominately through the agency of a person’s action rather than by maintaining the harmony of his humors.³¹ Maimonides³² and Roger Bacon³³ wrote about health and its maintenance at a time when medicine was mostly preoccupied with epidemics, disease, and surgery and not with health. Throughout the Middle Ages and beyond concepts of disease were based almost exclusively on Galen’s thought, especially on his notion of lesions localized in specific body structures. It remained for Francis Bacon³⁴ to formulate a syllabus for

medicine. He proposed how man might know himself comprehensively—as “segregate” and “particular,” and “conjugate” and “in society.” The proper topics in the study of living man were to acquire “knowledge with respect” to “the body” and to “the mind.” Most important he stated that this knowledge was unitary and consisted of “his common and undivided nature . . . concerning the *sympathies and concordance between the mind and the body*, which being mixed cannot be properly assigned to the sciences of either.”

He also proposed a method whereby to study mind: the “lyneaments” or gestures of the body would reveal the mind’s dispositions, and the countenance would disclose emotional (“humours”) and mental states. The relationship between “humours” and “affects” of the body and the “passions” and “apprehensions” of the mind were reciprocal. Furthermore, this mutuality had been and should be studied by physicians and was an “appendix of medicine.”

But it was not only the passions which could alter the body. Bacon went on to say that the “imagination” could do so too, and that both were “of great force to further or hinder remedies or recoveries.” It is also worth noting that Bacon was critical of anatomy because it provided only part answers. Properly to understand man and his diseases, anatomy had to be supplemented by a study of a man’s “imagination” and “passions” in order to achieve a humane medicine.

Medicine plays a much neglected role in the thought of Descartes.³⁵ Clinical medicine should be a “practical,” in contrast to a speculative (metaphysical?), philosophy and should be based on observing, experiencing, and “knowing.” The ultimate aim of this knowledge is to bring about the preservation of health—the “chief blessing in life.” Through experience alone we know the intimate union of our minds with our bodies. In sick persons a change occurs; their experience becomes focused on their bodies so that they lose their “liberty.” Dead persons have bodies only, which the anatomist and physiologist treat like machines—a heuristic device that has “no truth in the nature of things.”³⁶ The living sick person and clinical medicine does (should?) treat the “composite” whole. What scientific medicine and speculative philosophy (the body as a physical structure) have torn asunder, clinical medicine unifies, according to Descartes.

This brief summary of Descartes’s views on clinical medicine acts as a counterweight to what most historians of psychosomatic medicine have usually chosen to write about: they consider Descartes as the villain who divided mind and body or, at best, held an interactionist position on their interrelationship. These historians then contrast him to those who followed, such as Georg Ernest Stahl,³⁷ who, in reaction to Descartes’s “dualism,” was not satisfied with an exclusively mechanical explanation of living matter because it does not do justice to life’s special properties. Therefore, Stahl postulated a life force that he called *anima*, which, though it could not be observed directly, was the dynamic organizing principle of life acting through bodily motions, especially blood circulation. Jerome David Gaub stated in general terms that sound bodies could become ill and sick bodies well through the agency of the mind.³⁸ The mind, Gaub believed, as Bacon had said earlier, could also impede recovery from sickness.

William Cullen took quite another approach to the problem.³⁹ The brain, not the putative humors, regulates and integrates the function of every organ system in the body; its regulatory function is obscured by studying organs separately, and certainly cannot be studied in dead bodies. No vital or dynamic (*animae*) forces need to be postulated.⁴⁰

One finds in the writings of Benjamin Rush and Henry Holland the notions of the “indivisible” nature of man and the mutual influences between “soul” and “body.”⁴¹ (However, Holland’s observations on pellagra powerfully boosted the ever-present hope and belief that all mental illness eventually can be reduced to a physical basis—another of the traditional forms of unification by reduction.) Critical also for the development of psychosomatic medicine was Daniel Hack Tuke’s⁴² recommending the use of “psychotherapeutics” in treating physical disease, thereby implying a role for psychological factors. His recommendations were not systematically followed until the 1920s, although hypnosis was used during surgical operations and for a wide variety of symptoms in the nineteenth century. It was a century also marked by the remarkable successes of cellular pathology in defining, and of the germ theory for understanding, the pathogenesis of disease. Single causes for every disease were now sought. The explanation of symptoms and signs was to be correlated with local, anatomical terms. Increasingly, physicians focused attention on pathological anatomy and physiology—but not on their antecedents. A reaction to these narrow concerns

was in the offing. It appears in a radical redefinition of medicine given by Ludolf von Krehl,⁴³ who stated in 1932 that “diseases do not exist *per se*, we know only sick persons.” Equally important for a whole generation of pre- and post-World War II German practitioners of general internal medicine was Gustav von Bergmann,⁴⁴ who flew in the face of the tradition of thousands of years by stating explicitly that structural changes in the body followed from rather than preceded physiological change. At the same time Viktor von Weizsäcker formulated a medicine of man (“*Anthropologische Medizin*”), whose emphasis was the patient and his subjective experience, which he regarded as being as critical to the diagnosis of disease and care of patients as the “objectivity” of signs and anatomical lesions.⁴⁵

Once the statement has been made that the proper subject matter of medicine is the sick person rather than just the search for the anatomical basis of his symptoms, we are still at a loss to understand what aspect of the person is most relevant: is it his emotional life, his interaction with his environment, the meaning that symptoms and diseases have for the patient, his imagination or personality, or his genetic endowment and his past history? All of the relevant topics have been welded together—but only in recent years—into an integrative medicine, the historical heir of psychosomatic medicine.

The Role of the Emotions (Passions and Affections) in the History of Psychosomatic Medicine

Ackerknecht⁴⁶ pointed out that for centuries the latent content of psychosomatic medicine was subsumed under the heading of the passions. There are a number of reasons for the concern with the passions and emotions: They are characteristics of living organisms, but not of machines; they are observable phenomena; they change the appearance and expression of persons (Bacon’s “lyneaments”) and cause sensations and changes in bodily function; they are associated with “movements” in muscles and glands (“moved to tears”); and they are communicated; they have been linked with dramatic clinical phenomena—the hysterias—and to persons prone to it. Hysteria in turn is the most paradigmatic disorder in which bodily symptoms occur and in which actions and the mental faculties are altered without anatomical lesions. One need not be a philosopher or physician to be aware of such phenomena; in fact, the poet describes them far better than the biomedical scientist.

Nonetheless the matter is as puzzling as it ever was. The causal relationship between emotion and bodily change is complex; the specificity of physiological (not behavioral) changes with individual emotions remains unproven; and the role of the emotions in the production of structural changes in organs is far from established.

The Emotions

The Bible records many descriptions of the appearance of the grieving King David or the lamenting Jeremiah. In Hippocrates’s writings we read that every feeling governs an organ: anger, for instance, contracts and joy dilates the heart. Aristotle wrote that the affections are “associated with the body.”⁴⁷ Of importance, while fear, for Aristotle, may be induced by some external provocation, at other times it may occur without any “cause.” He believed, however, that the “affections of the soul are ideas expressed in matter” and implied, as had Plato, that certain affections are located in and emanate from specific bodily sites. In the second century Galen classified the passions as the sixth of the non-natural causes of disease, and believed that they could also cure disease,⁴⁸ while just before him Aretaeus of Cappadocia, perhaps the most prolific describer of diseases after Hippocrates, stated that the soul and its various affections were one of the causes of paralysis and of unrestrained laughter.⁴⁹ Augustine’s descriptions of grief and lust in his *Confessions* at the beginning of the fifth century still powerfully move us.⁵⁰ Avicenna made psychophysiological observations a thousand years ago,⁵¹ while a century and a half later Maimonides studied the bodily correlates of the passions.⁵² Not until the seventeenth century, though, did a rational explanation of their relationship appear. Until then the relationships of the “humors” to the passions remained obscure.

Thomas Elyot felt in the 1500s that *immoderate* passions of the “mind” could “annoy” the body and shorten life; sorrow in particular is the “enemy” of bodily health.⁵³ At about the same time the polymath Renaissance physician Juan Luis Vives accurately described love, hope, hate, resentment, envy, and jealousy.⁵⁴ In the 1500s Paracelsus based his radical views of medicine and disease on close study and observation of individual patients, proclaiming that body and mind were one and indivisible and commenting on the role of the passions in mental and physical diseases.⁵⁵ In 1547 the English physician Christopher Langton wrote about the different bodily effects of the affections and discriminated between fear and sorrow⁵⁶; exactly 80 years later Simon Goulart wrote that rage could produce disease, but he took no position on whether the humors emanated from the brain or the body.⁵⁷ The passions particularly interested Johannes Weyer (also known as Wier), who in the mid-1500s recorded the language and watched the behavior of the emotionally distressed, as well as providing an early rational explanation for witchcraft.⁵⁸ In arguably the most important Elizabethan psychological treatise, thought to be the basis for Shakespeare’s characterization of Hamlet’s melancholy, Thomas Wright asserted in his *Passions of the Minde* that the passions engender corporal humors to alter bodily function and structure.⁵⁹ Edward Jorden wrote the first English textbook on hysteria, published in 1603 two years after Wright’s book, falling back on Hippocrates’s explanation of its symptoms, although he also believed they could arise from “perturbations of the mind.”⁶⁰

Robert Burton’s 1621 book on melancholy, famous even in its own time, included descriptions of its accompanying bodily symptoms and the presence of insomnia.⁶¹ Burton believed, however, that the “principal part affected” was the brain and not the heart. In his 1633 *De melancholia hypochondriaca* the exiled Catholic English physician John Hawkins first described fearful concern with bodily parts (“hypochondriac melancholy”) mixed with depression, basing his book on the case of Queen Elizabeth of Bohemia, daughter of James I, whose symptoms were “twitching of the stomach [butterflies], rumbling of the guts, palpitation of the heart, attacks of trembling and swooning, sleeplessness and loss of weight.”⁶² In his 1628 *De motu cordis*,⁶³ which laid the foundation for modern medicine, William Harvey observed that the emotions perturbed the circulation, and that in some patients the threat of being bled was followed by fainting. He described a patient in whom unexpressed rage, spite, and revenge led to “extreme oppression in the heart and breast.” The patient died; his heart and aorta were engorged, and the ventricles of his heart “equalled the size of a bullock.” Harvey also described hysterical symptoms, most importantly pseudocyesis. A landmark in the history of physiology and medicine, Harvey’s observations on the circulation also raised a series of questions that have been discussed ever since: What is the nature of the living organism, and of life itself? What is the difference between living and dead tissue? What is the relationship between structure and function? Why does the heart beat and why do arteries pulse? Why should the emotions perturb the circulation, and what is the link between the one and the other? Many different answers to the question of the nature of living tissues and organisms in health and disease have been proposed ever since. Such concepts permeate medical thought for the subsequent centuries under the various rubrics of “irritability,” “sensibility,” “*animae*,” “vitalism,” “vital forces,” “entelechy,” “organization,” “integration,” “regulation,” and “emergent properties.”

In the early to mid seventeenth century, Jean Baptiste van Helmont made important observations on “gases” distinct from air.⁶⁴ Burning coal and fermentation produce, and the air of caves contains, the same gas. Growing plants accrete water. Nutritives are fermented by digestion. Thus living matter gives off non-living matter and converts nonliving matter into living matter. Some organizing force or principle (“*archeus*”) controls each living process in the body through ferments, which, when disrupted, produce disease. The subsidiary “*archei*” are relatively autonomous, but they become integrated by the “*archeus*” into the living being who is a “federation of organs.”

Living tissue, particularly muscle, contains an intrinsic property, which Harvey’s pupil Francis Glisson called “irritability,” and which is brought about by—and is a reaction to—external influences.⁶⁵ The brain is the source of “animal” movement resulting from the contraction of irritable muscles. Glisson’s observations point to the fact that living tissues have properties that dead tissue does not: some kind of “force” is inherent in the former.

In the latter seventeenth century Thomas Willis, often called the “father of neurology,” laid to rest the uterine (i.e., anatomical) explanation of hysterical symptoms.⁶⁶ Willis also described the alterations in sensation

and movement and the production of convulsions with which he equated hysteria (as a neurological disease). Thomas Sydenham used the term “hysteria” to refer to all of what later came to be called the “neuroses” by William Cullen.⁶⁷ Significantly, he stated that the neuroses could not be accounted for by the usual “principle of designating disease” anatomically. Sydenham believed hysteria was a common disorder, occurring not only in women, and that it often accompanied physical diseases. He seems to have placed it squarely in the psychological, not neurological, camp. Uncontrolled passions, such as grief, fear, and anger, “wounded” and disturbed the body and the mind. They could, according to the seventeenth century British physician Everard Maynwaring, cause a “wounded, disturbed, or restless mind” and a “diseased body.”⁶⁸ In 1691 Robert Boyle described the details of hysterical motor paralyses, and Richard Blackmore 34 years later ascribed hysterical and hypochondriacal symptoms to “disquieting and restless” passions.⁶⁹

Jan Swammerdam noted in 1667 that a physical object—muscle—could respond to nervous stimulation, even when the nerves were disconnected from the spinal cord. He laid the foundation for the study of muscle function, reflex activity, and “irritability” and for the eventual concern with neuromuscular transmission and the many factors that could produce paralysis.⁷⁰

Descartes preferred to write about the emotions and not the passions.⁷¹ Baruch de Spinoza described and classified the affections (emotions), and expertly identified the occasions that elicited them. In contrast to his predecessors and successors, he did not ascribe a moral valence to them—they were neither good nor bad. He believed that contradictory emotions produced vacillations or expunged each other.⁷²

Richard Morton’s 1694 *Phthisiologia* is thought to contain the earliest description of anorexia nervosa.⁷³ He differentiated it from tuberculosis (“distemper of the lungs”) and characterized it by loss of appetite, amenorrhea, and extreme weight loss without lassitude. (One hundred years later a case of male anorexia nervosa was first described by Robert Willian,⁷⁴ and 200 years later the disease was named by William Withey Gull and Ernest Charles Lasègue.⁷⁵) In 1698 John Floyer described the association of passions with fits of asthma, a theme that recurs until the present day.⁷⁶

Nehemiah Grew ascribed in 1698 hysterical symptoms to fantasies (“phancy”), only to be contradicted four years later by John Purcell, who again believed that they emanated from the “stomach and guts.”⁷⁷ Frances Hutcheson was, in the 1720s, one of the very first to study the link between thought, passion, and affection (emotion) and that between emotion and temperament—the abiding, characteristic emotional tone of persons, which, since Hippocrates, had been ascribed to blood and bile. What is more, the irrationality of the emotions struck Hutcheson, as did their ability to escape their subject’s “power.”⁷⁸ Fifty years later James Vere held to what would now be called a “conflict” theory of anxiety (nervousness), whose origins were a struggle between desire and aversion.⁷⁹

At the beginning of the eighteenth century fundamental observations and concepts central to the psychophysiology of the emotions appear in the works of Albrecht von Haller and Robert Whytt.⁸⁰ They both maintained that Glisson’s “irritability” is not an abstract property or faculty but rather the response of muscle (including heart muscle) to stimulation, independent of the nervous (neural) system. On the other hand the sensation (sensitivity) of pain is intrinsic to nerves but not to the brain itself. Whytt agreed with Haller’s observations. In addition, Whytt stated that muscles could also be made to contract by will, or the conducting nerves. He discovered reflex actions and described two kinds: “vital” (autonomic) and involuntary (reflex) ones, an example of which was the pupillary reflex to light. Thus he enunciated that the activities of the living body are coordinated and directed through the influence of the nervous system and not of the soul and pronounced the generalization that heads this chapter. He also stated that hysteria and hypochondriasis were nervous diseases and illustrated the principle by observing that an emotion (lust) could cause the penis to become erect.

Whytt’s French contemporary Théophile de Bordeu rejected both a mechanical and a vitalistic explanation of living beings and wished to place the study of their properties on an empirical and verifiable basis.⁸¹ The secretory functions of glands, he held, for example, cannot be explained by mechanical forces and pressures alone. Furthermore, he postulated that one could not easily separate (pain) sensation (“sensitivity”) from the “irritability” of muscle. But muscle may also be made to contract at will and carries out functions that machines are not capable of, although they both move. Nerves carry “sensitivity” throughout the

organism—a property that is exclusive to living beings. Machines are not organisms and do not feel pain. Although bodily organs may carry out their functions independent of each other and of the brain, they also interact and are connected by “sensible” nerves and ganglia and by the circulation of the blood, both ultimately controlled by the brain. Thus, particular organs can both be relatively autonomous of stimuli external to the body and also be influenced by them through the agency of sensory nerves and the brain. In an extraordinary way, Bordeu anticipated many of Claude Bernard’s ideas about the body’s internal environment (“*milieu intérieur*”) and to a whole series of later investigators who studied the external factors and contingencies that perturb it.

George Baker’s 1755 address delivered in Latin in Cambridge, England—the first lecture given there on the mind–body relation—was one of the earliest discussions of the pathogenic effects of certain emotions—melancholy, envy, jealousy, and anxiety.⁸² He linked anxiety causally to hypochondriasis. Pathogenic affections produce “furious” disturbances in bodily organs (“vitals”). His contemporary, John Hunter, specified some of these disturbances and made observations about sexuality which complemented Whytt’s.⁸³ According to Hunter the mind is responsible for disturbances of sexual potency and the ejaculation of sperm. Sexual intercourse is initiated by the mind; willing it is irrelevant because under certain conditions it fails, for example, if the potential sexual partner is a “virgin” or “one’s own sister.” On the other hand, masturbation produces guilt, and anger can lead to heart disease and sudden death.

Fundamental to our understanding of living organisms is John Brown’s concept that organisms are not merely the passive recipients of stimulation but are endowed with responsiveness (“excitability”).⁸⁴ Life is a balance between the two. Organisms may become overexcited, in which case they develop “sthenic” diseases, or if insufficiently excited, they fall sick of “asthenic” diseases. Thus, stimulation—and the “excitability” it produces—is a property of living organisms and not only of nerves or muscles. Brown’s ideas had considerable influence in Italy, the United States, where Benjamin Rush adopted them, and particularly in Germany, where wags joked that they killed more people than the French Revolution and the Napoleonic Wars combined.⁸⁵

William Falconer’s 1788 *Dissertation on the Influence of the Passions*—the first psychiatric prize essay, which won the first Fothergillian Medal given by the Medical Society of London in 1787—returned to the theme that emotions produced bodily diseases. Shortly after, Sayer Walker developed a methodology by which the physician might recognize the role of psychological factors in all of disease.⁸⁶ Believing that mind and body mutually interacted, Walker recognized that both bodily disease and external factors had an impact on the minds of persons. In the same period William St. Clare and Dugald Stewart recognized that hysteria (“dancing mania”) revealed in an important way that emotions and behavior are communicated from one person to another.⁸⁷ Robert Bree developed in the 1790s the theme of the passions as antecedents of asthmatic attacks and of migraine headaches.⁸⁸ He even postulated a neural mechanism—the eighth nerve [*sic!*]—that mediated the asthmatic attack.

In France, in the meantime, Pierre Jean Georges Cabanis reduced the mind–brain problem to a simple analogy: the brain digests impressions that arise both within and outside the person in the manner in which the stomach digests food. Thought is secreted by the brain. Yet feeling, according to Cabanis, belongs to another category; it is the essence of the consciousness of the self. This sensibility remains unfathomable; it is rooted in the nervous system and ultimately cannot be explained by the laws of physics and chemistry. (Cabanis remained undecided whether to be a mechanist or vitalist.⁸⁹) Alexander Crichton proclaimed nearly at the end of the eighteenth century that the passions were part of every person’s constitution, phenomena to be studied in their own right, which produce constant effects on the body and change the state of health.⁹⁰

In the meantime, major advances were being made in the anatomy of the nervous system with the recognition of the various divisions of the peripheral nervous system. Johann Christian Reil, the founder of German psychiatry, named the vegetative (“autonomic”) nervous system.⁹¹ It was separate from the sensory and motor roots and nerves discriminated by Charles Bell and François Magendie that formed the “voluntary” nervous system.⁹² (These first steps were necessary for the subsequent understanding of autonomic and spinal reflexes, the control of cardiac rhythm, respiration, the circulation, gastric acid secretion, etc.). Later in his career, Bell provided graphic descriptions of the emotions and their effects on respiration and the facial

musculature; he also studied the expression of the emotions in animals (Charles Darwin heavily relied on his observations). Magendie was much more than a great anatomist, pharmacologist, and physiologist. Proclaiming that the human intellect was not the proper field for physiologists to study,⁹³ he nonetheless stated that the intellect arose from the functions of the brain. He further categorized the “faculties of feelings” into “*sensibilité*” (sensitivity, tendency to emotion), memory, judgment, and desires or will. Happiness stems from the satisfaction of desires. Instincts occurred in two forms: animal (hunger, sex, and thirst) and social (wants arising from living in society). Passions were extreme and exclusive forms of instinctive feelings, which could instigate either noble or heinous actions. They were internal sensations arising in the brain, but in no particular area thereof. The passions, according to Magendie, were not, as Bichat had contended, localized in body tissues. Of importance, he also discriminated between willed movements and muscular contractions, with the former being influenced by instincts and passions.

The outlines of a multifactorial concept of disease were sketched by Joseph Adams in 1814.⁹⁴ He stated that diseases were not inherited directly, although the susceptibility to them was. This susceptibility can further be subdivided into a disposition to disease, requiring no external cause to elicit it, and a predisposition that induces disease only in interaction with some external cause (in modern parlance the predisposition is necessary, but not sufficient, to incite disease). Jean Louis Marc Alibert took advantage of the French Revolution to study the impact of political passions on the health and physical constitution of his patients.⁹⁵

Johann Gottfried Langermann in 1797 and George Mann Burrows in 1828 both postulated that “functional” and structural diseases were preceded by or correlated with the “emotions” of the mind.⁹⁶ Benjamin Collins Brodie described in 1837 a process, later known as (hysterical) identification, which may determine in some patients the “choice” of the locus of a particular symptom.⁹⁷ In the first “modern” psychiatric textbook Pinel’s pupil Jean Étienne Dominique Esquirol, who had become the dominant figure in French psychiatry, specified many of the (“life”) events and experiences associated with the onset of mental illness, and he provided a possible classification of disease according to these precipitating events.⁹⁸ The British physician John Abercrombie added in 1830 another factor to our understanding: the same event might have different outcomes—the precipitating event interacted with the constitution and personality of the patient.⁹⁹ Shortly thereafter, the American alienist and neurologist Amariah Brigham, one of the founders of what became the American Psychiatric Association, supplied yet another crucial variable in the causal chain: events in the lives of patients are mediated through the impact (meaning) they have on their minds.¹⁰⁰ In his pioneer 1831 contribution to industrial medicine, *The Effects of Arts, Trades, and Professions, and of Civic States and Habits of Living, on Health and Longevity*, the British physician Charles Turner Thackrah, who worked in the slums of Leeds with Poor Law patients, drew attention to social and occupational factors in health and disease, believing that the anxiety and disappointment engendered by work or commercial life played a role in disease onset.¹⁰¹

The importance of hypnosis lies in its affirming the potent influence that one person may have on another, the suggestibility of some persons but not all, and its ability to induce or remove bodily symptoms. It has also been used as an experimental method for producing physiological changes—as a research tool. It was named and defined in psychological rather than physical terms by James Braid, who believed it to be a form of “nervous” sleep.¹⁰² See Adam Crabtree’s contribution in this book for an extensive discussion of many mind–body issues in the histories and literatures of mesmerism and hypnotism.

The English continued to be rooted in the empirical and inductive tradition. The French argued about the ultimate explanation of life in terms of sensibility and vital forces while classifying, categorizing, and experimenting. German physicians at the turn of the nineteenth century remained deductive and speculative and were profoundly influenced by Romanticism. At about the same time great advances were being made in Germany in the classification of diseases, in methods for relating symptoms and signs, and in every branch of physiology and biology.

It is not easy to capture the essence of the Romanticism that flowered at the end of the eighteenth and beginning of the nineteenth century, particularly in Germany. The spirit of the individual and his personal instincts and inclinations were pitted against social bonds and convention. Strong passions were promoted, even if they were destructive. The oppressed and the poor were admired. Sensibility became a proneness

to emotion, an aesthetic. The utilitarian was decried. At his worst the Romantic was an egoist and solipsist, engaged in raising his self-awareness to the point of mysticism. In Bacon's words, the "segregate" and "particular" was the concern of the Romantic period.

The German physicians influenced by this trend of thought were profoundly humane and were disinclined to reduce man to a mere machine or to partition him. They were impressed by the indivisibility of man as a physical, moral, and spiritual being, whose morality, as Heinroth believed, represented the voice of Deity.¹⁰³ Being at fault (sinfulness) was the core of mental illness. Morality was the path to freedom. He believed also that man went through developmental stages culminating eventually in a sense of morality. Illness begins when passions or outside events overwhelm the predisposed person, upsetting the mental balance and inclining the person to sin. There are in Heinroth the seeds of thought of many later concepts about personality development, the role of "life events" and the passions. Carl Gustav Carus, thoroughly steeped in Romanticism, postulated a vague, nondynamic view of the "unconscious" as the seat of a self-actualizing life force and a repository of unconscious ideas that had once been conscious in the child.¹⁰⁴ This unconscious is also the force behind physiological functions whose disturbances originate there and impair self-actualization. Friedrich Eduard Beneke propounded a hypothesis that symbolic ideas could be expressed in physical reactions, which re-emerged in much greater detail in Sigmund Freud's concepts about conversion hysteria.¹⁰⁵ Ernst von Feuchtersleben reaffirmed a monistic position from which he concluded that psychotherapy was valuable in all disease and illness.¹⁰⁶ He observed that fear may produce diarrhea and enuresis, predisposes to "contagious" diseases, and may incite or paralyze action in situations of danger. Feuchtersleben also noted that persons respond to danger in different ways.

We now come to Charles Darwin. It is an extraordinary irony of history that organismic and evolutionary biology had until recently slight impact on medical thought. Together they constitute the other great pillar of modern biological theory. Yet the molecular, cellular, mechanistic, and physiochemical explanation of life and disease continues to be the predominant mode of thought in medicine. We owe to Darwin the seminal concept of individual variation occurring in groups of organisms upon which natural selection acts. Implicit in his thought is that natural selection has its impact on the behavior (not only on the physical appearance) of organisms in their attempt to survive and reproduce. Furthermore, these behavior patterns (not only bodily appearance) are reliable characteristics of species and have been selected for their survival and reproductive value. The complex movements (patterns) that express the emotions are not necessarily controlled by will or habit. They are not in the nature of reflexes. They are elicited in discrete and specific situations. The arched posture of the threatened cat (or tiger) as well as its dilated pupils, spitting and snarling, erect hair, and protruded claws are an integrated pattern that is clearly discernible and is communicated to the threatening foe. If the cat is defeated in the fight, the pattern changes. Each of these patterns is an integrated whole.

Darwin described the manner in which many emotions were expressed in animals and man and their appearance in the face of threat, defeat, or victory.¹⁰⁷ He wrote about the manner in which they were communicated and their exquisite correspondence to specific environmental situations. He emphasized the neural mechanisms of the patterned emotional behavior. He pointed out that both the emotion and the motor pattern were one and indivisible—one did not *cause* the other. This point is crucial because the linear-causal role of emotions in adaptive behavior, health, and disease has been implied before and after Darwin. Emotions do not cause anything. They are part and parcel of adaptive and maladaptive organismic responses.

Robert Brudenell Carter accurately described in the 1850s the kind of person who is prone to hysteria, believing that the emotions could be discharged through the nervous system to muscles and bodily organs.¹⁰⁸ For Carter, emotions have a "vital" force exerted through the sympathetic nervous or neuromuscular system. Hysteria occurs when "strong" emotions remain undischarged, with sexual desire being one of these strong emotions. Less active sexually and therefore obtaining relief less frequently, women are more prone to hysteria. Pent-up fear is another antecedent of hysteria. Carter also described what became known in the mid-twentieth century as Munchausen syndrome—a bane to physicians, in which the patient simulates or invents symptoms and signs. In his classic 1890 textbook of psychology William James returned to a previous model of emotion: its source lay within the body.¹⁰⁹ The racing heart or the dry mouth was the origin of the apperceived fear; physiological changes within the body instigated the fear.

(And indeed that may happen: for example, in the case of premature auricular or ventricular contractions or hyperventilation, especially if the irregular beat or aching chest muscles, respectively, acquire meaning.) However, the usual source of emotion lies in the mind, and the concomitant bodily changes may in turn be sensed to produce a new chain of mental events such as distress or apprehension.

Sigmund Freud's impact on human psychology, psychiatry, psychotherapy, and our understanding of ourselves has been vast. For the purpose of this chapter only a few of his relevant observations and concepts will be commented upon and summarized. In his 1926 major revision of his ideas about anxiety he differentiated between fear and anxiety.¹¹⁰ Fear signaled realistic danger; it had adaptive significance as a motive for avoiding or overcoming danger and harm. Anxiety was a signal of internal danger and was sounded when the person imagined something conflictful or was disposed to act in a manner that was deemed dangerous. Unconscious conflict was the source of this anxiety and a motive for regulatory devices ("defenses") to avert or contain it. If the unconscious signal (of anxiety) failed, anxiety could be consciously experienced, in which case it became a motive to act adaptively or not. If excessive, anxiety could lead to the paralysis or disorganization of behavior. Freud, therefore, added new dimensions to the study of emotions—its source could be unconscious, and the unconscious was dynamic.

Freud's second contribution was to provide two models for the pathogenesis of bodily symptoms—specifically, those seen in conversion hysteria and the "actual" neuroses.¹¹¹ It cannot be emphasized too strongly that the nature of conversion symptoms does not lie in the peripheral receptor of the sensory nerves: hysterical analgesia or anesthesia is not a disorder of sensation but of perception and its meaning. The bodily distribution of these symptoms does not accord with the innervation of the affected body part but with the patient's concept of the anatomy of his or her body. Hysterical motor paralyses are not due to the failure of muscular contraction or even of movement but of actions of a certain kind. For that reason alone they have meaning. Freud stated that usually the meaning was sexual—an idea suspected by many before him. The intolerable conflict is "converted" in order not to perceive and not to act. This model was later indiscriminately applied to structural disturbances of bodily organs by the psychoanalysts George Groddeck, Angel Garma, and Melitta Sperling.¹¹² Organs, however, do not carry out actions but only functions

But Freud proposed another model in which anxiety resulting from a conflict manifests itself as its bodily concomitants because it could not be discharged in action ("the actual neuroses"). The bodily manifestations were without content or meaning. Franz Alexander later took over this model, making it one of the pathogenic models for the role of conflict in bodily disease.¹¹³

Of course, anxiety and other emotions are associated with not only impaired perception, action, and bodily function, but with altered states of consciousness and memory function. When these latter occur, the major hysterical symptoms appear. In addition, Freud had much to say about grief and mourning and provided a developmental model that became central to psychosomatic investigation and theory: later failure to overcome specific experiences and challenges reactivates developmentally earlier unresolved conflicts. That is to say that he added a historical dimension to understanding the etiology of all disease and illness. Another major contribution was his concept of transference and countertransference—the major elements that promote, distort, or pervert the doctor–patient relationship. Constructively used it is the focus of all modern psychotherapies. An unconscious force of great power, transference is the process by which pre-existing (childhood) wishes, desires, expectations, disappointments, loves, and hatreds are ineluctably "transferred" to the therapist. Transference imparts to the therapist magical powers; the patient's fantasy expectations make treatment difficult, yet is the very crux for successful psychotherapy. On the other hand, the irrational behavior (countertransference) of physicians and therapists may act for good or ill in the care of their patients. A corollary of the concept of transference is that therapist and patient work together to understand their relationship: the central feature of psychotherapy is that the therapist works *with* the patient, rather than doing something *to* the patient (e.g., bleeding, purging, prescribing drugs, or performing surgery).

Central also to Freud's theoretical concepts is the idea that two instinctual drives that have bodily sources and operate on physical (hydrodynamic) principles engender conflict. He called the first of these instinctual drives *libido* (a term with vitalist connotations) and the second the aggressive drive. Both act as energizers of—and as dispositions to—directed action, and undergo a developmental sequence.

It is not wholly clear why Freud conceptualized and designated the two instinctual drives in this manner. Nor is it clear why they were not formulated in biological terms. Implicit in Darwin's thought is the idea that there must be built-in systems that ensure reproduction if an individual or species is to survive and that these are elicited under appropriate and highly specific environmental circumstances. At other times they are kept in abeyance, displaced, diverted, or disguised. There must also be built-in survival mechanisms responsive to danger and threats to kin, self, territory, food supply, and so on. A variety of other signals alert organisms to danger, to flight, or to submission. Other behavioral responses signal failure, defeat, triumph, reunion, and the like. These mechanisms assure the survival of the individual. In other words, it is unclear why psychoanalysis remained as uninstructed by Darwin as did the rest of medicine, especially given the broad shaping influence of Darwin on Freud's thinking, as detailed by Frank Sulloway.¹¹⁴ Psychoanalysis became a view of mankind with philosophical overtones rather than an important contribution to biology.

Freud was, then, the first to propose that unconscious anxiety may play an important role in bodily symptom formation and physiological changes. In 1886 Charles Creighton proposed a similar but less theoretical idea: negative emotions such as anxiety, worry, and grief are, if not expressed in the usual manner, discharged "unconsciously upon the glandular system."¹¹⁵ The American physician and pioneer clinical psychologist Morton Prince described in the late 1890s the dissociation between the conscious awareness of anxiety and its physiological concomitants.¹¹⁶

Psychophysiology of the Emotions

The foundations of experimental psychology and psychophysiology were laid in the 1830s and 1840s by Ernst Heinrich Weber, who put the study of sensation on a quantitative basis.¹¹⁷ His law states that, given two quantitatively different stimuli, such as two varying weights, the smallest perceptible difference can be stated as a ratio of the two quantities that is independent of their magnitudes. That ratio or proportion is roughly constant for each sense modality. Gustav Theodor Fechner carried this psychophysical law further: the intensity of a sensation progresses arithmetically with a geometric increase in the intensity of the stimulus. He went on to postulate units of sensation (his error is obvious: stimuli are composite, sensation is not). Fechner was an incurable romantic: he defined psychophysics as an exact discipline whereby to study the relationship of body and soul. Despite being a physicist he was also an animist and aesthete.¹¹⁸ Renowned as both a philosopher and a psychologist, Wilhelm Max Wundt—like Weber and Fechner a German—effectively founded modern experimental laboratory psychology.¹¹⁹ He experimented with hypnosis and carried psychophysics and psychophysiology further in the hope of quantitating emotions, sensation, and perception. He and his students described the effects of emotions on pulse volume and blood pressure. Most of their experimental work was published in Wundt's *Philosophische Studien*, the first purely psychological journal. The late nineteenth century Italian neurophysiologist Angelo Mosso studied the effects of fear, fatigue, and sleep on bodily function. He invented the plethysmograph to measure blood flow through the arm and fingers and observed roles of emotions and hypnosis in altering it.¹²⁰ At about the same time a number of investigators, for example, August Desire Waller and Armand de Watteville, described and measured the psychogalvanic reflex, which continues to be a way of studying skin resistance when emotions are perturbed or mental activity is promoted.¹²¹

The emotions are associated with visible, external changes in the facial expression, pupillary size, blood flow through the skin, sweat production, postural changes, muscle tension, heart and respiratory rates, and urinary and fecal discharge. The upstate New York physiologist/physician William Beaumont was the first person to observe directly and describe the relationship of the emotions to the functions of an internal organ. A gun accident in 1822 left a permanent gastric fistula in a young French-Canadian trapper whom Beaumont treated and decided in 1825 to study. Anticipating a meal induced gastric secretion and motility; when his patient was fearful, the stomach emptied more slowly and acid production was reduced.¹²²

The production of experimental gastric fistulae in animals led to Ivan Petrovich Pavlov's discovery of the conditioned reflex.¹²³ He presented food to dogs and discovered that the mere smell and sight of food was followed by a flow of salivary and gastric secretions ("the psychic phase"). When food was linked

with a tone, light, or touch (“neutral” stimulus), the tone alone would eventually elicit a secretory response that could eventually extinguish. Following extinction, the response would reappear with the presentation of food. Pavlov placed psychophysiology on an experimental basis. He also found that dogs exhibited individual (temperamental) differences in their capacity to develop conditioning responses, and that fear was associated with the inhibition of gastric secretion. Subsequently, he and his students discovered that many bodily functions mediated by the autonomic, voluntary, endocrine, and immune systems could be conditioned. Pavlov also described the innervation of the pancreas by the vagus nerve, a link in the chain between brain and secretory function.

The American physiologist Walter Bradford Cannon discovered in the early twentieth century that the isolated stomach had its own intrinsic contractile rhythm.¹²⁴ He used bismuth and X-rays to study gastrointestinal activity in intact dogs, showing that hunger sensations were associated with gastric contractions, whereas fear, worry, and anxiety were correlated with the inhibition of gastric secretion and motility. He studied other automatically mediated responses to pain, fear, and rage. These, he believed, were part of an organismic response that alerted and prepared animals and man to fight or flee. He also showed that many of the same responses were brought about by the secretion of adrenalin, previously shown to be released by sympathetic nervous system activation (more recently, it has been shown that adrenalin emanates mainly from the adrenal medulla).

Toward the mid-twentieth century Harold G. Wolff and Stewart Wolf made important discoveries about the fistulous stomach. When fearful or anxious, their subject Tom’s gastric mucosa blanched and much less gastrointestinal acid in general and hydrochloric acid in particular was secreted. When he was angry, his stomach reddened and increased acid secretion and motility.¹²⁵ In the 1950s George L. Engel, Franz Reichsman, and Harry L. Segal studied a 15-month-old girl with a gastric fistula.¹²⁶ When she was actively interacting with an adult her stomach secreted acid; when she withdrew from human interaction, it did not. In the withdrawn state, the secretory response to histamine, a powerful stimulant to acid secretion, was minimal. Irritation and rage, joy and contentment during a human interaction were all associated with acid secretion.

The ultimate aim of the psychophysiologicalist has either been to measure emotion quantitatively or to specify and define each emotion in terms of a physiological correlate. Emotions are indeed elusive (“subjective”) phenomena, but the idea that they are quantifiable is a category error: we can no more speak of a kilogram or quantum of emotion than we can of a joyful electron or depressed quark.

Psychophysiological Mechanisms

Recognition that fear can be associated with an increased heart rate or a dry mouth, that nerves are “irritable,” and that the peripheral nervous system consists of “vegetative” (involuntary) and “voluntary” divisions provided the background for a series of landmark investigations in the nineteenth century on the role of the regulation of bodily function by the brain, which laid the groundwork for all of physiology, including psychophysiology.

Ernst Heinrich Weber and Eduard Friedrich Wilhelm Weber described in the 1840s the inhibitory action of the vagus nerve on the heart rate.¹²⁷ The great German physiologist Johannes Müller found about the same time that each sense organ responds to stimulation with a specific sensation.¹²⁸ The Italian Carlo Matteucci discovered the flow of electrical current in muscle in the late 1830s, and the French physicians Emil DuBois-Reymond in the 1840s and Claude Bernard described the effects on local blood flow of stimulation of the cervical sympathetic nerves and the chorda tympani.¹²⁹ In addition to his many other achievements, Matteucci showed that curare blocked contraction of muscle incited by nerve stimulation while preserving the capacity of muscle to shorten when directly excited. He paved the way for understanding neuromuscular transmission. In the early 1850s Carl Ludwig found that stimulation of sympathetic nerves produced secretion of the submaxillary glands, and the American neurologist Charles Edouard Brown-Séquard, born a French-speaking British subject on the island of Mauritius, studied the vasoconstricting effects of cervical sympathetic stimulation.¹³⁰ Starting in the 1840s the neurophysiologist Moritz Schiff, born into a wealthy Jewish family in Frankfurt-am-Main, studied the control of respiration

by the vagus nerve.¹³¹ Later, in 1883, Johann Ernst Oswald Schmiedeberg confirmed that the slowing of the heart produced when the vagus nerve was stimulated could be stimulated by muscarine and that the injection of atropine antagonized both effects.¹³² In the early years of the twentieth century the British neurologist Walter Holbrook Gaskell laid the histological foundation for the modern study of the autonomic nervous system when he described the opposing functions of two branches of the “involuntary” nervous system—the thoraco-lumbar and bulbo-sacral outflows of the spinal cord.¹³³ His other main interest was the “involuntary” regulation of the cardiac rhythm. The English neuroanatomist and physiologist John Newport Langley renamed the “involuntary” nervous system “autonomic” in 1898 and called its two main divisions “sympathetic” and “parasympathetic.” His 1921 book on the autonomic nervous system, a classic contribution to physiology, presented his definitive views on the subject, of which there would be no major revision until the 1960s, when it was learned that the autonomic nervous system could be voluntarily controlled.¹³⁴ Shortly after Langley had renamed the vegetative nervous system, Thomas Renton Elliot published in the *Journal of Physiology* his paper on the action of adrenalin, in which he postulated the release of adrenalin on stimulation of post-ganglionic sympathetic fibers, while injected adrenalin stimulated the effects of exciting these nerves.¹³⁵ Otto Loewi, like Schiff born in Frankfurt-am-Main, published in 1921 his discovery that the stimulated vagus released a substance that slowed the heart.¹³⁶

These key discoveries laid the groundwork for understanding the work of Pavlov and Cannon and a host of psychophysicologists since that time. They allowed us to understand in part how emotions were correlated with altered bodily function.

Selected Specific Diseases: The Role of the Emotions

Ackerknecht and Stainbrook have summarized the contributions of many famous physicians to our understanding of the role of emotions in disease,¹³⁷ also pointing out that these doctors indiscriminately ascribed the cause and cure of diseases such as the plague, apoplexy, fevers, gout, and scurvy to the passions and emotions. Ackernecht’s statements imply that he dismisses these “pseudocausal” theories because he subscribes to a unicausal pathogenesis of disease. However, no disease has but a single cause. To be specific: we have known since Robert Koch’s 1882 paper that the tubercle bacillus is a necessary but not a sufficient cause of pulmonary tuberculosis.¹³⁸ Though the organism is ubiquitous, not everyone exposed to it develops the disease. Poor nutrition and depressed immunological function contribute to the etiology of tuberculosis, as do ethnic, genetic, and personal factors. If one holds to a unicausal theory of disease, one may dismiss—or overstate—the role of personal and emotional factors in all diseases in the same manner as one may overstate the role of bacterial, viral, or genetic factors.¹³⁹ It remains a fact, however, that some of the very greatest physicians for the last 200 years have either observed or postulated that the “passions” play a role in disease onset.

Symptoms and Diseases of the Gut

Right at the beginning of the nineteenth century Philippe Pinel described many dyspeptic and other gastrointestinal symptoms under the rubric of the neuroses.¹⁴⁰ Nearly 40 years later Christoph Wilhelm Hufeland wrote that dyspepsia had a “nervous” origin.¹⁴¹ But Francois Joseph Victor Broussais had already theorized in 1828 that the neuroses resulted from gastric irritation—Broussais’s theory of irritation as a fundamental explanans for disease was to remain influential in medicine for several decades.¹⁴² Jean Baptiste Bouillaud in 1836 and Auguste-François Chomel in 1864, however, argued that this causal chain was reversed.¹⁴³ Already in 1832 Amariah Brigham had described how disquietude and disturbances of the mind led to dyspepsia.¹⁴⁴ Armand Trousseau wrote in 1861 about emotional contributions to diarrhea, to dyspepsia, and to his own asthmatic attacks.¹⁴⁵

Throughout the latter part of the nineteenth and the beginning of the twentieth century the debate about the causes and site of origin of dyspepsia raged: was it a cause of neurasthenia or its consequence? Though

Carl Anton Ewald in 1902 still considered dyspepsia to result from either neurasthenia or hysteria, the great French neurologist Jean Martin Charcot had as early as 1877 denied that neurasthenia was rooted in the dyspeptic stomach. The German neurologist Ernst Adolf Gustav Gottfried von Strümpell influentially insisted in 1883 that dyspepsia was “caused” by anxiety.¹⁴⁶ Long before then the Viennese Carl Rokitansky, with Morgagni perhaps the greatest of writers about gross pathology, had in 1842 proposed a neurogenic theory of its pathogenesis.¹⁴⁷ Exactly 50 years later the French anatomist Jean-Baptiste Cruveilhier described the pathology of duodenal ulcer—a cause of dyspepsia.¹⁴⁸ During the latter part of the nineteenth century duodenal ulcer was more common in women than in men, though the ratio is now the reverse. Harvey Cushing described in 1932 a form of peptic ulcer secondary to operations on the cerebellum, indicating a role for the brain in the pathogenesis of this form of the disease.¹⁴⁹

Hyperthyroidism

It remains unclear to whom credit should be given for the first description of (one form) of hyperthyroidism: Caleb Hillier Parry, Robert James Graves, or Carl Adolph von Basedow.¹⁵⁰ From its first description it was known that the disease could begin acutely, often in a setting of danger (“*Schreck Basedow*”). An increased incidence of hyperthyroidism occurred during the Boer War and World Wars I and II. During World War II, for example, a massive increase was seen in Denmark and Norway, in conjunction with the Nazi occupation—but only as long as the food supply remained adequate.¹⁵¹

In peacetime the acute onset of hyperthyroidism occurs in about 25 percent of patients. It begins in a situation of extreme personal danger, presumably in the predisposed person, as well as during pregnancy or after surgery—all conducive to fear. For patients in whom onset of the disease is slow, controversy about the role played by emotional factors continues (a hyperthyroid state has also been produced in animals when repeatedly confronted by predators).

Diseases of the Heart: Angina Pectoris

William Heberden first named precordial “oppression” angina pectoris but was unaware that it was due to heart trouble.¹⁵² Sundry physicians speculated in the nineteenth century about the origins of this localized pain. Laennec wrote in 1819 that it was a “neurosis” of the cardiac neural plexus, though he remained unsure whether the vagus (pneumogastric) nerve or the sympathetic nerves were involved.¹⁵³ Bouillaud plumped for the phrenic nerve in his 1836 book *Essai sur la philosophie médicale*. Carl Reinhold August Wunderlich observed in his 1859 history of medicine that depressed feelings and moods could precede or accompany structural diseases of the heart.¹⁵⁴ It remained for William Whitley Gull and Henry Gawen Sutton to be the first to define in 1872 the structural alterations in small blood vessels, including the coronary arteries, although they believed them to be “fibrosed” and were speaking of the changes seen in Bright’s disease.¹⁵⁵ In 1882 the American physician Francis Campbell proposed an inclusive concept: granting that the heart was diseased by virtue of the “ossification of the cardiac vessels,” he stated that any new load making for increased contraction might occasion angina pectoris and that load could be induced by anger. He went on to say that patients with this form of heart disease died during sleep due to emotions aroused during dreams.¹⁵⁶ Seven years later Henri Huchard published his observation that spasm of the coronary arteries could be emotionally induced, which observation turned out to be almost equally important for understanding coronary artery disease.¹⁵⁷ The spasm, in turn, reduced blood flow to the muscle of the heart. He also enunciated a hypothesis, still current, that certain persons—politicians and financiers whose lives are “restless and worried”—will eventually develop a “permanent hypertension” eventuating in arteriosclerosis.

In 1912 the American James Bryan Herrick published the most important anatomical contribution on coronary thrombosis. In his paper he defined the variable clinical picture due to sudden arterial occlusion: it usually occurs in men who had previously experienced anginal pain and it leads to myocardial damage (“softening”). He thus related angina to coronary artery disease and occlusion to infarction.¹⁵⁸ Harold E. B. Pardee first described in 1920 the electrocardiographic signs of myocardial infarction,¹⁵⁹ but Ludwig Braun, writing the

same year, still believed that the heart was the specific “sensor” of anxiety, which could produce cardiac arrhythmias, increases in heart rate, and angina pectoris.¹⁶⁰ Adopting a more discriminating point of view, Walter H. von Wyss wrote later in the 1920s that anxiety had mental, cardiac, and motor components.¹⁶¹ Karl Fahrenkamp stated in his 1931 book on heart disease that patients who complain of cardiac arrhythmias without actual disease usually do not have them. In contrast, most patients with structural heart disease have arrhythmias that can be felt, heard, or recorded by others. Paul D. White pointed out, also in 1931 but on the other side of the Atlantic, that patients may die during an attack of angina pectoris without post-mortem evidence of structural damage to the heart. (The question of coronary artery spasm and sudden death with and without structural changes in these vessels has been a continuous source of debate in medicine to this day.) Gustave R. Heyer, Georg Klemperer, and Marcel Mauss all published works between 1925 and 1929 in which they argued that coronary artery spasm could accompany emotion when structural changes were present.¹⁶² Spasm can precede sudden death. (Today we know that coronary artery and anginal spasm pain can occur both with and without structural disease in Prinzmetal’s variant angina, and that sudden death may result from ventricular tachycardia and arrhythmia, with or without structural changes in the heart.) See Wallace’s Chapter 24 on “thanatomania.”

Diseases of the Heart: Essential Hypertension

Methods for the indirect recording of blood pressure did not appear until 1896 when Scipione Riva Rocci developed the sphygmomanometer for clinical use, an innovation that was the first step toward understanding high blood pressure.¹⁶³ Although Richard Bright had in 1836 inferred from the “hardness” of the pulse that patients with kidney disease had elevated blood pressures, more direct proof of its occurrence required the development of the sphygmomanometer.¹⁶⁴ Even though clinical observers and the early psychophysiologists had recognized that regional blood flow and blood pressure in man changed with fear, mental work, pleasant situations, and sleep, it remained the task of Ernst Weber in 1910 and Erich Leschke in 1911 to document and gather together these observations.¹⁶⁵ Fahrenkamp undertook the systematic study of mutual relationships between anxiety and conflict to heart disease including elevated blood pressure.¹⁶⁶

The modern era of the search for the pathogenesis of hypertension begins with Harry Goldblatt’s 1934 finding that constricted renal arteries raised blood pressure in animals by releasing a substance (renin) that indirectly elevates blood pressure.¹⁶⁷ Heightened levels of blood pressure also occur with diseases of the brain, endocrine glands, kidney, and blood vessels. Only in the last 40 years has it been recognized that the commonest form is essential hypertension, which—along with the complications following from it—is the leading cause of death in the United States in recent times. Unevenly distributed in different populations, it is more prevalent in black persons in the United States, especially in areas of social disruption.¹⁶⁸ Only recently has it been realized that it is not a homogeneous disease entity and that it probably has a variety of pathogeneses.

Soldier’s Heart, Neurocirculatory Asthenia, and So On

The earliest descriptions of “soldier’s heart” were Arthur Bowen Richards Myers’s in 1870 of soldiers during the British war in India and Jacob Mendes DaCosta’s of soldiers in the U.S. Civil War.¹⁶⁹ This syndrome of shortness of breath, palpitation, fatigue, precordial pain, light-headedness, fainting, tingling, sweating, headache, and altered states of consciousness brought on during battle or by effort and excitement was rediscovered during World War I, particularly by Thomas Lewis, who gave the classic modern description in 1918.¹⁷⁰ Its name has constantly changed until the present. Associated with and producing fear and anxiety, it can occur in hysterical and depressed persons. Since all these symptoms are associated with hyperventilation, it has more recently been named the “hyperventilation syndrome.” A paradigmatic psychophysiologic disorder, it is a major cause of disability.

Amenorrhoea

Amenorrhoea is associated with many conditions. Known to historians for several centuries,¹⁷¹ the amenorrhoea of starvation was studied in 1927 by Rudolf Schindler, who believed that wartime amenorrhoea also

occurred in well-nourished women whose husbands were away at the war front.¹⁷² August Forel used hypnosis in the 1880s to restore menstrual flow in amenorrheic women. Throughout the late nineteenth century, observations were made on amenorrhea, dysmenorrhea, and “menstrual insanity,” Richard von Krafft-Ebing’s being particularly important.¹⁷³

The first account of anorexia nervosa appears in Chapter One of Richard Morton’s 1689 *Phthisiologia*, also famous for being the first application of the principles of pathology to the study of pulmonary tuberculosis.¹⁷⁴ The French psychiatrist Ernest Charles Lasègue gave the syndrome its modern name and described it from a psychological rather than medical view in his 1873 paper “De l’anorexie hystérique.” The prominent British physician William Withey Gull first referred to “hysterical aepsia” (hysterical indigestion) in a widely read 1868 lecture. In 1874, about a year after Lasègue’s paper, Gull gave the classic description of the syndrome and adopted the name “anorexia nervosa,” which he claimed he had thought of using before Lasègue’s paper had appeared. He appeared miffed that Lasègue had not cited his own 1868 paper. Gull and Lasègue differed quite a bit in how they saw the disease, though both regarded it as largely, albeit not exclusively, a disease afflicting young women. Gull thought it had nothing whatever to do with either hysteria or insanity but was a disease *sui generis*, and Gull saw no cases tending to death—and thus regarded the prognosis as benign with correct medical care. Gull considered the disease to be a morbid mental state (a “nerve force”), nonhysterical in nature and mediated by the gastric branch of the pneumogastric (vagus) nerve. Lasègue, on the other hand, described food fads or revulsion to food as a reason for the anorexia and thought of it as a hysterical disorder that could begin with an avowed, concealed, or imaginary “marriage project,” sexual longing, or rebuff. According to Lasègue the illness starts with vague uneasiness, sensations of fullness in the stomach after eating, distaste for and the obstinate refusal of food, increased activity, and constipation. Lasègue mentions that the parents’ entreaties or admonitions “to eat” are without avail and the patient is indifferent to them. Amenorrhea and thirst eventually develop.¹⁷⁵ Additional anorexic patients were described by Charcot and by Pierre Janet, both of whom believed anorexia nervosa to be hysterical in nature. Janet also documented the various onset conditions (not only sexual ones) with which anorexia nervosa is associated.¹⁷⁶

The Beginnings of Psychosomatic Medicine (1920–1960)

Sigmund Freud inspired and influenced a more profound, systematic, and formal approach to the role of psychological factors in the etiology and pathogenesis of illness and disease. At the same time, many internists were still writing about the role of emotions in altering bodily function, though without stating explicitly how emotions contributed to the onset of disease.¹⁷⁷

The major figures in the period from 1920 to 1960 worked at first in Central Europe, with the majority fleeing the Nazi regime to England or the Americas. George Groddeck, Michael Balint, Ernst Simmel, Felix Deutsch, Eduardo Weiss, and later Angel Garma and Melitta Sperling took as their model Freud’s concept of the pathogenesis of hysterical conversion symptoms. They stated that physical diseases— anatomical lesions—are produced by and symbolically represent an unconscious conflict.¹⁷⁸ Deutsch, however, also concerned himself with the question of the specific location of symptoms, which he believed was determined by local injury, infections, or operations in childhood. He also studied anorexia nervosa (emphasizing the sexual nature of the conflict), hyperthyroidism, and the changes in heart rate and blood pressure induced by the suggestion of emotions during hypnosis.¹⁷⁹

Eric David Wittkower’s approach was less inferential and more observational and experimental. He broke new ground in his studies of the onset conditions and psychological factors in a variety of skin diseases (including eczema, psoriasis, and acne vulgaris), hyperthyroidism, bronchial asthma, and pulmonary tuberculosis. He used the psychogalvanic reflex to study the influence of emotions on bodily function. He observed that emotional arousal affected blood iodine levels and that hypnotically induced emotions were associated with changes in the rate of bile flow.¹⁸⁰

Alexander and his colleagues Catherine L. Bacon, Theresa Benedek, Thomas M. French, Adelaide M. Johnson, George H. Pollock, Leon J. Saul, and Louis B. Shapiro were influenced by the work of

Cannon and Freud.¹⁸¹ They took their lead from Freud's pathogenic model of the "actual" neuroses: the anatomic lesion had no symbolic meaning but was instigated by changes in bodily function. Alexander's concept of specific conflicts was an important attempt to deal with the problem of the "choice" of the disease. He also had a broad etiological concept of disease.

The Hungarian-born Alexander argued in his psychosomatic publications that specific constellations of unconscious conflicts characterized patients with the diseases he studied. According to Alexander these constellations were not unique to those suffering from these diseases, but were, instead, specific to each disease: patients with peptic duodenal ulcers have an unconscious wish to be fed and to receive; being ashamed of this wish, they become excessively independent. Patients with essential hypertension fear their own aggressive assertiveness, which they inhibit or repress, often for fear of retaliation. The child with bronchial asthma wishes to be enveloped and protected by its mother. In some children that wish is expressed in a cry for the mother's protection; but the cry is inhibited for fear that the mother will repudiate the child. In other children, the wish to be protected and enveloped is imagined to be dangerous; in such children the asthmatic attack can be averted by separating the child from its mother.

Much controversy has surrounded Alexander's formulations about specific psychological conflicts. While this controversy was raging, his other statements were forgotten. His concept of these diseases was actually tripartite: (1) the specific conflict predisposed patients to certain diseases but only in the presence of other (in his time undetermined) genetic, biochemical, and physiological "X-factors"; (2) certain specific life situations, to which the patient was sensitized by virtue of his key conflict, reactivated and enhanced it; and (3) strong emotions accompanied the activated conflict and were channeled by autonomic, hormonal, or neuromuscular mechanisms to produce changes in bodily structure and function.¹⁸² Following the publication of Alexander's formulations, many clinicians, such as Theodore Lidz (hyperthyroidism) and George Mahl (peptic ulcer), felt that nonspecific emotions were pathogenic. In fact, however, a number of Alexander's formulations have been confirmed in prospective and "blind" studies for hyperthyroidism,¹⁸³ peptic duodenal ulcer,¹⁸⁴ rheumatoid arthritis,¹⁸⁵ and one form of borderline (early) hypertension.¹⁸⁶ Alexander and two colleagues carried out a "blind" study on the taped records of patients with seven diseases. Based on their previous observations they were able to classify patients according to their diseases with a probability greater than chance and with more success than physicians who were not instructed by their formulations of specific conflicts.¹⁸⁷

Alexander made comprehensive statements about the several factors that play a role in the etiology and pathogenesis of disease. His writings contain statements about the multiple predispositions to, as well as the onset and the initiation of, a finite number of diseases (incorrectly called the only "psychosomatic" ones). Furthermore, Alexander also specified the developmental-experimental origins of the psychological conflicts and how they were habitually handled. When not handled, they aroused strong emotions. His pathogenic model is usually based on Cannon's: that emotions are short-term, acute phenomena. But he did not subscribe to the organismic, integrated nature of emotional responses, about which Darwin and Cannon had been explicit; instead, he held to a linear, causal concept of how emotions "produce" bodily changes.

Thure von Uexküll undertook an important revision of the role of conflict in disease in his 1963 book on psychosomatic medicine.¹⁸⁸ The concept of a motive is central to his thought. It is an emotionally charged disposition to directed action. Motives pose problems requiring solution. Actions are programs for solving these problems; they are not invariant—a motive may give rise to different solutions in action. Not simply paths toward objects or goals, actions are also pragmatic and conform to social standards and conventions. But above all, conscious and unconscious motives give objects meaning—they create each person's own universe. Motives have a history; at any one point in time we cannot understand them without reference to their past. Actions also have an ontogenesis; by practice they may become automatized. In addition—and important for psychosomatic medicine—motives and the actions to which they give rise always occur as part of an organismic response. There is a psychophysiological unity (the action does not lead to physiological change but is part of a unified whole).

How do motives and actions differ in those disorders with physical symptoms—the bedeviling medical question of "choice" of disease? Von Uexküll answered that conversion hysteria is an illness of the expression

of actions: as a result of mental conflict, the expression of emotionally charged actions (or fragments of actions) is prevented. The receptors of effectors—those organ systems that are involved in performing actions—are inhibited and are, therefore, prevented from functioning. The conflicting motives are barred from expression by the paralysis of parts or by the whole of the effectors—be they gestures or the organs of speech or mime. The conflictful motive is intolerable; it is forbidden either by virtue of the person's moral constraints or because it contravenes social convention. He contrasted diseases with anatomical lesions to the hysterias—disordered disposition of the emotions anticipating or preparing for action. For example, the hypertense patient is in a constant state of readiness to fight. It is the emotional disposition, not the motive to act, that is altered. No action occurs, but physiological changes that usually accompany the action are mobilized within the body. In these disorders the emotion is disposed of in a different manner than in conversion hysteria; the body, not the person, is the emotion's agent. The physiological changes seen are those that occur in pain, hunger, fear, and rage. The emotion and the correlated physiological responses are part of an inseparable whole.

According to von Uexküll, physical diseases also differ from psychophysiological ones, which are common disorders (better known as illnesses), not associated with anatomical lesions, that occur when two motives conflict. Neither is translated into action; the associated emotions are accompanied by changes in bodily function but not in structure. One or the other of the conflicting motives may become dominant and be translated into action, only to generate anxiety by bringing the person into conflict with social conventions. Von Uexküll's psychobiological formulations are the first psychosomatic ones to get away from a causal role for emotions, which he conceives as part of an integrated, organismic response to motivated, meaningful action and to social contingencies, that is, to the psychobiological and psychosocial environment in which persons live.

In the United States Helen Flanders Dunbar took a different approach.¹⁸⁹ Her major contribution was the claim that persons have diseases; she correlated their traits, attitudes, attributes, and habits with a variety of diseases, finding that patients with each disease were characterized by rather consistent personal features. Hypertensive patients, for example, were described by Dunbar to be shy, perfectionistic, reserved, and self-controlled; yet at times they showed "volcanic eruptions of feeling" when in conflict with authority. However, her postulated associations between personality and disease do not tell us how they could be related: do they have common genetic or experiential roots? Do the personality characteristics antecede or follow the physiological changes, or are they independent of each other? In other words, we do not know what "direction" these correlations take, or how they came about.

Dunbar's approach to the role of the psychological factors in disease addressed neither the issue of the onset of essential hypertension in such a person nor the factors that maintain the elevation of blood pressure. She also did not explain the historical origin of the personal characteristics that she ascribed to persons with different diseases. In 1930 D. Murray, working in Draper's constitution clinic at Columbia University, began his studies on patients with ulcerative colitis, emphasizing their emotional immaturity, fearfulness, and ties to their mothers. Ulcerative colitis and its psychotherapeutic treatment continued to be a central concern of his associates, George E. Daniels, Aaron Karush, and John F. O'Connor.¹⁹⁰

Between 1940 and 1950 several other authors drew attention to social and psychobiological factors in health and disease. James Lorimer Halliday, a medical biologist, identified seven separate, interacting features of the etiology of all diseases. They were the physical, domestic, and socioeconomic environment of the patient; his or her response to the environment and to sickness; the symptoms and signs (including the patient's behavior) that alert him or her to being sick; the physician-observer's response to the patient's person and symptoms; the physician's manner of, and theoretical bias in, formulating the patient's sickness; the "psychobiological" mechanisms set into motion by these various encounters; and the particular meaning of the sickness to the patient. Sickness is a link in a chain of nonlinear, self-regulating interactions and not the end product of a single, linear, causal event. Halliday also took pains to understand the continuous changes in the incidence and prevalence of many diseases, which changes he attributed to social, economic, occupational, and domestic factors.¹⁹¹

Partly based on their experiences as physicians caring for soldiers in World War II, Roy Grinker and John P. Spiegel espoused field theories such as Halliday's. Heinz Hartmann's 1939 extension of psychoanalytic

ego psychology to include the concept of adaptation and Erik Homburger Erikson's 1950 book *Childhood and Society* integrated Freud's concepts with biological, sociocultural, and familial ideas—and were major extensions of psychoanalytic theory. Hartmann's ideas about adaptation and Erikson's concerning the interaction of the child's developing personality with the social and cultural environment were extremely influential in American psychiatry in the mid-twentieth century and have indirectly influenced psychosomatic concepts ever since.¹⁹²

Jurgen Ruesch described in 1948 the common features of sick patients that made them particularly poorly adapted to their social and human environments—psychological characteristics that Alexander, Deutsch, and Dunbar had not studied. He specified explicitly the patient's age-inappropriate behavioral and psychological features. He listed these features as impaired or arrested social learning; a reliance on and imitation of others; a tendency to express thought and feeling in direct physical action; dependency on, and passivity, to others; childlike ways of thinking; lofty and unrealistic aspirations; difficulties in assimilating and integrating life experiences; reliance on securing love and affection from other persons; and, above all, an inability to master life's changes or to learn new techniques for overcoming frustrated wishes. Other features—called “alexithymic”—have subsequently been described. Patients with them fail to be aware of their own emotions that signal distress and are unable to imagine how to solve their problems. They are instead preoccupied with concrete specifics rather than with the meaning of events in their lives.¹⁹³

Ruesch (and many other writers since his time) stressed the adaptive incapacities of patients and their reliance on others. There has been a notable shift from a preoccupation with intrapsychic conflicts, which Alexander emphasized, to maladaptive psychological features of patients. Illness and disease began to be viewed as a failure of some persons to adapt to their ever-changing environment by virtue of their personal incapacities. The person more capable of adapting would not fall ill even if predisposed to a disease. For a number of years, though, this conclusion was obscured by Hans Selye's work, which suggested that the body responded in a similar, generalized way to stress, no matter what the inciting agent. Selye began his experimental studies on stress in 1936 and continued them for the next 30 years.¹⁹⁴ Unconcerned with Morgagni's kind of specific clinical-pathological correlations, Selye studied disturbances in critical biological functions—sleep, food intake, sexual behavior, physical strength, and temperature regulation—produced by a wide variety of diseases. Using his own experimental models, he found that a variety of injurious chemical, microbial, and physical agents produced hypertrophy of the adrenal glands, damage to the lymphatic system, and gastric erosions. He proposed that every one of these agents sequentially produced an “alarm” reaction during which the body mobilized its hormonal and neural defenses. This initial response was followed by a stage of “resistance” that might lead to a stage of “exhaustion” and death.¹⁹⁵ Local injury produced general bodily reactions that were nonspecific and invariant.

The concept of “stress” has, however, remained poorly defined. It has been used in many different ways—to describe the stimulus, the responses to it, or the panoply of physiological reactions brought on by injurious agents.¹⁹⁶ After 1945 the word “stress” began to creep into the behavioral and social sciences.¹⁹⁷ Diseases associated with putative stresses—exposure to the heat of the North African desert, fighting in a war, or living through human-caused disasters—were later called by Selye diseases of “adaptation.”¹⁹⁸ The word “stress” began to be used synonymously with any event, experience, change, or task likely to be encountered in everyday life, the person's responses to it, and as an explanation of disease.¹⁹⁹ Despite his concept's shortcomings, Selye drew attention to the role of the environment and to general organismic responses, as well as to specific organ lesions.

From the 1950s Harold G. Wolff and his many collaborators studied the effects of life “situations” and emotions in altering the function of virtually every bodily system.²⁰⁰ They found that personal topics meaningful to each subject elicited associated emotional responses and short-term changes in bodily function. Wolff believed that these bodily responses protected subjects. Verbal symbols were as effective as physical stimuli in calling forth these correlated responses. In Wolff's terms “stress” is the adaptive-protective response to many noxious agents and threats: a state within the organism.²⁰¹ Though, according to Wolff, disease was a consequence of the failure to adapt to life situations and other inciting agents, he did not believe that it was a *direct* consequence of such situations. If life situations were perceived as threats,

the person responded to them in a coordinated and protective manner. Part of the protective reactions, bodily responses were either “defensive” or “offensive.” The responding organ was the one most appropriate for the inciting agent, success in protecting against which being determined by endowment, previous experience, and the personal meaning of the threat.

Meanwhile, in Canada, Germany, Great Britain, Holland, and the United States, psychiatry had moved out of the asylum and into the general hospital. Specialist physicians in these countries had begun practicing a more integrated and comprehensive medicine. With the interaction of psychiatrists and internists a new approach to patients came into being that went beyond concern for their diseased organs and constituent cells. In the 1940s and 1950s the writings of the British psychoanalyst Michael Balint, the American psychiatrist-analyst Grete L. Bibring, and the American psychiatrists Carl Binger and Maurice Levine contributed greatly to the humanization of care in general hospitals. They stressed the characterological diversity of patients, the proper approach to patients as persons, the sensitivities and individual responses of patients to disease and illness, as well as the doctor’s own response to patients and their diseases.²⁰²

The movement of psychiatrists into the general hospital led to “liaison-consultation” activities whose main concerns, in addition to those just listed, were the responses of patients to new technologies and treatments (such as organ transplants, renal dialysis, and the combined pharmacological and psychotherapeutic treatment for many diseases). At the same time, antibiotic treatment and immunization against viral and bacterial infections had controlled the infectious diseases, leaving behind a large residue of chronic diseases. Soon it became evident that in many of these it was people’s behavior and not the traditional bacterial pathogens that led to disability and death. Many serious and prevalent health problems—industrial and automobile accidents; the consequences of violence; alcohol, tobacco, and drug abuse; excessive food and salt intake; lack of exercise; and coronary artery disease—stem in part from individual behavior.

The behavior of some patients prone to coronary artery disease is known as Type A (other patients—especially those over 65 years of age—with coronary artery disease show Type B behavior, while still other patients show neither form of behavior). Type A people are driven, impatient, hostile, and ambitious, with a sense of having to complete tasks, most of which they set themselves. In addition, these people show a variety of physiological and chemical variations that, together with their behavior, predispose them to the disease.²⁰³

Conclusion

Since 1960 there have been major revisions of explanations for the maintenance of health and predisposition to disease. These range from genetic variation to occupational and socioeconomic ones; all of them place future patients at risk for a disease that may or may not develop. Furthermore, virtually all diseases have come to be regarded as heterogeneous in nature: different combinations of risk factors may produce quite different results. The monocausal psychological explanations of disease—the role of the emotions and psychological conflict—are no longer seen as sufficient. Other factors are often as or more important factors in the emergence of a disease.

The many studies showing the important role social factors play in every aspect of health and disease resulted in these conceptual changes. The poor have notoriously less access to health care. Low socioeconomic status has been associated with shorter life expectancy, an increased risk for mental disorders and alcoholism, higher infant mortality and incidence of birth complications, the social and nutritional deprivation of infants and children, and obesity. It is not only overeating and lack of exercise that leads to obesity. Excess weight is unevenly distributed in the various social classes, decreasing with higher socioeconomic status. Obesity and social class are almost as closely linked for ancestors as for their obese descendants.²⁰⁴

The behavior of the Type A personality is a risk factor (along with high blood pressure, smoking, raised cholesterol levels, and glucose intolerance) in coronary artery disease and, therefore, potentially, of myocardial infarction. On the other hand, social order and stability, and traditional religious and secular ways—that is, a predictable social environment—protect against death from myocardial infarction.²⁰⁵ Similar studies

contrasting Japanese and Japanese-Americans, American Benedictine priests working in the community and members of a cloistered religious order, and nomadic Bedouins and Bedouin settlers in villages in Israel have all come to similar conclusions.²⁰⁶ A stable social environment is by definition unchanging and predictable and imposes a minimum of adaptive demands and tasks on its members. Conversely, poverty, social and family discord, and a frightening, unpredictable environment are conducive to raised blood pressure.²⁰⁷ Belonging to a family or a social group may also be conducive to health, while being excluded from or leaving it enhances the incidence of peptic duodenal ulcer, as Manfred Pflanz and his colleagues showed in 1956.²⁰⁸

Psychosomatic medicine has now emerged as an alternative to the traditional biomedical model which attempts to describe and explain disease in (single) changes of the structure of genes, enzymes, proteins, constituents of cells, or cell membranes. It is a medicine of living persons, based on a broad biological model. Since 1960 psychosomatic medicine has also moved away from simple, linear causal models of health, illness, and disease, recognizing that many influences contribute to the maintenance or disruption of the health of living beings in the course of adapting to the world about them.²⁰⁹ It seeks to examine and analyze how different levels of biological organization are affected in the course of the dynamic, ever-changing interactions of man and his environment. The environment is not a given, but a product of individual perceptions of it, which in turn are guided by our sensory receptors and experiences. These experiences determine the particular meaning to persons of events. Coordinated bodily changes occur in the course of adaptive endeavors. There is also mutual and recursive relationship between brain and body. Every bodily function so far studied is regulated and monitored by the brain. At the same time disease is seen as an alteration or breakdown in the regulation of organ systems and their functions, which may lead to changes in structure.²¹⁰

As one surveys the history of medicine, one is impressed by the persistent, radical reaction to vitalism, which is perhaps the reason why a medicine of living persons has never flourished. Now, a counter-reaction to the reductionistic, mechanistic response to vitalism is occurring. The physics of Newton, Galileo, Celsius, and Boltzmann have been replaced by the physics of Einstein, Schrödinger, Heisenberg, Feynman, Wigner, and Prigogine. It was once the hope that complex physical phenomena could be reduced to the collective behavior of simple objects—atoms and their constituent particles (or, life could be reduced to the composition of the gene and the structure of nucleotides). Yet even atoms are complex structures, and elementary particles have a history. Celsius's and Boltzmann's laws cannot explain biological evolution or embryological development.

In quite another area, it has become increasingly clear that the understanding of visual perception of the world cannot solely be understood by the analysis of single neurons that decompose and "analyze" specific characteristics of objects and the world about us. As David Marr wrote in his classic 1982 book on vision, "almost never can a complex system of any kind be understood as a simple extrapolation from the properties of its elementary components." The brain is not only an analyzer, but, as Marr insisted, it also must be capable of internally representing information—the very process that also guides the concepts of modern physics.²¹¹

Notes and References

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Topics

Chapter 17

Neurology's Influence on American Psychiatry: 1865–1915

Edward M. Brown

Prior to the middle of the nineteenth century psychiatry was clearly identified with the asylum and with the humane care of the most disturbed members of society. Between 1865 and 1915, however, this began to change, and psychiatry began to assume its twentieth century form. During this period the profession became more scientific, and simple concern with humane care became suspect. Psychiatrists also began to show more interest in less severely disturbed patients who might be treated outside of the confines of an asylum. Furthermore, the treatment of these patients in particular came increasingly to be understood in psychological terms as the ground was laid for the explosive development of twentieth century psychotherapies. In the United States it is clear that these changes did not simply evolve out of the older asylum psychiatry but resulted from the catalytic action of a new medical specialty—neurology—on the practice of caring for the mentally ill. In Europe, largely through the influence of Wilhelm Griesinger, psychiatry and neurology were more or less united after 1860. In the United States, by contrast, asylum superintendents were both well organized and isolated from the mainstream of medicine. This meant that newer perspectives were assimilated in the course of conflict and competition between two professional groups. Neurologists stimulated the assimilation of these newer perspectives by advocating a more scientific approach to patients, criticizing the quality of asylum care, treating patients previously unnoticed by psychiatrists, and importing a new psychological point of view from Europe. While asylum superintendents at first bitterly resisted the intrusion of these new specialists into their territory, in time they came to adopt a point of view quite similar to that of the neurologists. By the first World War this process was largely complete, and psychiatry was well on its way toward assuming its twentieth century form. This chapter will trace, in greater detail, the events just outlined. It will focus on developments in the United States because they serve both as a demonstration of how the intellectual and social shape of professions change and as an example of how such changes are brought about through conflict between social groups.¹

Before the Civil War the practice of psychiatry occurred almost exclusively within the walls of asylums. The wave of reforming optimism that swept over the United States in the early nineteenth century resulted in the construction of a number of these institutions. By 1844 the superintendents of thirteen asylums were ready to form the Association of Medical Superintendents of American Institutions for the Insane (AMSAI) and establish the *American Journal of Insanity*. While this association was the first organization of medical specialists in the United States, it was quite different from those that followed it. As the name of the association suggests, its members were not primarily interested in a class of patients, as was true of pediatrics, or with diseases of a particular organ system, as with ophthalmology, but with the administration of a particular institution. This administrative slant was so pronounced that even assistant asylum physicians were excluded from membership in AMSAI. As early issues of *the American Journal of Insanity* demonstrate, concerns with asylum management rather than scientific studies of insanity dominated the early

meetings of the association. Some superintendents wrote about the consequences of religious revivals, mental hygiene, and medico-legal subjects, but these issues always remained marginal to the day-to-day problems of caring for severely disturbed patients. Concerns with the quality of asylum care during the first half of the nineteenth century resulted both from the humanitarian impulses of the early superintendents and a need to legitimize asylum care in a society in which hospitals were seen chiefly as places to die. The narrowness of these concerns, however, made members of AMSAII vulnerable to criticism that they had isolated themselves from important scientific developments in medicine.²

By the end of the Civil War some of the early optimism that had led to the founding of the insane asylum was beginning to fade. Foreign-born patients appeared more difficult to treat, chronic patients were accumulating, and asylums were beginning to become overcrowded. Nonetheless asylum superintendents were still confident about their approach to patients, and, indeed, some physicians were beginning to apply the principles of asylum care to the treatment of alcoholics by creating specialized inebriate asylums.³ At the same time, however, a new group of professionals was organizing itself and preparing both to claim expertise in the treatment of the insane and to advocate a radically expanded vision of the idea of mental illness and health. The new professionals called themselves neurologists, and with their claims to a truly scientific understanding of the nervous system in health and disease they both challenged the hegemony of the medical superintendents and opened the way to a transformation of the field of psychiatry.

The American Neurological Association was established by eighteen physicians at a meeting in New York City in 1875, and the *Journal of Nervous and Mental Disease* was designated as their official organ in the following year. In contrast to the AMSAII, which was founded out of the real need of asylum superintendents to discuss common problems, the ANA was founded in the faith that recent scientific studies of the nervous system would soon sufficiently change the treatment of nervous diseases to justify their new specialty. There were several sources for the confidence of these early neurologists in their scientific understanding of the nervous system. In Europe advances were being made in the development of a localizing neuropathology. Not only had the older theories of phrenology been put to rest, but discoveries such as Broca's delineation in 1860 of a speech area in the brain opened the prospect that the true functions of the brain would soon be outlined. The concept of the reflex arc developed in the first half of the nineteenth century by Bell, Magendie, and Hall had also created the possibility that the basic physiological processes of the nervous system would soon be understood. Indeed, some, such as Carpenter and Laycock in England, attempted to use the concept of reflex action to explain "higher" mental functions and such pathological phenomena as somnambulism and trance. While these developments were occurring in Europe, some Americans were also contributing to the scientific foundations of the new specialty of neurology. During the Civil War, S. Weir Mitchell, who was later to be one of the leaders of American neurology, and his colleagues William W. Keen and George Read Morehouse had an opportunity to observe a vast number of peripheral nerve injuries. These observations were carefully recorded and formed the basis for subsequent publications including Mitchell's internationally renowned 1872 *Injuries of the Nerves and Their Consequences*.⁴

While neurologists could use these specific scientific developments to give substance to their claims of scientific expertise, they were also eager both to wrap themselves in the broad banners of positivism and scientism, which were so popular at the time, and to draw on models that had been successful in other areas of science. Some, such as Edward Spitzka, studied in Germany and brought back the conviction that new scientific methods would soon lead to great breakthroughs in neurology. Others were eager to present themselves to the public as scientific critics of such popular "delusions" as spiritualism.⁵ Virtually all of them drew heavily on contemporary theories of evolution, particularly those of Spencer, and popular ideas about the conservation of energy. This strong identification with the values of science contrasted sharply with the moral and religious tone of many asylum superintendents. It was also in terms of these differences in style, rather than specific scientific differences, that the conflicts between the neurologists and the asylum superintendents expressed themselves.

In practice many of the bold scientific claims of the neurologists were, however, no more than programmatic. While some neurologists were among the first to introduce lectures on nervous and mental diseases into medical school curricula, late nineteenth century American medical schools offered very little support

for research careers. What research neurologists did was usually privately funded, on a small scale, and largely clinical. To make a living these new specialists generally found themselves in office practice in American urban centers such as Boston, New York, and Philadelphia. Unlike the ophthalmologist, whose clearly superior skills and narrowly focused specialty allowed comfortable referral relations with the general practitioner, the neurologist, like the pediatrician and the gynecologist, defined his specialty quite broadly. This put the specialist in neurology in direct competition with the generalist. Freud, whose practice in the 1880s resembled that of his American counterparts, also reflected their experience when he wrote that

On the one hand the prospects in the treatment of ... [organic nervous] disorders ... were never promising, while on the other hand, in the practice of a physician working in a large town, the quantity of such patients was nothing to the crowds of neurotics whose number seemed further multiplied, by the manner in which they hurried, with their troubles unsolved, from one physician to another.

Because many of the neurotics to whom Freud refers were likely to agree with their family physicians that their complaints were “only nervousness,” neurologists faced the difficult task of convincing the public to take these complaints seriously and to insist on neurologic treatment.⁶

In order to win serious consideration for the nervous patient, neurologists had to present nervousness in medically acceptable terms. Because the suffering of these patients could not be explained in terms of anatomically discrete neuropathological lesions, they turned to physiological ideas, particularly that of the functional disorder. While such physiological thinking had less prestige at the time than anatomical explanations, it still had greater medical legitimacy than what would now be called psychological explanations. The latter were seen as “spiritual” and more appropriate for the theologian or novelist than the doctor. The awkwardness of such physiological thinking about patients' complaints is, perhaps, suggested by the title of W. B. Carpenter's popular book *Mental Physiology*, while the lengths to which this style of thinking could be pushed can be seen in Freud's *Project for a Scientific Psychology*. When, however, the great neurologist Jean Martin Charcot turned his attention to hysteria in the 1880s and treated it as a functional disorder, the physiological approach succeeded in establishing the nervous patient as medically ill.⁷

Perhaps the first successful proponent of the notion of functional nervous disorder was the American neurologist George Miller Beard. In 1869 Beard announced his discovery of what was to become—even more so than hysteria—the typical functional disorder of the age: neurasthenia. Without special training in neurology, Beard made his discovery while using a form of “general electrization” he had learned from a lay practitioner. Placing the electrodes on his own hands, Beard gave a mild electrical massage to all the muscles of the patient's body, and he repeated this process daily for weeks or months as necessary. What he found was that two-thirds of his patients recovered from a wide variety of complaints such as fatigue, dyspepsia, headaches, and nervousness. Viewing electricity as a kind of tonic, traditionally associated with vital nervous energy, he reasoned that all of these patients suffered from a lack of nerve force, which his treatment restored. “Nervousness,” he proclaimed, “is really nervelessness.” He argued that this lack of nerve force was the result of a specific functional nervous disorder that he called neurasthenia, and in the years following his initial publication he became a tireless advocate of the significance of this condition.⁸

Beard's physiological explanation of neurasthenia in terms of nerve force, as well as his apparent ability to cure this illness, had great appeal. Not only were some relieved to learn that they suffered from something real, but others were reassured to learn that their “symptoms, which for a long time had kept them in a state of alarm, if not despair, lest they might be precursors of incurable disease of the brain or spinal cord” could be treated. Beard's theory also had special appeal for affluent patients, who were of particular interest to neurologists in private practice. By drawing on contemporary notions of evolution, his theory suggested that the victims of neurasthenia were most likely to be highly successful as well as highly refined people. The highly developed “nervous organization” of such “brain workers,” it was argued, made them especially sensitive to the stresses of advanced civilization. Because Beard explained the protean manifestations of neurasthenia by calling on three central ideas of the period—the reflex theory, the electrical nature of the nerve impulse, and the law of conservation of energy—he also left little doubt about the scientific status of those who treated it.⁹

While the diagnosis of neurasthenia and Beard's explanation of it achieved international standing, which they maintained into the twentieth century, Beard's treatment was soon eclipsed by the more comprehensive rest cure. This treatment was developed by S. Weir Mitchell, who, like Beard, had established an office practice after the Civil War. Drawing on his observation that "complete rest and plentiful food" allowed exhausted soldiers to return to the front, he tried the same approach in 1874 with Mrs. G., a "lady of ample means, with no special troubles or annoyances, but completely exhausted by having had children in rapid succession and from having undertaken to do charitable and other work to an extent far beyond her strength." When he discovered that she could not tolerate complete bed rest he added passive massage to the regimen and was delighted by her recovery. Soon he added electrotherapy, overfeeding, and seclusion of the patient from her family to the treatment. This treatment, particularly his insistence on secluding the patient from her family, showed considerable insight into the family dynamics surrounding invalids. Mitchell nonetheless was consistent in emphasizing the somatic aspects of the rest cure—even calling his book describing the cure *Fat and Blood*. This treatment, like the concept of neurasthenia, achieved international popularity—even Freud spoke highly of it. It also provoked one of Mitchell's patients, the noted feminist Charlotte Perkins Gilman, to write a stinging satire in which she suggested that the rest cure nearly drove her crazy.¹⁰

With diagnoses like neurasthenia and treatments like the rest cure achieving significant popularity, a new type of medical practitioner, the nerve doctor, was emerging. In Europe a sharp split between this new specialty and the older form of practice, which centered around the asylum, was largely avoided. In Germany, for example, the influential Wilhelm Griesinger assumed the chair of Psychiatry and Neurology at Berlin in 1865. By uniting psychiatry and neurology with the prestige of a university chair as well as his slogan "psychological diseases are diseases of the brain," Griesinger established a tradition that left little room for the kind of interprofessional conflict that marked the American scene. In France the great neurologist Charcot worked at that country's largest asylum, the Salpêtrière; and in Austria, while Freud pursued his office practice with nervous patients, his mentor, Theodor Meynert, held a chair at the university and conducted a program of research on localizing neuropathology.¹¹

In the United States the absence of a strong university medical school tradition and the presence of a well-organized association of asylum superintendents left those neurologists who wanted to emulate their research-oriented European counterparts isolated from the most interesting patients. During the late 1870s and early 1880s this situation contributed to one of the most bitter conflicts in the history of American psychiatry. Having established a national association of their own in the early 1870s, American neurologists were soon ready to launch an organized critique of the dominant branch of the psychiatric profession. The New York Neurological Society, which represented the core of the national association, fired the first volley in 1878 by submitting a formal petition to the New York State legislature demanding an investigation of the asylum system of that state. When the legislature's committee on public affairs absolved the state's hospitals the following year, the neurologists claimed there had been a whitewash. After this initial clash, however, momentum built and soon led to an alliance between the neurologists and members of the National Conference of Charities and Corrections, which was a group of charity reformers concerned with placing public welfare on a more "scientific" footing.

By 1880 this coalition of neurologists, charity reformers, and a few reform-minded asylum superintendents were ready to form the National Association for the Protection of the Insane and the Prevention of Insanity (NAPIPI). Dedicated (in George Miller Beard's words) to "obtaining universal recognition of the fact that it is no disgrace to be crazy," this organization provided a forum for neurologists to continue their attack on the management of American asylums. They pointed to the growing isolation of asylum superintendents from new developments in medicine, the seemingly excessive preoccupation of the superintendents with the physical plants of their asylums, the superintendents' lack of scientific training, and the paucity of scientific research done in asylums. They also joined with English psychiatrists in complaining about the use of mechanical restraints on insane patients in the United States. Because asylum care in the 1870s had deteriorated from what it had been thirty years earlier, some of the neurologists' criticisms were well taken. The thrust of these criticisms, however, was aimed not so much at the specific abuses as at establishing the ideal of "science" as the norm of good psychiatric care. Because asylum superintendents did not take this criticism

passively, what evolved was an intense war of words between a group of self-proclaimed advocates of the ideals of science and a group that considered itself uniquely qualified to provide humane care for the insane. In this context asylum superintendents were assailed as “despots,” “autocrats,” “reactionaries,” and “businessmen” who had lost interest in medicine and science,” while the superintendents expressed their contempt for “outside meddlers,” “soft headed humanitarians,” and “neuropaths.”¹²

The conflict between the neurologists and the asylum superintendents was not, however, limited to the question of asylum reform. The assassination of President Garfield by Charles Guiteau in 1882 provided another arena in which both groups could attempt to demonstrate the superiority of their professional perspectives. By providing an opportunity for the most outspoken members of the two groups to line up on opposite sides of the question of guilt versus insanity, Guiteau's trial probably gave the public more insight into the conflicts within the profession than into the accused's mental state. John Gray, who was superintendent of the Utica Asylum in New York and editor of the *American Journal of Insanity* (which he owned), took the position that Guiteau was sane because he “had been motivated neither by uncontrollable rage nor by the torrents of insane compulsion ... [but instead] ... thought, reasoned and controlled his actions.” Guiteau's claim that he killed the president out of inspiration was dismissed by Gray as after-the-fact rationalization and his long history of strange behavior as egotism. The star defense witness, the neurologist Edward Spitzka, argued that Guiteau was insane because his crime was “the result of a morbid project rather than a delusion strictly speaking.” This broad definition of what counted as insane behavior was supported by Spitzka's view that Guiteau's long history of strange behavior was due to a “congenital malformation of the brain.” With testimony like this Spitzka no doubt demonstrated his familiarity with the latest European scientific theories, especially the popular theory of hereditary degeneration. Nonetheless Gray's narrow interpretation of criminal responsibility prevailed. Guiteau was convicted and hanged—perhaps inevitably considering public sentiment about the assassination. Within a few years the neurologists' position seemed increasingly plausible and few doubted Guiteau's insanity.¹³

Not long after the Guiteau trial the sharp controversies between the neurologists and the asylum superintendents died down almost as abruptly as they had begun. By the mid 1880s the NAPIPI was dead and with it the chief instrument of the neurologists' attack. In part this was due to the death of some of the most active leaders of the organization, and in part due to a split between the neurologists and the lay members of NAPIPI, some of whom were hostile to all medical experts. It was also, no doubt due to the fact that the asylum superintendents slowly began to reform their organization. By 1892 the AMSAII had broadened its membership to include assistant asylum physicians, and at the same time, in a significant symbolic gesture, they changed the name of the organization to the American Medico-psychological Association. Of particular interest is the fact that in 1894 the distinguished neurologist S. Weir Mitchell was invited to address the newly renamed association. Mitchell initially refused the invitation, perhaps not wanting to rekindle the controversies of the 1880s. The invitation was renewed; and when he spoke, Mitchell did not pull his punches. He repeated many of the same criticisms that had been made in the early 1880s, telling his audience:

You were the first specialists and you have never come back into line You soon began to live apart and you still do so. Your hospitals are not our hospitals; your ways are not our ways I am strongly of the opinion that ... the belief that no one could, or should, treat the insane except the special practitioner has done us and you and many of our patients a lasting wrong.

While some of Mitchell's criticisms were unjust because he seemed to be unaware of changes that had occurred in the care of the insane, the *American Journal of Insanity* published a remarkably mild response. Clearly the members of the American Medico-psychological Association were confident enough in their own progressive reforms that they were willing to listen to their critics.¹⁴

Another reason that the neurologists may have moderated their criticism of their asylum-based colleagues was that they had achieved a degree of success in establishing themselves as experts in the care of the mentally ill. What this meant, in part, was establishing the value of the nonasylum treatment of the insane. Because of the great popularity of asylum care in the early nineteenth century and the wide acceptance of the view that isolating the insane from the harmful influences of their environment was an important ingredient

in successful treatment, nonasylum care had no formal place in American medical theory or practice. In an influential paper on "The Non-asylum Treatment of the Insane" published in 1879, the neurologist William A. Hammond argued "that the medical profession is, as a body, fully capable of treating cases of insanity as cases of any other disease, and that in many instances sequestration is not only unnecessary but positively injurious." According to Hammond, neurologists, and even some general practitioners, were better able than asylum superintendents to recognize cases of insanity during their early and treatable phase. With the exception of "those who refuse food, who have homicidal or suicidal tendencies, or delusional or morbid impulses, which prompt them to the destruction of property or other acts of violence," he argued, they were also quite able to treat them at home. Because twentieth century definitions of mental illness are so different than those of the 1870s, it is difficult to understand Hammond's point without considering a specific case. For example:

M.G., a lady thirty years of age, and a widow for three years, consulted me on February 20th, 1877, for what was considered to be incipient insanity, and an affection in all probability, requiring, it was feared, incarceration in a lunatic asylum. The patient was quiet and orderly in her demeanor, and so far as her friend's accounts went, entirely sane, except on one point of fear of contamination, which was exhibited by mental distress, and the practice of washing her hands without there being obvious cause for doing so.

Treating her with a mixture of a mild cathartic, a bromide, and opium, he reported that within three to four months her mental strength was improved and she was better able "to contend with the ridiculous notions which govern her." By advocating the nonasylum treatment of a case of "incipient insanity" such as this Hammond was redefining the place of asylum care in psychiatry and enlarging the field of "outpatient" treatment that Beard had begun to stake out with his concept of neurasthenia. By the beginning of the twentieth century many asylums (which were often called hospitals by then) had established outpatient departments.¹⁵

By the 1880s the field of nonasylum treatment was well established, and a significant number of neurologists could make a living treating neurasthenics as well as patients such as the one described by Hammond. Perhaps the most important condition that neurologists treated, however, was hysteria. Both because hysteria mocked neurologists' efforts to explain it in terms of their localizing neuropathology and because it responded to such distinctly "unmedical" treatments as hypnosis, suggestion, and psychoanalysis, it opened the way for some neurologists to broaden the field of psychiatry by developing a psychological point of view. Traditionally viewed as a disorder of women, hysteria had long been the bane of physicians' lives. As Reynolds put it in a standard medical text, "The employment of the word 'hysterical' may sometimes be found indicative of the state of mind of the practitioner rather than that of the patient's health." Viewed in terms of twentieth century categories, the hysterical woman's symptoms have recently been described as a covert rebellion against her limited opportunities in life. For nineteenth century neurologists, however, hysteria was interesting because so many of its symptoms resembled those produced by genuine neurologic lesions. Paralysis, ataxia, abnormal movements, dysesthesias, and seizures could all be found. If the power of neurologic diagnosis was to be established, hysterical imitations had to be distinguished from the real thing. Even the great English neurologist John Hughlings Jackson was interested in the difference between hysterical seizures and epilepsy. For Jackson as well as many of his counterparts in Europe and America, however, hysteria itself was of little interest after the process of differential diagnosis was complete. According to Jackson's influential doctrine of concomitance, "mental symptoms ... are, strictly speaking, only signs to physicians of what is going on or what is going on wrongly in a part of a patient's material organization." From this point of view the protean and perplexing symptoms of hysteria offered little promise of neurologic insight.¹⁶

Not all neurologists, however, followed Jackson's lead. Particularly in France, under the influence of Charcot, neurologists began turning their attention toward hysteria as a condition worthy of study in itself. Beginning his career as *Medecin de l'Hospice de la Salpêtrière* in 1862, Charcot had used his "museum of living pathology" to delineate numerous neurologic syndromes. When he turned his attention to the study of hysteria in the late 1870s he was generally recognized as one of the world's leading neurologists. With Charcot studying hysteria, others could not easily ignore it. Charcot was important not only because of his

prestige, but also because he presented his views in terms that were readily acceptable to late nineteenth century neurologists while at the same time opening the way for others to go beyond his findings to develop a psychological point of view toward hysteria and other nervous disorders. For Charcot the fact that hysteria “left no material trace that can be discovered” and therefore resisted efforts to explain it in terms of localizing neuropathology was of less importance than the fact that it was “governed, in the same way as other morbid conditions, by rules and laws.” In his hands, for example, hysterical seizures appeared to proceed through distinct and readily observable stages. While observations like this later came under severe criticism, they were important at the time because they allowed neurologists to see hysteria as a genuine disease. Charcot's understanding of hysteria was also readily accepted by neurologists because it was consistent with their belief that only materialistic explanations could be regarded as truly scientific. For Charcot the dominant idea in the etiology of hysteria was hereditary predisposition. Drawing on the popular theory of hereditary degeneration, he generally established the presence of such a predisposition by giving the patient's family history, in which psychic disturbances, organic nervous diseases, and more or less diffuse diseases of other kinds in relatives were mentioned.¹⁷

In spite of his strong somatic bias, Charcot's studies on hysteria opened the way for the development of a psychological point of view in at least two ways. The first of these was his legitimization of hypnosis as a tool of neurological research. Since the late eighteenth century regular physicians had largely avoided using hypnosis. Efforts to explain its effects in material terms, that is, in terms of a magnetic fluid, had been consistently unsuccessful, and medical discourse had no place for “spiritual” explanations. Consequently during the nineteenth century, with exceptions like James Braid in England, hypnosis was largely the property of irregulars such as spiritualists and magnetic healers. Even in the 1870s neurologists who attempted to employ hypnosis ran the risk of being regarded as charlatans. When Charcot started to use hypnosis to study hysteria in 1878 this began to change. Only after 1882, when Charcot's findings with hypnosis were accepted by the Academie des Sciences, which had rejected similar findings three times in the previous century, could other neurologists begin to investigate hypnotic phenomena in earnest.¹⁸

One reason that Charcot's understanding of hypnosis was readily accepted was that, like his understanding of hysteria, it was quite consistent with the dominant scientific mores of the time. Viewing hypnosis as only “an artificially produced morbid condition—a neurosis” that “disclose(d) itself almost always on soil predisposed by hysteria,” he regarded its potential as a treatment as quite limited. Nonetheless, others, notably Charcot's rival Hippolyte Bernheim, extended the territory established by Charcot by arguing that hypnotic phenomena could be found in normal people as well as in hysterics and by demonstrating the therapeutic potential of hypnotic suggestion. Still others such as Pierre Janet, Josef Breuer, and Freud built on Charcot's work, using hypnosis to establish their remarkable hypotheses about the presence of an unconscious mental life. With this work psychological theory and psychological treatment were well on their way to being established as part of the field of psychiatry.¹⁹

Charcot also created an opportunity for neurology and psychiatry to incorporate the psychological into their domain through his consideration of the role of trauma in the etiology of hysteria. While regarding hereditary predisposition as central to his understanding of this disorder, he did grant that

a thorough acquaintance not only with the disease, but also with the conditions under which it is produced will ... [be seen] as useful from the fact that nervous disorders often ensue without any traumatic lesions and simply as a result of ... psychical nervous shock.

It is of interest that Charcot's consideration of traumatic, that is to say, emotional factors resulted from his study of male hysterics—particularly those men who were the victims of a puzzling nervous disorder often referred to as “railway spine.” Because women were expected to be emotional, it was easy to see their hysteria as simply due to an inherited nervous weakness. The possibility, Charcot noted, that “a fireman of a locomotive, for instance, never before emotional, at least in appearance, may as the result of a railroad accident ... become hysterical just like a woman—this (had) never entered into the imagination of some people.” While Charcot regarded the terror that such a fireman might have experienced as only an “agent provocateur” that released the disposition to disease, the fact that he acknowledged that emotions might

result in hysteria in such apparently robust individuals clearly weakened the explanatory importance of heredity. In the hands of other neurologists, most notably Charcot's student Freud, the importance of traumatic factors could be expanded to the point of virtually replacing heredity as the dominant idea in the etiology of hysteria—for women as well as men. The fact that such traumatic factors also appeared to be treatable through new psychological means also contributed to an important wave of therapeutic optimism among neurologists.²⁰

With this significant work occurring on the continent of Europe, Americans could not completely ignore hysteria, hypnosis, and the developing psychological point of view. Among those claiming expertise in caring for the mentally ill, neurologists were among the first to import these new ideas and approaches. While some neurologists were interested in European developments in the 1880s and 1890s, widespread interest did not develop until after 1906. In that year Pierre Janet, who was viewed as a representative of the "school established by Charcot," delivered an important series of lectures on "The Major Symptoms of Hysteria" at Harvard University and another series of lectures on psychotherapeutics at the Lowell Institute. The year before, the Swiss neurologist Paul Dubois' s book *The Psychic Treatment of Nervous Disorders* (for a time regarded as the bible of psychotherapeutics) had been translated. By July 1907 seventy-nine papers and ten books were listed in the *Index Medicus* under the heading "psychotherapy"—a heading that had first appeared only in May 1906. The psychological ideas of Bernheim, Dubois, Janet, and especially Freud, were, however, not imported without controversy. At the opening of the twentieth century controversies among neurologists about the legitimacy of psychological ideas and treatments had, in fact, clearly upstaged lingering disagreements between neurologists and those working in psychiatric hospitals. While most hospital-based psychiatrists had little use for the new ideas, reformers saw the new psychological approach as a way to revitalize their work. Indeed, the combination of increasing conflict among neurologists and a progressive rapprochement between psychologically oriented neurologists and reform-minded hospital psychiatrists contributed greatly to establishing the boundaries of the field of psychiatry that prevailed through most of the twentieth century.²¹

Disagreements among neurologists over hypnosis, suggestive therapeutics, and especially psychoanalysis took on a somewhat regional character. While Boston neurologists were relatively eager to import the new approaches, neurologists in other cities, such as Philadelphia, imposed a virtual quarantine to prevent their spread. Perhaps a lingering sympathy for transcendentalist philosophy made Bostonians particularly receptive to the results of hypnotic experiments and even psychical researches. In any event, between 1890 and 1909 a loosely knit group of psychologists, philosophers, neurologists, and even men associated with psychiatric hospitals—the so-called Boston school—cooperated to develop a sophisticated psychological approach to mental disorders. The two neurologists in this group, Morton Prince and James Jackson Putnam, deserve special mention. Prince began his medical career treating diseases of the nose and throat but switched to the study of nervous diseases in the early 1880s. A visit to Charcot (with his ailing mother) and another trip to study with Bernheim firmly established his interest in hysteria and hypnosis. By 1890 his own research allowed him to publish a paper on "Some of the Revelations of Hypnosis: Post-Hypnotic Suggestion, Automatic Writing and Double Personality." Accepting Bernheim's view of hypnosis as a normal phenomenon, Prince used this technique less as a therapy than as a tool to conduct a series of original researches, particularly on the subject of multiple personality. Prince's importance, however, was perhaps less as an original researcher than as a publicist for the importance of psychological issues. In 1906 he founded the *Journal of Abnormal Psychology*, which was highly influential in introducing professionals to this area. In the same year he also published *The Dissociation of a Personality*, which was, perhaps more than any other single early twentieth century work, responsible for exposing the American public to the mysteries of the subconscious.²²

To understand the role of the profession of neurology in introducing the psychological point of view into psychiatry, however, it is perhaps more useful to consider less original thinkers than Prince, Janet, or Freud. From this point of view those neurologists who gave up a firm commitment to somaticism to accept the psychological ideas of others are of particular interest. Here the best-known American example is James Jackson Putnam. Educated in Germany like such ardent materialists as Spitzka, Putnam was a highly influential

proponent of the somatic point of view in the years after the Civil War. At a meeting of the American Neurological Association in 1876 when George Miller Beard presented a series of experiments that tested “how much could be done in the way of effecting cures in cases of rheumatism, neuralgic sleeplessness and various forms of chronic diseases by exciting in patients a definite expectation,” Putnam replied that he “had never seen any evidence that cure had been effected by mental influences in cases where actual disease existed.” By 1909, however, Putnam was ready to welcome Freud enthusiastically when the latter gave a series of lectures at Clark University, and by the time of his death in 1918 Putnam had become the leading American advocate of psychoanalysis. Freud’s charisma notwithstanding, Putnam’s own career clearly must have been critical in producing such a radical transformation. Certainly his friendship with members of the Boston “school” such as William James and Morton Prince played a role, as did Putnam’s own philosophic interests.²³

Two features of Putnam’s neurological career, however, should also be mentioned. First, Putnam studied not only in Germany, but also in England with Hughlings Jackson. While Jackson’s principle of concomitance kept him from directly pursuing psychological investigations, his dynamic and evolutionary approach to nervous function bears some striking similarities to Freud’s dynamic psychology. Indeed Putnam remembered Jackson’s teaching that “when the hierarchy of (cerebral) functions ... suffers derangement at any part ... the attempt at a reestablishment of some sort of equilibrium is always such that the new arrangement tends to safeguard itself.” One wonders whether Putnam’s exposure to this style of thinking prepared him to find Freud’s dynamic explanations in terms of energy, regression, and defense more congenial. In any event, the fact that Freud’s style of theorizing in terms of dynamic and evolutionary concepts was generally familiar to neurologists must have allowed them to take his ideas seriously even when they did not agree with him.²⁴ To understand Putnam’s willingness to accept a specifically psychological etiology for hysteria it is important to note that Putnam, like Charcot, had considerable experience with traumatic neuroses like “railway spine.” Because such patients often suffered from apparently trivial injuries and because they often developed symptoms only some time after the accident, their compensation by railway companies was the subject of considerable controversy. In examining these patients Putnam had to distinguish between hysteria, as a genuine disorder, and deliberate simulation. Perhaps his success in doing so allowed him to take hysteria seriously and prepared him to accept Freud’s emphasis on traumatic factors in the etiology of hysteria. The experiences of other neurologists with patients with traumatic neuroses may also have prepared them for Freud’s theory of the traumatic etiology of hysteria. In any event neurologists did find that theory a comfortable way to understand Freud and continued to ascribe it to Freud long after he had changed his views.²⁵

Perhaps the greatest effect of the new European ideas on American neurology was not as a source of hypnotic experiments or explanations for traumatic neuroses but as a source of effective treatments. As practitioners, neurologists were always aware of the importance of such treatments in attracting patients. While electrotherapy and the rest cure continued to suffice for some neurologists, their limitations were well known by the turn of the century. Indeed even in the 1890s there was some willingness to understand these treatments in psychological terms. At the same time Europeans were developing several kinds of psychotherapy and claiming dramatic results. Hypnosis itself could be used therapeutically. Bernheim, who saw hypnosis as only an extreme form of the normal suggestive influence of one person on another, advocated using suggestions to directly correct symptoms. Those who found such suggestive therapeutics deceptive and perhaps unethical could turn to Dejerine or Dubois, who advocated using moral appeals and reasoning to persuade patients to get better. And, of course, there was Freud and his “psycho-analysis.” After Janet’s visit in 1906 and Freud’s in 1909, competition between the advocates of these various approaches intensified.²⁶

There were, however, other sources of competition as well. Particularly in Boston at the turn of the century Christian Science, the New Thought Movement, and the Emmanuel Movement were all successful in attracting patients to religious healers. Such competition with religious movements was not altogether new to neurologists. In the 1870s, for example, Beard and Hammond devoted considerable energy to demonstrating that materialist explanations of trance phenomena were superior to the supernatural explanations offered by the quasi-religious movement known as “modern” spiritualism. What was new at the turn of the

century, however, was that the new psychotherapies were not so easily distinguished from their religious counterparts. Janet, for example, pointed out the similarities between Dubois's "medical moralization" and Christian Science; the Emmanuel Movement actually used friendly neurologists to develop their approach.²⁷ The New York neurologist C. L. Dana summed up the situation:

After all, the question is not whether we should use psychotherapeutics, hypnotism or suggestion; we as neurologists are confronted with the fact that an enormous number of mentally sick people are running around and get their psychotherapeutics from the wrong well.²⁸

While some neurologists were actively developing and promoting the new forms of psychotherapy, others saw these new treatments as a threat to neurology. For them the psychological point of view undermined the identity of the profession. While one neurologist saw Freud and Dubois as contradicting one of neurology's fundamental beliefs because he got the impression "that neither one of them believes that there is ever a physical foundation for nervous disorders," another neurologist worried that enthusiasm for psychoanalysis and psychotherapy would deprive neurologists of those basic diagnostic skills that gave the profession its claims to expertise.²⁹ Still a third said that he was "in favor of psychotherapy but such as he can practice without labeling it or calling the attention of his patients to it and saying to them 'Here I am a practitioner of psychotherapeutics.'" He added, "I am a neurologist, I am not going to call myself a psychotherapeuticist any more than I would call myself an electrician."³⁰ What this meant was that somatically oriented neurologists might adopt such techniques as suggestion that could be incorporated into their familiar mode of practice while rejecting more elaborately systematized methods such as psychoanalysis. Even such a staunch somaticist as the Philadelphia neurologist Francis X. Dercum could claim that "suggestion as an adjuvant may, in skillful hands, aid in the most unmistakable manner in bringing about a recovery." On the other hand, he added, "psychoanalysis [*sic*] ... is a cult, a creed, the disciples of which constitute a sect. To be admitted to its brotherhood it is merely necessary that he should be converted to the faith, not that he should be convinced by scientific proof, for none such is possible."³¹

The split among neurologists over psychotherapeutics in general and over psychoanalysis in particular widened during the second decade of the twentieth century. Some neurologists were troubled not only by the sectarian character of the psychoanalytic movement, but also by what they saw as Freud's exclusive concern with sexual factors in the etiology of nervous disorders, or as one of them put it, "this eternal harping on sex as if it were the only thing in life."³² One focus of these differences was the *Journal of Nervous and Mental Disease*. Because this journal published the proceedings of the American Neurological Association, it was virtually the official journal of that organization even though it was privately owned by its editor, Smith Ely Jelliffe. After Jelliffe's "conversion" to psychoanalysis in the early years of the century an increasing proportion of the journal's articles were devoted to psychoanalytic subjects. By 1913 a number of neurologists, feeling that there was literally not enough room in that journal for their organic approach and that of the psychoanalysts, rebuffed Jelliffe and founded a new journal—*The Archives of Psychiatry and Neurology*. After this dramatic event, organically and psychologically oriented neurologists continued to grow further apart. For neurologists interested in psychotherapy and psychoanalysis this did not result in professional isolation, however, because while some neurologists were rejecting the psychological point of view, hospital-based psychiatrists were increasingly coming to accept it.³³

The rapprochement between hospital-based psychiatrists and neurologists had been going on since the 1890s. The fact that psychiatrists emphasized their scientific credentials and their interest in disease processes made the differences between the two professions less apparent. Not only were some neurologists running psychiatric hospitals and hospital psychiatrists caring for "extramural" patients, but they were even participating in the same professional organizations. The Boston Medico-Psychological Society, which was founded in 1880 by asylum psychiatrists, for example, admitted neurologists to membership in the 1890s, and in 1901 changed its name to the Boston Society for Psychiatry and Neurology.³⁴ While the new psychological approaches had little to offer most institutionalized patients, they did offer the possibility of some cures, and this appealed to reformers hoping to cast off psychiatry's custodial image. Some efforts to introduce psychotherapy and psychoanalysis into psychiatric hospitals were made.

As William Alanson White noted, however, the effect of such treatments was more easily measured in improved staff morale than in increased patient well being. Of greater importance to the relationship between psychiatry and neurology was the fact that after the turn of the century psychiatrists were increasingly anxious to reach beyond institutional walls and no longer limit their activities and responsibilities to the institutionalized mentally ill. After 1910 the mental hygiene movement, with its emphasis on preventing mental disorders, gave this change in psychiatry its rationale. Adolf Meyer's eclectic "psychobiology," which stressed understanding individual patients through a complete account of their biographies, gave these changes a theoretical foundation. Neurologists interested in psychotherapy could now find a more comfortable home in the newly expanded field of psychiatry.³⁵

By the time of the First World War, then, the boundaries of the field of psychiatry had been radically altered. The nineteenth century distinction between asylum superintendent and nerve specialist had been obliterated. Neurologists were no longer concerned with the nervous patient but rather with the diagnosis and treatment of organic disorders of the nervous system. Psychiatry, while not completely abandoning its commitment to the institutionalized mentally ill, had expanded its claims of expertise to cover a broad domain beyond the walls of the hospital. Late nineteenth century neurologists had catalyzed this change in psychiatry in several ways. By insisting that psychiatrists adopt a more scientific posture toward their work they had stimulated reforms that allowed the profession to achieve a degree of credibility in the twentieth century. By legitimizing the care of the nervous patient they had opened up a new field into which twentieth century psychiatrists were able to move. By introducing psychological theories and psychological treatments they had given psychiatry the tools it needed to broaden its claims of expertise. In stimulating this broad expansion of psychiatry late nineteenth century neurologists may not have succeeded in demonstrating that it "is no disgrace to be crazy," but they did contribute to the astonishing willingness of twentieth century Americans to see themselves as having psychiatric problems.

Notes and References

1. Jacques M. Quen, "Asylum Psychiatry, Neurology, Social Work and Mental Hygiene: An Exploratory Study in Interprofessional History," *Journal of the History of the Behavioral Sciences* 13 (1977): 3–11, presents a similar argument to that presented in this chapter. He adopts a broadly interprofessional focus, whereas this chapter focuses more narrowly on the dynamic influence of the new profession of neurology.
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Chapter 18

The Transformation of American Psychiatry

From Institution to Community, 1800–2000

Gerald N. Grob¹

In seventeenth and eighteenth century America insanity was not perceived within a strictly medical framework or as a matter of pressing social concern. The number of mentally ill persons was small, and a low population density characteristic of rural and agricultural societies ensured their dispersal. Insanity, therefore, was largely an individual rather than a social problem. Indeed, the colonial period was notable for the virtual absence of physicians or hospitals specializing in the care and treatment of the mentally ill.

The absence of institutions, however, did not imply that no provision would be made for “lunatics” or “distracted” persons (as this group was commonly known). Before the nineteenth century the family was primarily responsible for the welfare of any of its members who became mentally ill. Yet the local community was never able to remain completely aloof from the problems relating to insanity. Certain forms of abnormal behavior seemed to threaten public security and safety and therefore dictated the adoption of protective measures. In other instances mental illnesses created economic dependency, thus making the individual a public charge. If the family possessed inadequate resources, the community was legally bound to intercede because of its obligations to care for indigent dependent persons. Finally, the issue of guardianship often involved the community, for the afflicted individual might be declared legally incompetent to manage property. Yet toleration remained the norm; punishment or confinement was rare and was used only when behavior seemed to threaten the security of residents. Nevertheless, reliance on familial and community traditions and practices rendered it unnecessary to consider structural changes. Consequently, the very concept of social policy—which involved the conscious creation of new public institutions or procedures on a regional or national basis to replace traditional means of dealing with distress—was largely absent.²

Creation of Institutions

After 1800 new circumstances created conditions that stimulated the thrust toward reliance on institutional care of the mentally ill. Demographic changes (including population growth, geographical mobility, urbanization, and immigration), a growing awareness of social and medical problems, a surge in philanthropic giving by elite groups, knowledge of medical and psychiatric innovations in France and England, and religious and intellectual changes all combined to give rise to a movement to establish institutions specializing in the care and treatment of the insane. The transformation of insanity into a social problem and the ensuing emphasis on state intervention (as contrasted with familial and community responsibility) was by no means unique; the nineteenth century was notable for the proliferation of institutional solutions and the transfer of functions from families to public or quasi-public structures. In 1820 only one state mental hospital existed; by the Civil War virtually every state had established one or more institutions.³

The founding of asylums was accompanied by the emergence of psychiatry, arguably the first medical specialty (excluding surgery). The creation of a new medical specialty—a development that placed madness within medical jurisdiction—was not a function of new discoveries or changes in the ways in which the nature of insanity was understood. Nor was psychiatry responsible for the establishment of asylums, which preceded rather than followed. The outlook and functions of asylum physicians were shaped by the setting in which their specialty was conceived and grew to maturity. Psychiatrists—unlike the rest of their medical colleagues—were for the most part employed in public institutions and not in private practice at this time. The ensuing identification of the specialty of psychiatry with asylums and state medicine would have a lasting effect. It not only helped to shape professional and popular perceptions about insanity, but it also contributed to the prevailing consensus that institutional care and treatment for mental disorders represented the appropriate and professional policy choice. Psychiatry and asylums, therefore, enjoyed a symbiotic relationship for more than a century; each reinforced and conferred legitimacy on the other. Had both not been so closely related, it is conceivable that subsequent developments might have followed a quite different path.⁴

Before 1820 the literature dealing with mental illnesses in the United States was relatively sparse. Insanity was peripheral to the lives of lay people and physicians alike; the primary concern of both was with those endemic and epidemic diseases that posed a threat to life. A few physicians, including the redoubtable Benjamin Rush, had written about insanity, but they tended to be exceptions. The creation of mental hospitals introduced a new element, for physicians associated with these institutions limited their activities to a single group of patients rather than a representative cross section. Admittedly, the physical health problems of mental hospital patients were not novel. Yet the reasons for their confinement were specific and unique, and asylum doctors quickly began to distinguish themselves from their colleagues in general practice. Beginning in the 1830s and accelerating in succeeding decades, physicians employed in mental hospitals (either as superintendents or assistant physicians) created one of the earliest medical specialties and produced an extensive literature dealing with mental illnesses. That they dealt with a subject in which the problems of merging theory and empirical data seemed insurmountable was not surprising. Not only did they seek to confer legitimacy on their institutions and specialty, but they also hoped to provide a rational explanation of insanity that would foster public confidence. The resulting atmosphere of trust would then remove the negative stigma often associated with insanity and facilitate the commitment of insane persons by their friends and families.⁵

Most psychiatrists, like physicians generally, conceived of disease in individual rather than general terms. Health was a consequence of a symbiotic relationship or balance among nature, society, and the individual. Disease represented an imbalance that followed the violation of certain divine natural laws that governed human behavior.⁶ Insanity occurred when false impressions were conveyed to the mind because the brain or other sensory organs had been impaired. Mental illnesses were perceived to be somatic and to involve lesions of the brain, the organ of the mind. To have argued otherwise would have broached blasphemy. If the mind itself (often equated with the soul) could become diseased, it might conceivably perish. The immortality of the soul, on which Christian faith depended, would thereby be denied or negated. Reared in a Protestant culture, most psychiatrists instinctively rejected a model of disease that threatened traditional moral and religious values.

Such reasoning provided asylum physicians with a model of mental illnesses that was especially compatible with belief that they were precipitated by psychological and environmental factors interacting with the constitution or predisposition of the individual. Insanity thus was provoked by willful violation of certain natural laws that governed human behavior. Immorality, improper living conditions, or unnatural stresses that upset the natural balance of the individual could also precipitate mental disorders. Mid-nineteenth century psychiatrists managed to infuse moral values and science into their model of insanity.

The holistic concept of mental illnesses that saw physical disorder of the brain as the cause of the disorder required of most American psychiatrists an act of faith. Except for a few cases in which autopsies revealed the presence of a brain tumor or other gross abnormality, the link between the brain and madness remained a mystery. Given their inability to demonstrate a relationship between anatomical changes and behavior, psychiatrists identified mental disorders by observing external signs and symptoms. In this respect they were no different from other physicians who defined pathological states in terms of visible and external signs (such as fever). Although disagreeing on the diagnosis of diverse signs and symptoms,

few physicians questioned this approach, if only because they could conceive of no alternative. Psychiatrists accepted disease as a given; the inability of patients to function, combined with severe behavioral symptoms, was sufficient evidence of the presence of pathology.

Most asylum doctors were vaguely aware of the intellectual and logical difficulties that followed from their somatic view of insanity. Their references to lesions generally lacked empirical support, and acceptance of their presence rested on faith rather than observation. Classification of mental disorders (nosology) was equally problematic, for there was no way to relate brain physiology to specific behavioral patterns. Indeed, nomenclature and classification aroused little enthusiasm among mid-nineteenth century American psychiatrists, if only because diagnosis was not related to specific therapies. No system of classification, conceded Amariah Brigham (superintendent of the Utica Asylum in New York State) in 1843, appeared to be of “much practical utility.” All categories based on symptoms “must be defective, and perhaps none can be devised in which all cases are arranged.”⁷ Nor were Brigham’s views unique. Samuel B. Woodward, head of the Worcester hospital, had observed earlier that insanity was a “unit, indefinable ... easily recognized ... [but] not always easily classified.” He believed that therapy was independent of any nosological system and had to reflect the unique circumstances presented by each individual case.⁸ And when Pliny Earle, one of the most important asylum physicians of the nineteenth century, was approached toward the end of his long career on the possibility of developing a universally accepted classification of mental disorders, he took issue with the idea. “In the present state of our knowledge,” he observed, “no classification of insanity can be erected upon a pathological basis, for the simple reason that, with but slight exceptions, the pathology of the disease is unknown.” Hence psychiatrists were still forced to fall back upon symptomatology—“*the apparent mental condition*, as judged from the outward manifestations.” Nineteenth century nosologies—unlike their twentieth century counterparts—were simple, and employed such categories as mania, monomania, melancholia, dementia, and idiocy.⁹

Recognition of the difficulties that blocked the formulation of a comprehensive nosology did not in any way impede discussions of the origins and causes of mental disorders. Despite an inability to demonstrate meaningful relationships between physiology and the presence of particular behavioral signs or symptoms, the social and cultural role of medicine required that physicians—psychiatrists and others—provide some explanation of disease processes.

The causes of mental illnesses, most psychiatrists agreed, could be subsumed under two general headings—physical and “moral.” The physical causes—a blow to the head, a disordered organ other than the brain, various somatic illnesses—affected the structure of the brain, thereby impairing cerebral functioning. Without doubt, psychiatrists were far more interested in the “moral” causes of insanity, if only because of their inability to influence presumably unknown physiological processes. The “moral” causes of insanity (which seemed to account for the majority of cases) were in some respects related to inappropriate behavioral patterns; individuals who ignored the natural laws that governed human behavior placed themselves at risk. Lifestyle thus became a key analytic category in causal explanations. When referring to “laws,” psychiatrists were not endorsing a deterministic universe; law was rather a moral construct that stipulated, but did not necessarily require, ideal behavioral forms. The moral causes of insanity included—to cite a few examples—intemperance, masturbation, overwork, domestic difficulties, excessive ambitions, faulty education, personal disappointments, marital problems, jealousy, and pride. Nor was individual lifestyle the only determinant of illness and health. Social relationships and institutions also played a role. There was general agreement that insanity and civilization were linked; the pressures of an urban and commercial civilization influenced prevailing etiological patterns.¹⁰

To define the nature and etiology of mental illnesses was only a beginning, not an end. The goal of psychiatry—like that of medicine generally—was the alleviation and cure of disease. Despite their recognition that disease processes remained shrouded in mystery, most psychiatrists believed that mental illnesses could be cured. Since insanity was in large part precipitated by improper behavioral patterns associated with a deficient environment, it followed that treatment had to begin with the creation of a new and presumably appropriate environment. Home treatment was ineffective, for the physician had no means of controlling or eliminating undesirable influences. Institutionalization, therefore, was a *sine qua non*. Once in a hospital, the patient could be exposed to a judicious mix of medical and moral treatment. Heirs to a body of traditional medical

thinking that dated to antiquity, asylum physicians perceived of disease as a holistic entity that could not be disaggregated into specific categories. Health represented a physiological equilibrium; disease occurred because of imbalance. The goal of treatment was the restoration of balance. Medical intervention included the judicious use of tonics, cathartics, laxatives, and drugs (especially narcotics to calm violent behavior). Similarly, warm and cold baths, cold head compresses, and special diets were part of the medical regimen.¹¹

Although moral treatment was seen as conceptually distinct, mid-nineteenth century psychiatrists did not in practice distinguish between it and medical therapy. The indissoluble linkage of mind and body required that careful attention be paid to both; to neglect one for the other would only perpetuate the continued presence of the disease process. In effect, they were reiterating the ancient faith that health involved both mind and body. Some tended to emphasize the autonomy of medical treatment; others believed that drugs were preliminary interventions that prepared the foundation for moral treatment. Nevertheless, there were virtually no institutional psychiatrists who rejected the importance of either therapy.

While susceptible to many interpretations, moral treatment meant kind, individualized care in small institutions. Such care consisted of occupational therapy, religious exercises, recreation, and the employment of mechanical restraint infrequently and only when absolutely necessary. Since insanity was precipitated by both prior behavior and environment, the goal was to reeducate the patient by inculcating those internal controls and external activities that enabled individuals to live in normal society. Hence the daily institutional regimen became the key to recovery, for it created a framework that enabled patients to begin to transform themselves into normal people. The role of the asylum physician was not fundamentally different from the role of the stern, occasionally authoritarian, yet loving and concerned father.¹² In some respects the ideal hospital was modeled along the lines of a closely knit and cohesive family. After more than a decade of service at the Worcester hospital in Massachusetts, Woodward remarked that the 1,800 patients who had been and were under his care seemed “*like children and kindred.*”¹³ “By our whole moral treatment, as well as by our religious services,” he wrote in 1841,

we inculcate all the habits and obligations of rational society. We think the insane should never be deceived; all their delusions and false impressions of character should be discouraged by removing, in the kindest manner, every badge of honor and distinction which they are disposed to assume, and by directing their attention to other subjects of interest. They may be held responsible for their conduct so far as they are capable of regulating it. By encouraging self-control and respect for themselves and others, we make them better men, more orderly and reasonable, before any impression is made upon their delusions.¹⁴

Surviving evidence suggests that moral treatment achieved—even by contemporary standards—some striking successes. Although claims about curability rates were undoubtedly exaggerated, there is little doubt that many individuals benefited from hospitalization. In the 1880s an enterprising superintendent undertook a follow-up study of over 1,000 patients discharged as recovered on their only or last admission. The study took over a decade to complete; in the end data were accumulated on 984 individuals. Of these, 317 were alive and well at the time of their reply, while an additional 251 who had died had never again been institutionalized. Thus, nearly 58 percent of those discharged as recovered had functioned in a community setting without a relapse.¹⁵

The emphasis on moral treatment gave mid-nineteenth century psychiatry a distinctive character. It implied the legitimacy of custodial as well as therapeutic functions. Moral treatment was based on the presumption that under certain conditions care—including counseling and regimen—was a form of treatment, while in other respects care (i.e., food, clothing, and shelter) was distinctly custodial. As a matter of fact, mid-nineteenth century psychiatrists generally opposed the establishment of separate institutions for chronic or incurable cases. They were not persuaded of their ability to distinguish between curable and incurable cases, and feared that the prevention of abuses in strictly custodial institutions would be too difficult. The only advantage was the relative inexpensiveness of custodial institutions, and this claim had validity only if moral and humanitarian obligations were ignored. In his classic and influential work on hospital architecture in 1854, Thomas S. Kirkbride summed up the case against separate institutions for chronic patients. “The first grand objection to such a separation is,” he noted,

that no one can say with entire certainty who is incurable; and to condemn any one to an institution for this particular class is like dooming him to utter hopelessness. . . . When patients cannot be cured, they should still be considered under treatment, as long as life lasts; if not with the hope of restoring them to health, to do what is next in importance, to promote their comfort and happiness, and to keep them from sinking still lower in the scale of humanity. Fortunately, almost precisely the same class of means are generally required for the best management and treatment of the curable and incurable, and almost as much skill may be shown in caring judiciously for the latter as for the former. When the incurable are in the same institution as the curable, there is little danger of their being neglected; but when once confined to receptacles especially provided for them, all experience leads us to believe that but little time will elapse before they will be found gradually sinking, mentally and physically, their care entrusted to persons actuated only by selfish motives—the grand object being to ascertain at how little cost per week soul and body can be kept together—and, sooner or later, cruelty, neglect and suffering are pretty sure to be the results of every such experiment.

When Kirkbride published a second edition of his book a quarter of a century later, his views had not changed. “What is best for the recent,” he insisted, “is best for the chronic.”¹⁶

Moral treatment imparted to the young specialty an administrative and managerial character. The very concept of moral treatment was synonymous with the creation of a specific environment that would facilitate recovery. The vagueness of etiology and the inability to locate the somatic changes that allegedly accompanied disease meant that psychiatric theory often had little direct (or indirect) relationship to practice. Consequently, the imperatives of the hospital as a social system—its size and structure, physical plant, patterns of authority, and relationships between physician and attendant as well as between staff and patients—became dominating factors. The omnipresent danger of social disorganization caused by the tensions arising out of the social distance between physician and patient and the unpredictable character of patient behavior reinforced the preoccupation with administration and management.¹⁷ Such concern manifested itself in the early debates of the Association of Medical Superintendents of American Institutions for the Insane (founded in 1844)—an organization whose name accurately mirrored the functions of its members. In 1851 and 1853 it adopted a series of propositions that codified in great detail the proper size, location, construction, organization, and governance of hospitals.¹⁸

That such concerns remained central was evident in the psychiatric literature of that era. As late as 1878 Richard S. Dewey observed

The medical officers of our institutions have an immense number of miscellaneous duties; indeed, their medical duties, pure and simple, form but a small part of what devolves upon them—office work, business routine, and correspondence, with various administrative labors, consume a vast amount of time.

His article, in fact, was appropriately entitled “Present and Prospective Management of the Insane,” and it identified five important areas of concern: means of employment and recreation of patients; the degree to which confinement and restraint were necessary; the effect of asylum routine on patients; the treatment of patients by attendants; and the relation of the hospital to the public, to its officers and employees, and to the advancement of knowledge.¹⁹

Institutional Change

The fortuitous circumstances that created the conditions conducive to therapeutic successes and the provision of care, however, proved relatively short lived. By the latter half of the nineteenth century the structure and functions of mental hospitals—and therefore of the specialty of psychiatry—had begun to undergo a gradual transformation. Intended as small curative institutions that fostered close relationships between the medical and lay staffs and patients, hospitals grew in size and complexity, and considerations of order and efficiency began to conflict with therapeutic imperatives. The vision of a harmonious institution proved difficult to implement. The realities presented by an increasingly diverse patient population that included individuals who sometimes behaved in bizarre and disruptive ways led to friction with the medical and lay staff.

In theory all patients were to receive the same quality of care. In practice the variables of class, race, ethnicity, and gender resulted in internal distinctions. Conceived as self-contained and independent institutions, asylums in fact were shaped not only by patients and staffs, but also by the legal, administrative, political, and fiscal environments in which they existed, and consequently faced problems similar to those at other public and social institutions. In short, major differences developed between the ideology of asylum care and the realities of institutional life.²⁰

Asylums never retained any significant degree of isolation from the larger society of which they were a part. Public policy remained a legislative and executive responsibility. The decentralized and prebureaucratic nature of mid-nineteenth century American society inhibited the formulation of consistent and coherent policies; mental hospitals were often caught up in the vortex of change and confusion and saw their goals transformed by circumstances beyond the control of their officials. Nor did local governments bring any measure of stability or continuity to policy issues; community control and participation—at least as far as the mentally ill were concerned—were inversely related to the quality of care and level of funding. The fact that problems arising out of mental illnesses were inseparable from the broader issues of dependency also had major implications. When many states began to centralize and rationalize their welfare systems in the late nineteenth century, mental hospitals became further enmeshed in an ambiguous welfare system. Under these circumstances the goals of mental hospitals were constantly shifting as psychiatrists were forced to respond to changes within the larger environment.²¹

Two developments in particular were to prove crucial to the subsequent evolution of psychiatry. First, medical practice underwent a fundamental transformation after 1870. Increasingly it became identified with bacteriology and other biological and physical sciences. In turn the doctor–patient relationship—which traditionally presupposed some form of shared responsibility—was altered, and the patient became dependent on the specialized training and knowledge of the physician. At the same time the general hospital began to assume its modern form, and authority slowly shifted from lay trustees to physicians. This trend mirrored the transformation of the general hospital from an institution providing care for socially marginal groups to one reflecting a new emphasis on science and technology and catering to more affluent groups capable of paying the high costs involved.²²

The emergence of modern scientific medicine had a subtle but significant impact upon psychiatry. In the mid-nineteenth century asylum physicians enjoyed high status; they remained aloof from the bitter sectarian rivalries that divided physicians into hostile and warring camps. Indeed, when the American Medical Association was founded in 1847, it made several efforts to induce the Association of Medical Superintendents of American Institutions for the Insane to affiliate.²³ These efforts were rebuffed by psychiatrists, who felt that they had distinct interests and could gain nothing by joining with physicians with a distinctly subordinate status. By the turn of the century, on the other hand, the respective roles of physicians and psychiatrists had been reversed. The identification of medicine with science and technology, and the reorganization of medical education, combined to elevate the status of physicians. As the status and prestige of medicine rose, that of psychiatry declined, and the specialty began to be perceived as a medical backwater.

Second, the nature of the patient population in mental hospitals underwent profound changes. In simple terms, the majority of patients began to fall into the chronic category. Before 1880, patient populations at public hospitals included large numbers of acute cases institutionalized for less than twelve months. Although national data are lacking, a sample of individual institutions reveals that custodial functions had not yet become paramount. In 1842, a decade after its opening, 46.4 percent of the patients at the Worcester hospital had been institutionalized for less than one year; only 13.2 percent had been in the hospital for five or more years. In 1870 the comparable figures were 49.6 and 13.9 percent. Nor was Worcester atypical. In 1850 41.1 percent of patients at the Virginia Western Lunatic Asylum had been institutionalized for less than one year and 29.6 percent for five years or more; the respective figures for the California Insane Asylum in 1860 were 40.2 and 0.1 percent. Although exceptions were by no means uncommon, most hospitals before 1890 included large numbers of patients who were admitted and discharged in less than one year.²⁴

By the turn of the century the pattern began to be reversed as the proportion of short-term cases fell and that of long-term cases increased. In 1904, 27.8 percent of the total patient population in the United States

had been confined for less than twelve months. By 1910 this had fallen to 12.7 percent, although it rose to 17.4 percent in 1923. The greatest change came among patients institutionalized for five years or more. In 1904, 39.2 percent of patients fell into this category; in 1910 and 1923 the respective percentages were 52.0 and 54.0. Although data for the United States as a whole were unavailable after 1923, the experiences of Massachusetts were perhaps typical. By the 1930s nearly 80 percent of the available beds in its mental hospitals were occupied by chronic patients.²⁵

The shift toward a predominantly custodial institution whose inmate population was made up of long-term chronic cases reflected nonpsychiatric determinants. The growing number of aged persons in mental hospitals is a case in point. Before 1890 relatively few older persons (over sixty years of age) were confined in public mental hospitals. In those cases in which aged persons were destitute or without families willing and able to provide care, they were generally sent to local almshouses. Throughout much of the nineteenth century, almshouses served as undifferentiated welfare institutions; one of their primary functions was the care of aged dependent persons, many of whom were undoubtedly senile or frail.

Between 1880 and 1920, however, the almshouse declined in significance as a public institution. Admissions fell from 99.5 to 58.4 per 100,000 between 1904 and 1922. The decline in the number of mentally ill persons aged sixty and over was even sharper; by 1923 only 5.6 percent of the almshouse population fell into this category. The decline, nevertheless, was more apparent than real, for the number of aged mentally ill persons committed to mental hospitals was rising steadily.²⁶ What occurred, in effect, was not a deinstitutionalization movement, but rather a lateral transfer of individuals between different types of institutions. The shift was less a function of medical or humanitarian concerns (although these were by no means absent) than a consequence of financial considerations. As states moved to accept fiscal responsibility for all insane persons in the late nineteenth and early twentieth centuries, local public officials seized on the fiscal advantage inherent in redefining senility in psychiatric terms. If senile persons were cared for in state hospitals rather than local and county almshouses, the burden of support would be transferred to the state.²⁷ To many families, confinement in a hospital may have been preferable to almshouse care. Not only did hospitals provide better care, but, paradoxically, the stigma of insanity—especially if an aged person was involved—may have seemed less than that of pauperism.

Between 1880 and 1940, the proportion of aged persons in mental hospitals mounted rapidly. In New York, to offer a specific illustration, 18 percent of all first admissions to state mental hospitals in 1920 were diagnosed as psychotic because of senility or arteriosclerosis. By 1940 this category accounted for nearly 31 percent of all first admissions. In 1950, 40 percent of all first admissions were aged sixty and over, as compared with only 13.2 percent of New York State's total population. Nor was New York unique in this respect; the data for such states as Pennsylvania, Massachusetts, and Illinois exhibited similar patterns. As late as 1958 nearly one third of all patients in state mental hospitals were over sixty-five.²⁸

Not only did the number of aged persons in mental hospitals increase, but age-specific admission rates for older persons as compared with younger persons rose markedly as institutions such as almshouses declined. In their classic study of rates of institutionalization covering more than a century, Goldhamer and Marshall found that the greatest increase occurred in the category of those aged sixty and over. In 1885 the age-specific first-admission rate in Massachusetts for patients aged sixty and over was 70.4 for male and 65.5 for female patients (per 100,000). By the beginning of World War II, the corresponding figures were 279.5 and 223.0.²⁹

In addition to aged persons, mental hospitals cared for large numbers of individuals whose behavioral peculiarities were related to an underlying somatic etiology. Paresis (the tertiary stage of syphilis) was one such case. Between 1911 and 1919, for example, about 20 percent of all first admissions to New York State mental hospitals were cases of general paresis. Given the nature of the disease, few households were willing or prepared to cope with paretic cases. Despite the relative absence of aged persons among paretic patients, its prognosis was decidedly negative. In 1920, for example, 825 such cases were admitted for the first time to New York State mental hospitals. Of this number, 332 (39 percent) died in less than six months, 113 (13.7 percent) between six and eleven months, and most of the remainder between one and four years after their admission. Between 1913 and 1922, 87.7 percent of all first-admissions paretics in the state died during their confinement.³⁰

Generally speaking, at least one third and probably one half or more of all first admissions to state mental hospitals represented cases in which behavioral symptoms were probably of known somatic origins. In 1922, 52,472 persons were admitted to state mental hospitals for the first time. Of this number, 3,356 were without any evidence of psychoses; they were admitted because of epilepsy, alcoholism, drug addiction, psychopathic personality, or mental deficiency. Of the remaining 49,116 first admissions, 16,407 suffered from a variety of identifiable somatic conditions, including senility, cerebral arteriosclerosis, general paresis, Huntington's chorea, pellagra, and brain tumors. Between 1922 and 1940, the proportion of patients admitted for the first time with such somatic conditions increased from 33.4 to 42.4 percent.

If we assume that many individuals in the functional categories also suffered from a variety of conditions with a somatic origin—an assumption that may be warranted from other present-day data—it is evident that mental hospitals provided care for a patient population with severe physical as well as mental problems. The fact that the somatic group had higher death rates than the group with functional psychoses suggests that the diagnoses were not wholly inaccurate. In 1940, for example, the somatic group accounted for 19,357 deaths out of a total of 31,417, or 61.6 percent.³¹

A significant proportion of the total institutionalized population, in other words, included individuals suffering from physical disabilities that also involved behavioral symptoms. Whether the mental hospital was the appropriate place for them was beside the point; most of these patients required some form of comprehensive care. It is true that it was theoretically possible to care for such individuals within a home environment. Nevertheless, such a solution was not always feasible. In many cases, home care proved disruptive; in others, no home existed. Ultimately many families accepted hospitalization as an unwelcome but necessary last resort.

The large numbers of chronic and aged persons led to a fundamental transformation in the character of mental hospitals. To be sure, their therapeutic functions were by no means obliterated. But the presence of large numbers of chronic long-term patients had dramatic consequences. Internally, it resulted in a more depressing environment. To cure and discharge patients was associated with an aura of optimism and achievement; it reflected a predominantly male ethos that valued therapy above all other functions. To care for those who rarely manifested improvement and ultimately died was hardly consistent with twentieth century images of medical and scientific progress; the caring function was identified with women and often devalued. For psychiatrists the rise of custodialism created negative images of themselves, their work, and their institutions. Ultimately this situation led them to reexamine their position and to become receptive to new roles that shattered their hitherto inseparable links with mental hospitals, which then lost much of their social legitimacy.

Reorientation of Psychiatry

The reorientation of American psychiatry began in the 1880s. By then the specialty was under attack by other physicians, social activists, lawyers, state regulatory agencies, and former patients. "It is fair to say," observed E. C. Seguin, an eminent American neurologist in 1880,

that in the present state of psychiatry in America, to be pronounced insane by physicians, by a judge, or by a jury, means imprisonment for months, for years, or for life. To put it another way, there is a disease which reduces its victims to a level with persons accused of crime, and exposes them to loss of liberty, property and [to] unhappiness.

The moral was clear; the mental hospital was little more than a prison for mentally ill patients. These and other comments threatened to undermine the very legitimacy of institutional psychiatry that an earlier generation had forged.³²

In reaction to widespread criticisms, psychiatrists began to reexamine the foundations of their specialty. After 1900 a new vision of the specialty began to take shape. "Dynamic psychiatry" (the name by which it was known) involved a sharp modification in the traditional model of disease. Generally speaking, nineteenth century asylum psychiatrists made a fundamental distinction between health and disease. The presence of mental illnesses was indicated by dramatic behavioral and somatic signs that deviated from the prior "normal" behavior of the individual. The new model of psychic distress, by contrast, suggested

that behavior occurred along a continuum that commenced with the normal and spanned to the abnormal. Such an approach elevated the significance of the life history and prior experiences of the individual, thereby blurring the clear demarcation between health and disease. Indeed, psychiatric intervention began to emerge as a distinct option well short of the acute stage of the mental illness. From here it was but a short step to suggest that early outpatient treatment either in offices or clinics might prevent the onset of the severe mental disorders that up to that time had required institutionalization.

Dynamic psychiatry expanded the jurisdiction and boundaries of psychiatric practice to include psychologically troubled individuals as well as allegedly dysfunctional social structures and relationships. Correspondingly, the severely and chronically mentally ill—heretofore the sole focus of an institutionally oriented policy—began to lose their central position within the mental health system. The difficulty of treating severe mental disorders made psychiatrists receptive to new clients and to new careers outside of the ubiquitous walls of mental hospitals. Although the consequence of this shift would not become evident until after World War II, its foundations were laid in the opening decades of the twentieth century.³³

The process of change was evident well before the turn of the century. In 1885 the Association of Medical Superintendents of American Institutions for the Insane modified its membership requirements and permitted assistant physicians to become ex-officio members. Seven years later the Association changed its name to the American Medico-Psychological Association. These changes, which culminated in 1921 when the latter became the American Psychiatric Association, represented a fundamental shift in direction. Nineteenth century psychiatrists had emphasized managerial and administrative issues because they had made the care of the institutionalized patients their primary responsibility. Their late nineteenth and early twentieth century successors, by way of contrast, were as much concerned with disease as they were with individuals, and slowly the former replaced the latter. Their desire to integrate their specialty into the structure of “scientific medicine,” therefore, was ultimately to have profound consequences for severely mentally ill persons.

After 1900 American psychiatrists began to look beyond the institutions that for so long had been linked with their specialty. Some explored the physiological and biological roots of mental disease; some developed a more analytic psychiatry that incorporated Freudian insights; some attempted to integrate psychological and physiological phenomena to illuminate the inner workings of abnormal minds; some experimented with novel therapeutic approaches; and others reached beyond the boundaries of medicine to create a mental hygiene movement that sought to demonstrate the social utility and relevance of modern psychiatry. “I regard the future of mental medicine as filled with golden promise,” Charles G. Wagner informed his colleagues in his presidential address before the American Medico-Psychological Association in 1917:

Serious, thoughtful students of psychiatry are busily at work on problems of vital importance, and I venture to predict that within the period of a decade or two their labors will result in a much better understanding of the etiology, pathology, diagnosis and treatment of mental diseases than we now possess.³⁴

Wagner’s optimistic comments notwithstanding, American psychiatry remained a divided and ambivalent specialty. Its disunity was not due simply to the absence of a tradition of basic research or the relative weaknesses of American medical schools as compared with European medical education, although both elements played a role. More important, the very concept of mental disease could not be separated from the deeper and profound problem of explaining the nature of human beings in general and their behavior in particular. At one extreme were certain deterministic systems that reduced behavior to physiological mechanisms and ruled out independent thought or actions that did not have specific causal antecedents. Most psychiatrists, however, adhered to eclectic models that posited a link between mental and biological factors. The nature of such links remained shrouded in mystery, however, and the very concept of mental phenomena posed seemingly unresolvable theoretical difficulties.

In general medicine, by way of contrast, the demonstration of a relationship between the presence of certain symptoms and a specific bacterial organism had led to the development of a new classification system based on etiology rather than symptomatology. The inability to pursue a parallel course left psychiatry with a classification system based on external symptoms that tended to vary in the extreme. Conclusive evidence that paresis was actually the tertiary stage of a disease that began with a prior syphilitic infection offered one possible model for psychiatric diseases; the same was true of pellagra. Nevertheless, neither psychiatrists nor

pathologists were able to identify other specific disease entities in comparable terms. Indeed, Simon Flexner, director of the Rockefeller Institute for Medical Research, was dubious about even undertaking neuropsychiatric research; he insisted “that there were no problems in a fit state for work.”³⁵ Flexner’s position was not accepted by members of the specialty; to concede its validity might undermine their legitimacy.

The ferment within psychiatry in the early part of the twentieth century was also marked by institutional change. By the turn of the century, two innovations had appeared: the research institute and the psychopathic hospital. The creation of such institutions was related to changes in medicine in general. The specific germ theory of disease suggested an explanation that was empirically verifiable and that seemed to point the way toward the development of specific therapies. Scientific and technological innovation also created conditions that made possible the emergence of the general hospital in its modern form. Why could not psychiatry emulate the successes of biological medicine and create new institutional forms?

In 1895 New York State founded the Pathological Institute, later renamed the Psychiatric Institute (which ultimately affiliated with Columbia Presbyterian Hospital and Medical Center). A few states followed suit during the succeeding decade. The goal of these new organizations was to promote research and thus to uncover the underlying mechanisms that led to mental disease. At about the same time a number of psychopathic (or reception) hospitals came into existence. In 1902 the Albany Hospital established Pavilion F (the Department of Mental Disease of the Albany Hospital). Undoubtedly the two most influential psychopathic institutions were Boston Psychopathic Hospital and the Henry Phipps Psychiatric Clinic at Johns Hopkins, both established on the eve of World War I. Unlike traditional mental hospitals, psychopathic institutions were established for the treatment of individuals in the early or acute stages of mental disease rather than those in the chronic stage. The goal was to provide short-term and immediate therapy, thus, it was hoped, obviating the need for commitment to state hospitals.³⁶

Paradoxically, the optimistic expectations of psychiatrists and the institutional innovations of the early twentieth century did not significantly alter the lives of the thousands of patients in traditional mental hospitals. The number of strictly psychopathic institutions was never large, and most dealt with relatively small numbers of young patients being treated for conduct disorders rather than psychotic conditions. For the majority of patients in traditional mental hospitals—including the aged and parietic—there were no known therapeutic interventions to eliminate the source of their difficulties. Yet most psychiatrists never conceded their inability to deal with the kinds of patients found in public institutions. On the contrary, the illusion of power and knowledge created its own perceptions of rapid change. Such was the case in the early twentieth century when a vision of a scientific psychiatry integrated with modern medicine held sway.

Another visible symbol of change was the creation of a mental hygiene movement after 1900. Reflecting a commitment to science, mental hygienists saw disease as a product of environmental, hereditary, and individual deficiencies; its eradication required a fusion of scientific and administrative action. As members of a specialty that they believed was destined to play an increasingly central role in the creation of a new social order, psychiatrists began to broaden the scope of their discipline. The emphasis on scientific research rather than care or custody, on disease rather than patients, and on alternatives to the traditional mental hospital was merely a beginning. More compelling was the utopian idea of a society structured in such a way as to maximize health and minimize disease. In 1917, Dr. Thomas W. Salmon, a key figure in the reorientation of psychiatry, spoke about the future of the specialty. The new psychiatry, he insisted, had to reach beyond institutional walls and play a crucial part “in the great movements for social betterment.” Psychiatrists could no longer limit their activities and responsibilities to the institutionalized mentally ill. On the contrary, they had to lead the way in research and policy formulation and to implement methods in such areas as mental hygiene, care of the feeble-minded, eugenics, control of alcoholism, management of abnormal children, and treatment of criminals and to help in the prevention of crime, prostitution, and dependency.³⁷

The emphasis on mental hygiene took programmatic form with the founding of the National Committee for Mental Hygiene in 1909. This organization was the creation of Clifford W. Beers, who had spent time in several mental hospitals in his early adulthood. In 1908 he published his classic *A Mind That Found Itself*. Beers’ initial goal was the creation of a national society dedicated to the improvement of conditions among

the insane. However, as a result of his contacts with several leading figures in the field—notably Adolf Meyer of Johns Hopkins—Beers's original emphasis on institutional improvement was replaced by a more ambitious, but amorphous, goal of promoting mental health. The attractiveness of mental hygiene for psychiatry was obvious; it opened new vistas and occupational roles for practitioners while shifting attention away from a custodial role and inability to cure admittedly vague disease entities. Mental hygiene also had the virtue of hastening the integration of psychiatry and medicine because it provided the former with the rhetoric of a biologically oriented specialty and thus seemed to put it in step with other medical prevention movements.

When Salmon became medical director in 1912, he began to reshape the focus of the National Committee for Mental Hygiene and further diminish its preoccupation with mental hospitals. The surveys conducted under its auspices, once limited to the institutionalized mentally ill, began to deal with truancy, sexual immorality, juvenile delinquency, and other similar categories. During the 1920s the National Committee also became involved with the child guidance movement.³⁸ Child psychiatry would emerge from this.

One of the major byproducts of a broadened mental hygiene movement, oddly enough, was a growing preoccupation with internal professional concerns rather than issues that related directly to patient welfare. Before 1930 psychiatrists not only helped to popularize the concept of mental hygiene, but also invited a number of nonmedical groups to join them as well. When these newer occupational groups sought to carve out more autonomous spheres for themselves, the result was heightened conflict. The friction involved not only intergroup relations, but also gender conflict as well. Psychiatry was a male-dominated specialty (although women constituted a higher percentage in psychiatry than in most other medical specialties), whereas before World War II the others—including psychiatric social work, clinical psychology, psychiatric nursing, and occupational therapy—were largely female. Even those who supported such new occupations had second thoughts. E. E. Southard is a case in point. Southard had pioneered in establishing a social service department at Boston Psychopathic, co-authored a classic text with Mary C. Jarrett on psychiatric social work, and generally supported the new group in their quest for professional identity. Yet in an unpublished paper he confessed to some reservations. "I am afraid I must confess to one at least," he noted,

namely, that psychiatric social work must be dominated far more than certain other branches of medico-social work, and again far more than certain other branches of social service at large, by the physician and alienist. This prejudice, if it be a prejudice, does not hesitate to concede to the trained social worker every latitude in the technique of social investigation and almost every latitude in the offering of advice and in the choice of domestic and economic steps to take in the given case. But decisions concerning medico-social therapy ... are decisions which are, in my opinion, medical decisions. Decisions concerning the relative parts played by heredity and environment in a given case, whether a case is "morbid" or "vicious," how much improved family surroundings might help a case, whether syphilis is to be suspected, whether there is an element of sex-perversion in the case, whether questionable statements of patients are best regarded as truths, lies, delusions, or mixtures of these—all these decisions and a vast number of similar ones are decisions hardly to be entrusted to such social workers as the schools have yet developed.³⁹

Persuaded of the legitimacy of their authority but fearful of challenges from both within and without medicine, psychiatrists began to ponder seriously the future of their specialty in the 1920s and 1930s. During these decades the American Psychiatric Association took the lead in the effort to ensure that its members retained a dominant position in the mental health field. Increasingly its members became involved not only in efforts to lay down educational qualifications for the training of psychiatrists, but also to provide for board certification. Such efforts, of course, were by no means unique; during these decades medicine in general was beginning to confront questions pertaining to the organization of medical care and relations between generalists and specialists. Nevertheless, the movement toward board certification in psychiatry reflected a series of novel issues as well.

Even before 1930 the American Psychiatric Association's (APA) Committee on Medical Services had been attempting to define the qualifications and experience necessary for the practice of psychiatry. In 1930 the American Medical Association (AMA) authorized an investigation of the nation's mental hospitals and also began to discuss the establishment of specialty boards under its aegis. Fearful that the AMA as well as nonmedical professional groups were beginning to transgress on traditional psychiatric jurisdiction, the APA began to move toward the establishment of a specialty board in cooperation with the

American Neurological Association. By this time the movement to create specialty boards within American medicine was gathering momentum, and the actions of the APA were by no means idiosyncratic. “The only question at issue,” insisted Dr. James V. May in his presidential address at the convention of the APA in the spring of 1933, was whether psychiatric

standards are to be left to the judgment of neurologists, psychologists, internists, general practitioners, sociologists, social workers, biologists, biochemists, laymen and amateurs not occupied for the time being with other fads, or whether they are to be established and maintained by The American Psychiatric Association. The following year the American Board of Psychiatry and Neurology was formally organized.⁴⁰

The creation of a specialty board also reflected a faith that the content of psychiatry had reached a level susceptible to fairly precise measurement. In a larger sense, such beliefs were characteristic of other occupational groups that defined themselves in professional terms and were persuaded that they possessed the ability to control events within their respective spheres of competence. In a more limited sense, however, the emphasis on certification was an attempt to secure reinforcements from the field of medicine to support the legitimacy of the psychiatric claim to overarching competence, in contrast with the various would-be usurping nonmedical professionals. The effort to shift the foundations of psychiatric practice seemed appropriate in view of the widespread, if not always accurate, belief that scientific medicine was responsible for the decline in mortality from infectious diseases and the increase in life expectancy at birth. At the same time that psychiatrists were identifying with the field of medicine, they were also shifting psychiatric practice increasingly away from mental hospitals toward outpatient clinics, child guidance clinics, and private practice.

The change in the career patterns of psychiatrists was also accompanied by a growing receptivity toward novel therapeutic approaches between World Wars I and II. The older emphasis on moral treatment had long since diminished in importance. The disinterest in environmental modification as a basic therapeutic tool was a natural consequence of several developments. An ever-increasing proportion of patients in hospitals had severe somatic disorders, and a psychologically oriented therapy was of marginal importance. Environmental modifications, moreover, were difficult in large and complex institutions and often were not relevant to the kinds of patients being admitted. Moreover, those psychiatrists most influenced by dynamic or psychodynamic concepts were less likely to practice in mental hospitals. Aside from personal desires to reestablish ties with a biologically grounded medicine, psychiatrists were deeply concerned with the welfare of their patients. Their training emphasized the physiological basis of disease, and they were therefore receptive to novel somatic therapies that might enable some individuals to leave the hospital and to resume a functional role in both a family and a societal setting.

During the interwar years American psychiatrists were favorably disposed toward therapeutic innovation. A few were drawn to the focal infection theory of mental illnesses. The outstanding exponent of this theory—which held that chronic, masked, or focal infections played a “very dominant role in the etiology of the psychoses”—was Henry A. Cotton, superintendent of the Trenton State Hospital in New Jersey. Persuaded that many infections spread from the teeth to other regions of the body (especially the tonsils, stomach, and lower intestinal tract), Cotton came to the conclusion that the extraction of diseased teeth and such radical surgical procedures as colectomy were effective therapies. Although the leaders of the specialty were generally hostile, the focal infection theory was symptomatic of the somatic emphasis of institutional psychiatry.⁴¹

More widely accepted was malaria fever therapy for the treatment of general paresis. Developed by Julius Wagner-Jauregg, an Austrian psychiatrist who received the Nobel Prize for his work in 1927, the use of fever therapy spread quickly. The most popular therapeutic innovation of the 1930s was “shock” treatment. The technique—initially developed by Manfred Sakel in Vienna—involved injecting psychotic patients with a sufficiently large dose of insulin to lower drastically the sugar content of the blood and thus to induce a hypoglycemic state. In this state of “shock,” the patient went into a deep coma, which was relieved by the administration of sugar. Although there was no known theoretical basis for such a therapy, Sakel and others insisted that many psychotic patients benefited from its use. Ladislav von Meduna, a Hungarian physician, by way of contrast, used metrazol to induce convulsions in schizophrenic patients. Between 1937 and 1940 most mental hospitals employed shock and convulsive therapy, although by the

latter year electroshock therapy replaced the use of chemical substances. The most spectacular therapeutic innovation of this period was prefrontal lobotomy. Used in the United States shortly after its development by Egas Moniz in Portugal in 1935, prefrontal lobotomy seemed at least theoretically defensible since it grew out of the concept of functional localization in neurophysiology.⁴²

These new somatic therapies were quickly absorbed into the psychiatric armamentarium. They offered to psychiatrists what appeared to be efficacious interventions. These treatments could also be understood by their medical colleagues, thus hastening the integration of psychiatry into medicine, and could facilitate the behavioral adjustment of the mentally ill. For patients and their families the obvious gain was the possibility of the patient leaving the mental hospital and residing in the community. Hospital officials were equally enthusiastic; successful interventions would both relieve overcrowding and restore their therapeutic role, which had been eclipsed because of the presence of large numbers of chronically mentally ill persons requiring custodial care. The rapid acceptance of these therapies was also facilitated by the vast publicity accorded them in the popular media. Newspapers and magazines as well as radio disseminated information about these therapies and created the impression that they represented major breakthroughs.

It is, of course, difficult to evaluate the impact of these aggressive somatic interventions. The obstacles impeding the evaluation of their efficacy remained formidable. A major investigation of the outcome of all first admissions to a single Pennsylvania hospital from 1916 to 1950 yielded some surprising results. First admissions (which during the entire period totaled 15,472) were divided into four chronological periods: 1916–1925, 1926–1935, 1936–1945, and 1946–1950. The probability of release of functional psychotics increased from 42 to 62 percent between 1926–1935 and 1946–1950. Nevertheless, the authors of this study conceded that it was impossible to specify the causal elements responsible for the changes; a variety of factors, including novel therapies, had to be taken into consideration. It was entirely possible, for example, that better risks were being admitted; that new administrative practices within the hospital were involved; and that changes in familial and community practices enhanced the possibility of release. They therefore called for more adequate clinical trials.⁴³ Whatever the case, the therapeutic claims of the 1930s were for the most part not grounded on a foundation of authoritative data. These claims reflected for the most part the confident outlook of psychiatrists, who believed in the efficacy of their therapies and who were unwilling to accept a caretaker role for chronic patients. In the end, faith in science and the scientific method shaped the activism of practitioners in the interwar years.

Winds of Change in Mid-Twentieth Century America

On the eve of World War II it was becoming evident that the links between psychiatry and mental hospitals, though intact, were weakening. Wartime and postwar developments, however, strengthened some of the trends already evident in the prewar years. Indeed, by the 1960s and 1970s the very legitimacy of institutional care and treatment had become problematic. The founders of American psychiatry had defined their specialty within an institutional context; the function of the mental hospital was to provide care *and* treatment. Their twentieth century successors, on the other hand, were less prone to speak and act only as the representative of the institutionalized mentally ill.

World War II was a watershed for American psychiatry. During that conflict a significant number of physicians serving in the military were recruited into psychiatry. In 1940 the APA had a total membership of less than 2,300; by the end of the war about 2,400 physicians had been assigned to psychiatry (of which less than one third had prior experience in the specialty).⁴⁴ Wartime experiences strengthened their determination to change the structure and nature of the specialty. These physicians had become familiar with the high rejection rate for neuropsychiatric disorders during the operations of Selective Service as well as the disabling psychological effects of both training and combat situations. Slowly but surely they learned what their predecessors had observed between 1917 and 1919, namely, that environmental stress played a major role in the etiology of mental maladjustment. The psychiatric “lessons” gleaned from wartime experiences had significant policy implications. The greatest successes in treating soldiers with psychological symptoms occurred

at the battalion aid station. Conversely, the therapeutic success rate declined in rear echelon units. A logical conclusion followed; treatment in civilian life, as in the military, had to be provided in a family or community setting rather than in a remote or isolated institution. The implication for psychiatry was clear; community and private practice would replace institutional employment. Concern with social and environmental determinants, at the same time, implied a radically different role for psychiatry. Not only would the community become the focal point of psychiatric practice, but practitioners would become active in promoting appropriate social and environmental changes that presumably optimized mental as well as physical health. Moreover, psychiatrists believed that it was possible to identify individuals experiencing psychological distress and provide early treatment, thus preventing the onset of more serious mental disorders.⁴⁵

The new psychodynamic psychiatry that took shape after 1945 reflected the dominance of environmentalism in American social thought generally and the social sciences in particular. Increasingly the attention of psychiatrists shifted away from a concern with the institutionalized mentally ill toward a preoccupation with those social and environmental factors that promoted mental illnesses and maladjustment. Mental hygiene, observed Robert H. Felix (the first director of the federal government's National Institute of Mental Health) and R. V. Bowers, had to be concerned "with more than the psychoses and with more than hospitalized mental illness." Personality, after all, was shaped by socioenvironmental influences. Psychiatry, in collaboration with the social sciences, had to emphasize the problems of the "ambulatory ill and the perambulatory ill (those whose probability of breakdown is high)." The community, not the hospital, was their logical habitat. Indeed, as early as 1945, Felix argued that psychiatry had an obligation to "go out and find the people who need help—and that means, in their local communities."⁴⁶

The shift in the nature of psychiatric practice was reflected in a variety of developments. Perhaps most revealing was the movement of individuals away from institutional employment. At the turn of the century virtually every member of the American Medico-Psychological Association was employed in a mental hospital. Forty years later at least three fourths of the Association's membership worked in mental hospitals. By 1956, however, only about 17 percent of the 10,000 or so members of the APA were employed in state mental hospitals or Veterans Administration facilities; the remainder were either in private practice or worked for government or educational agencies, community clinics, and medical schools.⁴⁷

Equally suggestive was the emergence of a new kind of psychiatric epidemiology. Before World War II statistical analysis had been largely limited to the study of the pattern of mental disease among hospital populations; such studies were presumably of interest to legislators and officials responsible for making appropriations and setting policy. After 1945, by way of contrast, there was an explosion of community and demographic studies of the mentally ill. These new studies reflected not only changes in data-gathering capabilities, but also a preoccupation with the role of socioenvironmental variables and the relations among social class, diagnosis, treatment, and mental disease. To move from a concern with mental disease in institutional populations to the incidence in the general population and the role of socioenvironmental variables represented an extraordinary intellectual leap. Curiously, those involved with epidemiological studies of mental illnesses generally ignored some of the methodological problems that followed. That such problems were rarely raised was suggestive of the degree to which those who were concerned with mental illnesses were emphasizing the centrality of an environment that had no clearly defined boundaries.⁴⁸

As the outlook and location of psychiatric practice changed, so too did its institutional foundation. Nowhere was this more evident than in the internecine struggle that nearly destroyed the APA between 1945 and 1950. Before that time the APA had two basic functions: to hold an annual convention and to publish the *American Journal of Psychiatry*. The Association lacked an adequate fulltime staff and a secure financial base, and elected officials rarely devoted much time to its affairs. Accountability was thus diffused, and the organization never developed systematic or coherent policies.

Toward the close of World War II a group of "Young Turks" launched an ambitious effort to transform the APA. Led by William C. Menninger (the first psychiatrist to become a general officer in World War II, and head of the army's Neuropsychiatry Division), they founded the Group for the Advancement of Psychiatry (GAP) in May 1946. There was general agreement that GAP would operate as a pressure group within the APA; its stated goal was to overcome the APA leadership's apathy and "particularly the incapacity

to function.” The new organization was based on the proposition that psychiatry’s responsibilities and functions transcended the institutional care and treatment of the mentally ill.⁴⁹ “I do feel,” William Menninger told a colleague in early 1947, “that American psychiatry needs renovation in the sense of consideration of social problems and social needs.”⁵⁰ Indeed, the early committee reports of GAP (issued in final form as independent publications) revealed a willingness to engage in a debate on broad social and political issues that bore little direct relationship to the problems of the institutionalized mentally ill. A draft report on “The Social Responsibility of Psychiatry” urged that psychiatric insights be employed in the service of “social action” (defined as “a conscious and deliberate wish to change society”). Preventive psychiatry, therefore, had to move “away from the hospitals and clinics, into the community.”⁵¹ Albert Deutsch, a perceptive and knowledgeable reporter of the psychiatric scene, noted that the specialty was divided into two contending groups. On the one side were “neurologically oriented” psychiatrists who stressed organic factors and insisted that their responsibilities were limited to the treatment of the mentally sick. On the other side were those who stressed psychological and psychoanalytic factors, psychotherapy, and a belief that they had a major role to play “in the shaping and correction of broad social issues” (e.g., unemployment, racial discrimination, war) that affected the mental health of millions.⁵²

Deutsch’s analysis was not wide of the mark. GAP’s social activism and emphasis on a psychodynamic psychiatry aroused the opposition of those committed to practice in a more traditional institutional setting and a greater emphasis on the organic aspects of mental disease and somatic therapies. Obviously, many APA members held more moderate views (eclecticism rather than extremism was characteristic), but their choice lay between two polar positions. Between 1946 and 1949 a harsh and bitter internecine conflict raged in the APA. The struggle over the reorganization of the Association and the founding of GAP led to the creation of an opposing organization—the Committee for the Preservation of Medical Standards in Psychiatry—and many personal relationships were disrupted by charges and countercharges. The election of the Association’s president—normally an honor awarded to a single nominee—became politicized and contested.

In the end the “Young Turks” (a name they heartily disliked) emerged victorious. The change, curiously enough, was achieved less by constitutional means than by a transformation of the Association’s committee structure that infused new life and expanded activities and responsibilities. The office of Medical Director also gained in stature and authority. Most significantly, activists shifted the focus of attention to the community and society and succeeded in making the APA a participant in the attempt to resolve significant social problems.⁵³ To emphasize social involvement is not to imply that the APA ignored the problems of mental hospitals. During the 1950s the APA conducted annual Mental Hospital Institutes. Its newly created Central Inspection Board performed significant work in upgrading institutional standards. The state surveys conducted by the Association were in part intended to improve the quality of institutional care. Nevertheless, the activities and interests of members—few of whom were employed in mental hospitals—were focused elsewhere. Indirectly, therefore, the APA and its membership slowly disengaged themselves from public mental hospitals, the very institutions that had brought the specialty and the Association into existence.⁵⁴

The new concerns of American psychiatry were also accompanied by a transformation in the role of the federal government. Before World War II responsibility for care and treatment of the mentally ill resided with the states. A presidential veto of a land grant bill in 1854 ensured that the federal government would play no role in mental health policy. Although the U.S. Public Health Service created a Division of Mental Hygiene in 1930, its responsibilities were limited to narcotics addiction problems. The enactment of the National Mental Health Act of 1946, however, reversed the tradition of federal inactivity.

In the late 1930s Lawrence Kolb, a psychiatrist who headed the Division of Mental Hygiene, undertook a quiet campaign to persuade Congress to create a National Neuropsychiatric Institute modeled after the National Cancer Institute (established by law in 1937). Although generating some support and interest, the proposal was aborted by American entry into World War II. Felix, Kolb’s successor, revived the idea toward the end of the war. Aided by Mary Switzer (a federal official who played an important role in health policy issues in the postwar era) and Mary Lasker (a layperson who helped to create a federal biomedical lobby), Felix succeeded in getting J. Percy Priest, a relatively obscure Tennessee Representative, to introduce a bill into Congress establishing a neuropsychiatric institute in the Public Health Service. The hearings in both the

House and Senate revealed that the pressure to act was generated by a relatively small number of federal officials, concerned laypersons, and a group of psychiatrists (including William C. Menninger) who were actively working to transform their specialty. There was little evidence of any groundswell of broad public support for the measure. Perhaps because no significant funding was involved at the outset, Congress passed the bill without opposition in 1946.⁵⁵

The National Mental Health Act had three basic goals: first, to support research relating to the cause, diagnosis, and treatment of neuropsychiatric disorders; second, to train professional personnel in psychiatry by awarding individual fellowships and institutional grants; and finally, to make grants to states to assist in the establishment of clinics and treatment centers and demonstration studies dealing with the prevention, diagnosis, and treatment of neuropsychiatric disorders. Support for institutional care and treatment of the mentally ill was specifically excluded.

What was most significant about the act was not its specific provisions, but rather its general goals and the manner in which it was implemented. The legislation provided financial and institutional support for research, much of which was based on the assumption that the roots of mental illnesses could be traced to broad social and environmental determinants. Indeed, under Felix the energies of the National Institute of Mental Health (which came into existence as a result of the legislation) emphasized the social basis of mental disorder; extramural biomedical research never was given high priority (perhaps in part because research into the basic physiological processes relating to mental disease may not have been possible in the 1940s). Whatever the reasons, it is clear that the legislation and the manner in which it was interpreted promoted a social model of mental disease and a belief in community rather than institutional treatment. The act itself also created a professional and congressional lobby that was extraordinarily successful during the 1950s in increasing appropriations for mental health. The National Mental Health Act of 1946 thus strengthened those elements that were undermining the commitment to and legitimacy of institutional care and treatment.⁵⁶

Conclusion

By the 1950s, therefore, the foundations had been laid for a reversal in the more than century-old commitment to provide care and treatment in public mental hospitals. Admittedly, other factors played a role in the rejection of institutional care: the introduction of psychotropic drugs that held out the promise of alleviating behavioral symptoms and thus facilitating the discharge of patients; the willingness of states to shift burdensome costs to the federal government; the impetus given to policy changes by the influential report of the Joint Commission on Mental Illness and Health (1955–1961); the emergence of an ideology of community psychiatry and community treatment; the passage of the Community Mental Health Centers Act of 1963 as well as the Medicaid legislation (which permitted a vast transfer of aged people from mental hospitals to chronic nursing care facilities); the generalized attack on formal institutions by social scientists and political activists and the Civil Rights movement of the 1960s and 1970s; and the creation of entitlement programs during and after the 1960s that provided resources to severely mentally ill persons, thus enabling them to live in the community. Moreover, concern in the 1950s with transforming the mental hospital into a therapeutic institution often proved ephemeral; preoccupation with community psychiatry and community care superseded interest in reshaping traditional mental hospitals. Whatever the reasons, the commitment to institutional care and treatment of the mentally ill was slowly but surely eroded.

By the second half of the twentieth century American psychiatry had abandoned its traditional base in mental hospitals. The consequences were significant: increasing the availability of psychiatric services in a noninstitutional setting; developing a greater awareness of the impact of social and ecological forces on individual and collective behavior; creating a sensitivity to the importance of internal institutional environments; and offering an alternative to mental hospital care.

Nevertheless, the new policies that took shape in the latter half of the twentieth century had unanticipated consequences. Treatment in the community for clients with multiple needs, as compared with mental

hospital care, posed severe challenges. In the community (and particularly in large urban areas) clients were widely dispersed and their successful management depended on bringing together needed services administered by a variety of bureaucracies, each with its own culture, priorities, and preferred client populations. Although there were sporadic (and occasionally successful) efforts to integrate these services (psychiatric care and treatment, social services, housing, social support) in meaningful ways, the results in most areas were dismal.

The decentralization of services and lack of integration made it extraordinarily difficult to deal with individuals with serious disorders in the community, and many became part of the street culture where the use of alcohol and drugs was common. Individuals with a dual diagnosis of a serious mental illness and substance abuse presented such serious problems that many mental health professionals refused to deal with them despite their growing numbers. Moreover, the decline in institutional care created a situation where the “criminalization” of persons with mental illnesses became more common. If such individuals were on the streets, they were more likely to engage in acts that attract the attention of authorities and that end in arrest and detention. Many persons with serious mental illnesses had encounters with the police, and a significant number were caught up in the criminal justice rather than the mental health system and incarcerated in prisons. To be sure, collaboration between the two systems was possible, but often the different perspectives, values, and cultures of each placed formidable barriers in the way of cooperation.

In the last third of the twentieth century states pursued a policy of reducing their mental hospital populations by placing barriers in the way of new admissions and only as a last resort. This policy, in conjunction with the vast expansion in the clientele of mental health services and diagnostic categories, shifts in public attitudes and perceptions, changing treatment strategies, and social and economic factors, led to the emergence of a confusing array of organized and unorganized settings for the treatment of persons with mental illnesses. State mental health agencies, which in theory were responsible for administering the mental health system, found themselves faced with declining resources and an increasing inability to influence policy. Multiple sources of funding from a variety of federal programs administered by independent agencies made it difficult to develop and implement comprehensive, integrated, and effective community-based services. Many of the components of community mental health care—income support, housing, social support networks—were designed for other populations (e.g., the poor and the disabled) and often did not fit the needs of persons with severe and cyclic or persistent mental illnesses.

Ironically, the results of a community oriented policy (commonly known as deinstitutionalization) was fragmentation and disorganization. Since the 1970s the mental health system has included a bewildering variety of institutions: short-term mental hospitals, state and federal long-term institutions, private psychiatric hospitals, nursing homes, residential care facilities, community mental health centers, outpatient departments of hospitals, community care programs, community residential institutions for persons with mental disorders with different designations in different states, and client-run and self-help services. This disarray and absence of service integration has led to a situation where many patients with serious mental illnesses were forced to live in homeless shelters, on the streets, and even in prisons.

Although seemingly massive changes have taken place during the latter half of the twentieth century, dissatisfaction with the existing system of mental health services persists. In October, 2002, Michael F. Hogan, chair of the President’s New Freedom Commission on Mental Health, sent to the White House an Interim Report. “America’s mental health service delivery system is in a shambles,” he wrote in his accompanying letter.

We have found that the system needs dramatic reform because it is incapable of efficiently delivering and financing effective treatments—such as medications, psychotherapies, and other services—that have taken decades to develop. Responsibility for these services is scattered among agencies, programs, and levels of government. There are so many programs operating under such different rules that it is often impossible for families and consumers to find the care that they urgently need. The efforts of countless skilled and caring professionals are frustrated by the system’s fragmentation. As a result, too many Americans suffer needless disability, and millions of dollars are spent unproductively in a dysfunctional service system that cannot deliver the treatments that work so well.⁵⁷

There is a price to be paid for implementing ideology ungrounded in empirical reality, and for making exaggerated rhetorical claims. The ideology of community mental health and the facile assumption that residence in the community would promote adjustment and integration did not take into account the extent of social isolation, exposure to victimization, inducement to abuse substances, homelessness, and criminalization of persons with mental illnesses. The assumption that community mental health centers would assume responsibility for aftercare and rehabilitation of persons discharged from mental hospitals proved erroneous. The absence of mechanisms of control and accountability permitted community mental health centers to focus on new populations of more amenable and attractive clients with less severe problems. Nor does the recent move to managed care for persons with serious mental illnesses offer assurance that the needs of this group will finally be met. Indeed, preliminary evidence suggests that a “democratization” of services reduces the intensity of services for patients with more profound disabilities and needs.⁵⁸

When institutional care was the norm, there was a clear recognition that there was a fundamental distinction between its patients and persons experiencing problems of everyday life. The medicalization of problems of living and the creation of a myriad of psychiatric diagnostic categories far removed from persistent and serious mental illnesses, however, blurred the distinction between the needs of persons with serious disabilities and the population at large with mild disorders, and the former have suffered the consequences of a system that overlooked their needs. Effective community care for those individuals once institutionalized requires a range of functions and services that hospitalization was intended to provide from housing and supervision to treatment and rehabilitation.

What is especially notable is the roles played by rhetoric and ideology in the development of mental health policy during the past half century. To dismiss them as simply forms of public posturing is to ignore their consequences. Rhetoric and ideology shape agendas and debates; they create expectations that in turn mold policies; and they inform the socialization, training, and educations of those in professional occupations. The concept of community care and treatment, the belief in prevention, and the corresponding attack on institutional care—all of which played significant policy roles from the 1950s to the present—were not inherently defective. But states, communities, and policy advocates lacked the foresight or commitment to finance and to provide required services. Persons with severe and persistent mental illnesses were forced to make their way amidst an uncoordinated array of programs, providers, and services that happened to be in the community. Many of these individuals, moreover, had to fend on their own, often with unfortunate consequences. At the beginning of the twenty-first century it is clear that the construction of an integrated and coordinated system of mental health care remained an unfulfilled ideal.⁵⁹

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Notes and References

1. Most of the material in this chapter is drawn from my previous books: *Mental Institutions in America: Social Policy to 1875* (New York: The Free Press, 1973); *Mental Illness and American Society, 1875–1940* (Princeton, N.J.: Princeton University Press, 1983); *From Asylum to Community: Mental Health Policy in Modern America* (Princeton, N.J.: Princeton University Press, 1991); and *The Mad Among Us: A History of the Care of America's Mentally Ill* (New York: The Free Press, 1994). For further documentation and greater detail, the reader can consult the text and footnotes in these works.

For stylistic purposes I refer to psychiatry and psychiatrists throughout this chapter, even though both terms did not come into common usage until relatively late in the nineteenth century. In the early part of that century a psychiatrist was simply a superintendent of an asylum or an alienist. I have also used the term “insanity,” which was a medical rather than a legal term in its original meaning.

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There are many insights in the older but pioneering and classic work by Albert Deutsch, *The Mentally Ill in America: A History of Their Care and Treatment from Colonial Times* (Garden City, N.Y.: Doubleday, Doran & Co., 1937). David J. Rothman's works—*The Discovery of the Asylum: Social Order and Disorder in the New Republic* (Boston: Little, Brown & Co., 1971) and *Conscience and Convenience: The Asylum and Its Alternatives in Progressive America* (Boston: Little, Brown & Co., 1980)—emphasize the inevitable and inherent failures of institutions such as mental hospitals.
3. Grob, *Mental Institutions in America*, Chaps. II and III. See also Norman Dain's *Disordered Minds: The First Century of Eastern State Hospital in Williamsburg, Virginia 1766–1866* (Williamsburg, Va.: Colonial Williamsburg Foundation, 1971).
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11. See Samuel B. Thielman, "Madness and Medicine: Trends in American Medical Therapeutics for Insanity, 1820–1860," *Bulletin of the History of Medicine*, 61 (Spring 1987): 25–46.
12. For descriptions of medical and moral treatment in mid-nineteenth century America, see Grob, *Mental Institutions in America*, pp. 165–171; Grob, *The State and the Mentally Ill: A History of Worcester State Hospital in Massachusetts 1830–1920* (Chapel Hill: University of North Carolina Press, 1966), pp. 43–79; Norman Dain, *Concepts of Insanity in the United States 1789–1865* (New Brunswick, N.J.: Rutgers University Press, 1964); Tomes, *A Generous Confidence*; and Ellen Dwyer, *Homes for the Mad: Life Inside Two Nineteenth-Century Asylums* (New Brunswick, N.J.: Rutgers University Press, 1987).
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17. See especially Tomes, *A Generous Confidence*, and Dwyer, *Homes for the Mad*.

18. *American Journal of Insanity*, 8 (July 1851): 79–81, 10 (July 1853): 67–69.
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20. Grob, *Mental Institutions in America*, Chaps. V and VI; Tomes, *A Generous Confidence*; Dwyer, *Homes for the Mad*.
21. See Grob, "Government and Mental Health Policy: A Structural Analysis," *Milbank Quarterly*, 72, No. 3 (1994): 471–500.
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43. Kramer, *A Historical Study of the Disposition of First Admissions to a State Mental Hospital*.
44. U.S. Army Medical Department, *Neuropsychiatry in World War II*, 2 vols. (Washington, D.C.: Office of the Surgeon General, Department of the Army, 1966–1973), I, pp. 33–66; William C. Menninger, "Psychiatric Experience in the War, 1941–1946" *American Journal of Psychiatry*, 103 (January 1947): 577.
45. See especially John W. Appel and Gilbert M. Beebe, "Preventive Psychiatry: An Epidemiologic Approach," *Journal of the American Medical Association*, 131 (August 31, 1946): 1469–1475; John W. Appel, "Incidence of Neuropsychiatric Disorders in the United States Army in World War II," *American Journal of Psychiatry*, 102 (November 1945): 433–436; Roy R. Grinker and John P. Spiegel, *Men Under Stress* (Philadelphia: Blakiston, 1945), pp. 427–460; Thomas A. C. Rennie and Luther E. Woodward, *Mental Health in Modern Society* (New York: Commonwealth Fund, 1948); and William C. Menninger, *Psychiatry in a Troubled World: Yesterday's War and Today's Challenge* (New York: Macmillan, 1948). For a detailed history of post-World War II developments, see Grob, *From Asylum to Community* and Grob and Howard H. Goldman, *The Dilemma of Federal Mental Health Policy: Radical Reform or Incremental Change?* (New Brunswick, NJ, 2006).

46. Robert H. Felix and R. V. Bowers, "Mental Hygiene and Socio-Environmental Factors," *Milbank Memorial Fund Quarterly*, 26 (April 1948): 125–147; Robert H. Felix, "Mental Public Health: A Blueprint," presentation at St. Elizabeths Hospital, Washington, D.C., April 21, 1945, Felix Papers, National Library of Medicine, Bethesda, Md. See also Paul V. Lemkau, "The Future Organization of Psychiatric Care," *Psychiatric Quarterly*, 25 (April 1951): 201–212.
47. Data on membership compiled from the following: American Medico-Psychological Association, *Proceedings*, 2 (1895); *List of Fellows and Members of the American Psychiatric Association 1940/1941* (n.p.: n.p., c. 1941); *Biographical Directory of Fellows & Members of the American Psychiatric Association as of October 1, 1957* (New York: R.R. Bowker Co., 1958). I have sampled 10 percent ($n = 943$) of the total membership of the APA for 1957. The new location of psychiatric practice was also accompanied by an emphasis on psychotherapy and a concern with the social and ecological environment.
48. Grob, "The Origins of American Psychiatric Epidemiology," *American Journal of Public Health*, 75 (March 1985): 229–236.
49. GAP, Minutes of the First Informal Gathering, May 26, 1946, GAP Papers, Institute for the History of Psychiatry.
50. William C. Menninger to N. K. Rickles, November 22, 1948, and Menninger to Oscar J. Raeder, March 31, 1947, William C. Menninger Papers, Menninger Foundation Papers, Kansas Historical Society, Topeka, KS.
51. GAP Circular Letter No. 154 (September 16, 1949), GAP Papers, and "The Social Responsibility of Psychiatry, A Statement of Orientation," GAP Report No. 13 (July 1950): 5.
52. Albert Deutsch, "Split Ranks in Psychiatry," *New York Daily Compass*, May 24, 1949.
53. For an extended analysis of the internecine warfare in the APA see Grob, *From Asylum to Community*, Chap. II.
54. The generalizations in this paragraph rest on an analysis of the records of the APA and more than a dozen manuscript collections at the APA Archives, Washington, D.C., the Menninger Foundation Archives, and the GAP papers, as well as all of the printed literature.
55. The Mary E. Switzer Papers (Schlesinger Library, Radcliffe College, Harvard University, Cambridge, Mass.) and the Lawrence Kolb Papers (National Library of Medicine, Bethesda, Md.) have relevant material on the background and passage of the legislation. The hearings can be followed in 79th Congress, 1st session, *National Neuropsychiatric Institute Act. Hearing Before a Subcommittee on Interstate and Foreign Commerce House of Representatives ... on H.R. 2550 ... 1945* (Washington, D.C.: Government Printing Office, 1945), and 79th Congress, 2nd session, *National Neuropsychiatric Institute Act. Hearings Before a Subcommittee of the Committee on Education and Labor United States Senate ... on S.J. Res. 46 ... 1955* (Washington, D.C.: Government Printing Office, 1946). See also Lawrence Kolb, "Research and Its Support Under the National Mental Health Act," *American Journal of Psychiatry*, 106 (December 1949): 407–412, and Jeanne L. Brand, "The National Mental Health Act: A Retrospect," *Bulletin of the History of Medicine*, 39 (May–June 1965): 231–245.
56. See John A. Clausen, "Social Science Research in the National Mental Health Program," *American Sociological Review*, 15 (June 1950): 402–409.
57. New Freedom Commission on Mental Health, *Achieving the Promise: Transforming Mental Health Care in America. Final Report* (DHHS Pub. No. SMA-03-3832: Rockville, MD: 2003), p. 1.
58. David Mechanic and D. D. McAlpine, "Mission Unfulfilled: Potholes on the Road to Mental Health Parity," *Health Affairs*, 18 (Sept.-Oct. 1999): 7–21.
59. See David Mechanic and Gerald N. Grob, "Rhetoric, Realities, and the Plight of the Mentally Ill in America," in *History and Health Policy in the United States: Putting the Past Back In*, ed. Rosemary A. Stevens, Charles E. Rosenberg, and Lawton R. Burns (New Brunswick: Rutgers University Press, 2006), pp. 229–249.

Chapter 19

The Transition to Secular Psychotherapy

Hypnosis and the Alternate-Consciousness Paradigm

Adam Crabtree

Three traditions exist in the Western world for understanding the origins of disturbances of consciousness and accompanying bizarre behavior—the spiritist, the medical, and the psychological—within which three influential paradigms for understanding mental illness have evolved.

The spiritist approach is the oldest and most universally found. It sees disturbed mental functioning as a sign of outside intrusion. The stricken individual is acting strangely because some witch, sorcerer, magician, or evil spirit is interfering with that person's soul. The intrusion reaches its extreme form in demonic possession, in which the individual is entirely taken over by the external force. The cure for the condition is to appease the troublesome agent, use countermeasures to block its influence, or exorcise it. In the spiritist approach to mental disturbances, the principal mental health workers are the priest, the shaman, or the magician since they are able to function on the same level as the being producing the problem. This conception of the dynamics of mental disorder constitutes a well-defined model or paradigm and may be labeled the intrusion paradigm for disturbances of consciousness.

Another view of the cause of mental aberration has evolved alongside the spiritist way of seeing things. In this view the disturbance is thought to be the result of organic dysfunction. Although this notion goes back hundreds of years in the Western tradition, it received a significant boost in the sixteenth century with the appearance of two works: the *Occulta naturae miracula* (1559) of Levinus Lemnius and the *De praestigiiis daemonum* (1562) of Johann Weyer. These two men called into question the assumptions of the intrusion paradigm and asserted that the mental disturbance was a physical rather than spiritual problem. They insisted that victims were not suffering from outside interference but from an illness, a bodily malady that could be corrected medically.

According to Lemnius, disturbances of consciousness were due to vehement cerebral stimulation. To treat the condition, one must therefore understand the functioning of the brain and the humors that affect it. Weyer asserted that the persecuted witches of his day were the victims of crazy imagination caused by illnesses that came from natural sources, either from drugs or poisons they had ingested or from humoral imbalances created through other means. Weyer condemned all who resorted to exorcism or magic, declaring that those who used such methods were even more deluded than their patients. By locating the source of mental disturbance in the dysfunctioning physical organism, Lemnius and Weyer clearly formulated a medical model for the condition that may fittingly be termed the organic paradigm for disturbances of consciousness.

It was not only those working within the organic paradigm who sought natural causes. A venerable tradition of humanistic thinkers favoring a psychological approach to mental illness based on an understanding of the mind also existed. A contemporary of Lemnius and Weyer, Juan Luis Vives, gave eloquent

expression to that tradition. Vives was concerned about the cruel way the mentally ill were generally treated in his day. In *De anima et vita* (1538) he insisted that care for the mentally ill must above all be humane. He pointed out that while some victims need medical attention and some need to be forcibly constrained, others can be cured through kindness and friendly care. He emphasized the importance of understanding the nature of the human mind more deeply in order to help victims of mental disturbance. Vives gave prominence to an introspective study of the mind, and through his writings on the nature of thought and emotions he made an important early contribution to the formulation of a psychological model for understanding disturbances of consciousness. In the late eighteenth century, the attempt to arrive at a psychological understanding of disturbed mental functioning reached a turning point with the discovery of “magnetic sleep.” Magnetic sleep, today known as artificial somnambulism, revealed what appeared to be a second consciousness in the human psyche—a consciousness that, though normally hidden, exercised a powerful influence on human conduct. The phenomenon thus identified came to be termed divided consciousness, and the explanatory paradigm that it produced may be called the alternate-consciousness paradigm. This paradigm was key in the development of modern dynamic psychiatry. This chapter will trace the evolution of the alternate-consciousness paradigm from the discovery of magnetic sleep by the Marquis de Puységur to the end of the nineteenth century, by which time it had received its principal formulations in the writings of Pierre Janet, Frederick Myers, Morton Prince, Josef Breuer, and Sigmund Freud.

Historiography

The alternate-consciousness paradigm came into prominence because of the work of one man, the Viennese physician Franz Anton Mesmer (1734–1815). The healing system that he developed and called “animal magnetism” became the entry point for a way of looking at the psyche that would become the basis for all modern psychotherapeutic systems that accept the notion of a dynamic unconscious mental life. Animal magnetism (or mesmerism) is so little known today that most historical scholars would probably be hard pressed to write more than a brief paragraph about Mesmer and his discoveries. Yet, for approximately seventy-five years from its beginnings in 1779, animal magnetism flourished as a medical and psychological specialty, and for another fifty years it continued to be a system of some influence. When one examines the history of animal magnetism and its offshoots, it seems incredible that this once powerful system is now almost completely forgotten. That animal magnetism is no longer practiced in its original form is hardly surprising. The theory, as given expression by Mesmer, would be difficult for most moderns to accept. What is puzzling is that the story of animal magnetism has been so neglected. Animal magnetism is not comparable to certain medical fads that flourished for a time and then died out. Such crazes did not significantly shape medical or psychological theory and practice, nor did they significantly affect the evolution of those disciplines. Animal magnetism, on the other hand, had a profound impact on both medicine and psychology. It is a strange quirk of academic historiography that a medico-psychological tradition that was investigated and used by practitioners in every country in the Western world for one hundred years before Freud came on the scene, a tradition that found supporters among the most brilliant researchers and thinkers during that period and produced thousands of medical treatises describing tens of thousands of cures and ameliorations, a tradition that counted among its offshoots a practicable surgical anesthesia and an effective system of psychotherapy, could until recently be dismissed in histories of psychiatry with a few cursory lines.

My chronological examination of the literature of mesmeric practice tells the story of the lengthy tenure of animal magnetism, from its beginnings in 1779, through its heyday in the 1840s and 1850s, to its decline in the late decades of the nineteenth century and its total demise in the early twentieth century.¹ Since the First World War only a few historians have given it serious attention, and in most instances their interest has been either in bringing to light the eccentricities of a bygone era or paying tribute to the pre-history of hypnotism rather than examining the significance of the mesmeric tradition for present-day psychotherapy practice.² This changed with the publication of Henri Ellenberger’s *The Discovery of the Unconscious* in 1970. Ellenberger identified animal magnetism as a central force in the development of

modern dynamic psychiatry.³ Since then others have investigated the implications of the mesmeric tradition for modern psychological thought.⁴ Gauld's monumental *A History of Hypnotism* (1992) was the first work to provide a penetrating and comprehensive study of animal magnetism as a medico-social force.⁵ In my annotated bibliography I identified three distinct currents of thought flowing directly from animal magnetism—the psychological, the medical, and the parapsychological—and illustrated these influences through the literature from 1766 to 1925.⁶ Then in *From Mesmer to Freud: Magnetic Sleep and the Roots of Psychological Healing* I attempted to fill out the picture sketched by Ellenberger, which depicts the crucial role played by the mesmeric tradition in the development of modern psychodynamic theories, tracing the rise and development of the alternate-consciousness paradigm from 1784 to 1900.⁷

Mesmer and Animal Magnetism

Franz Anton Mesmer⁸ developed a technique for healing illnesses based on a broad medico-philosophical theory. It was his belief that the universe is pervaded by a subtle substance called “magnetic fluid.” The constitutive elements of this fluid are indivisibly fine particles. Following the mechanistic bent of his day, Mesmer accounted for all physical and vital action in the world in terms of the ebb and flow of these particles. Currents of magnetic fluid moving among all physical bodies in the universe create a universal magnetic interaction. Mineral magnetism, of such great interest to the scientists of Mesmer's day, was simply a special case of this universal magnetism, the reality behind all physical action. For Mesmer, universal magnetism played a central role in the functioning of living things, constituting their vital force.⁹ In the context of organic beings he called it “animal magnetism.” Mesmer believed that health depended on the proper flow of animal magnetic fluid within the organism and that disease was a sign of blockage of or imbalance in that flow. It was the physician's task to correct the flow of vital magnetic fluid in the ill. Once that had been accomplished, the body would heal itself of its affliction, provided the disease had caused no irreversible organic damage.

In the beginning Mesmer used iron magnets in his efforts to stimulate the magnetic fluid of his patients. He soon dropped that practice, however, having come to believe that the physician himself was the best “magnet” for curing illness. Being a channel for animal magnetic power, the physician's body could be used to affect the currents of magnetic fluid in the patient's body. This was done particularly with “passes” made by the hands over the patient's body, with or without contact, and by using the eyes, which Mesmer believed were instruments for conveying magnetic influence at a distance. In 1775 Mesmer moved from Vienna to Paris and set up a healing salon there. He developed a device called the “baquet,” which he thought could be charged with magnetic fluid and used as a sort of storage battery from which the ill could draw healing power. It consisted of a large wooden tub about a foot high containing a layer of ground glass and iron filings, on which were placed bottles filled with magnetized water. The tub was covered with a wooden top, which had a number of holes in it. Iron rods bent at right angles were inserted through the holes and pointed outward from the circumference of the baquet. The ill could hold on to the rods or bring them in contact with the afflicted parts of their bodies. At some point, if the healing was to be successful, the patient would go through a “crisis,” which often involved convulsions. Separate rooms were set aside where these convulsives could receive special attention. Music was used to create a meditative atmosphere, and Mesmer heightened the drama of the situation by wearing a flamboyant robe and walking among the patients, touching them with a metal rod to direct the fluid to specific areas of the body and induce the desired crisis. Although his healing rooms had a theatrical flavor, Mesmer's explanation of what was going on was materialistic and mechanical rather than mystical. He believed that animal magnetism could be explained in terms of matter and motion, and that his theory of animal magnetism was capable of scientific verification.

Mesmer's notion of a universal magnetic fluid easily lent itself to an occult or mystical interpretation. Within a short time of his making his theories known to the public, a number of occultists were espousing his ideas. Mesmer was ill at ease with these views. In his later works he tried vigorously to counter such interpretations of his thought.¹⁰ Nevertheless, Mesmer's notion of a universal magnetic fluid came in for harsh criticism. Eventually, two royal commissions were appointed to investigate. One was made up of

members of the Société Royale de Médecine, and the other consisted of members of the Académie des Sciences and the Académie de Médecine. The latter commission was headed by Benjamin Franklin (1700–1790), then American ambassador to France. The commissions proceeded without Mesmer's approval but with the cooperation of his pupil and associate, Charles D'Eslon (1750–1786). The result was two public reports, both issued in 1784, rejecting the theory of animal magnetism and denying the existence of the fluid.¹¹ Jean Sylvain Bailly of the Franklin commission also wrote a secret report meant for the king alone (Neufchateau 1800, pp. 146–158). It pointed out the potential for dangerous misuse of the technique of animal magnetism when applied by male practitioners to impressionable female subjects. Only one of the commissioners, Antoine Laurent de Jussieu (1748–1836), a member of the commission of the Société Royal de Médecine, took exception to the official reports. He wrote a dissenting opinion that declared Mesmer's ideas credible and worthy of further investigation.¹² That is where matters stood when the course of the development of animal magnetism took an important new turn.

The Marquis de Puységur and Magnetic Sleep

Believing that animal magnetism could be explained in terms of mechanical, physical interaction, Mesmer paid little attention to psychological factors. He did not involve himself with questions about the patient's subjective attitude or the way the magnetizer might affect the imagination of the person being magnetized. In fact, in reading his works, one gets the impression that Mesmer was not at all at home in the domain of human interaction, and he seems to have had very little interest in finding out about the mind and its intricacies. So it is ironic that one of the most important developments of modern times in the field of psychology and psychotherapy came directly out of the practice of animal magnetism. It was not Mesmer but one of his pupils who must be credited with initiating the line of inquiry that would have such significance for dynamic psychiatry. In the same year that the commission reports were published, Armand-Marie-Jacques de Chastenet, Marquis de Puységur (1751–1825) wrote a book entitled *Mémoires pour servir à l'histoire et à l'établissement du magnétisme animal* that would establish him as the father of modern hypnotism and a prime mover in the emergence of the alternate-consciousness paradigm.

Armand de Puységur was the eldest of three brothers who were active in promoting animal magnetism. The Puységur family was an old and respected one in the French aristocracy, and its members were well known for the humanitarian projects they had undertaken over the centuries. Like many of his ancestors, Armand, the Marquis de Puységur, had spent time in the military. He had encountered Mesmer and animal magnetism at the point when he was about to retire and pursue other interests. Having learned the theory and technique from Mesmer in Paris, Puységur began experimenting with it in 1784 on his estate at Buzancy near Soissons. Puységur was quite well acquainted with the peasants who worked on his lands and found them willing subjects for his new-found healing art. Among the first to come to him was a young man of twenty-three named Victor Race, who had been bedridden for four days with what appeared to be pneumonia. Puységur magnetized Victor, using magnetic passes (repeated downward movements of the hands over the body). From his training in Paris, Puységur was expecting Victor to experience the violent "crisis" or convulsions believed to be necessary for an effective cure through animal magnetism. Instead Puységur saw with astonishment that the young man, after being magnetized for fifteen minutes, fell into a peaceful sleep without any sign of convulsions. It was soon apparent that this was no ordinary sleep, however, for Victor began to speak about personal matters that were upsetting him. Fearing that such disturbing thoughts might make his illness worse, Puységur tried to stop them by inducing more pleasant ones. He suggested to Victor that he imagine himself at a shooting contest, dancing at a party, and so forth. Puységur's suggestions immediately became realities for Victor, and he began to move about carrying out the actions of one actually in the situations suggested. Puységur used this induced activity to get the young man to sweat, something he thought would be beneficial for his illness. In the process, Puységur discovered a peculiar thing: Victor seemed to be able to read his thoughts, for if he would mentally sing a tune, Victor would repeat it out loud. After an hour of this new kind of magnetic "crisis," Puységur calmed the

young man and had food brought to him. Victor ate—something he had been unable to do for several days—and then fell into a profound sleep. When he awoke the next day, Victor could remember nothing of Puységur's visit.¹³ Over the following days, Puységur kept up this treatment of Victor and discovered an additional phenomenon connected with his crisis. While in the magnetized state, Victor appeared to be clairvoyant about his illness as well as the illnesses of others. That is, he seemed to have an instinctive knowledge of the nature of the disease, the course it would run, and the treatment that would be most beneficial. Puységur took these pronouncements seriously and found that they were remarkably accurate and useful. He also found that in his altered state Victor's general mental agility and personality characteristics were radically altered, so that he no longer thought or talked like a simple peasant but showed a confidence and acuity never before seen in this young man.¹⁴ It bears mention that at Duke University in the 1970s, it was found that hypnosis used to relax patients with medical problems; gave some of them the capacity to accurately diagnose one another's pathologies (E. R. Wallace, III, M.D.; Personal communication to his son ERW IV). Such has been noted at other medical centers as well.

In Puységur's account of his treatment of Victor we find a description of all of the basic characteristics of a hitherto unknown condition, one Puységur called "magnetic somnambulism." They are (1) a sleep-waking kind of consciousness, (2) suggestibility, (3) a "rapport" or special connection with the magnetizer (more will be said about this later), and (4) amnesia in the waking state for events in the magnetized state. Puységur was intrigued by his discovery and immediately tried to make sense of it in terms of known phenomena. This is apparent in the various names he used to designate the condition. He called this newfound state "magnetic sleep,"¹⁵ "crisis"¹⁶ or "magnetic crisis,"¹⁷ "peaceful sleep,"¹⁸ "magnetic state,"¹⁹ "state of somnambulism,"²⁰ and "magnetic somnambulism."²¹ With the latter name, of course, the similarity of the magnetic condition to natural somnambulism or sleepwalking was acknowledged. In one of his later works, Puységur elaborated on the likenesses and differences of the two states. His principal conclusion was that they are actually identical in their essential nature but different in terms of "rapport." With magnetic somnambulism there is a rapport or special connection between the somnambulist and the magnetizer, whereas with natural somnambulism, the subject is in rapport with no one.²² Building on his personal experience of magnetizing people, Puységur quickly moved away from Mesmer's physicalist explanation for the action of the magnetizer. Instead of speaking about the mechanical ebb and flow of a fluid composed of indefinitely small particles, Puységur concentrated on the psychological side of the process, focusing on the action of the magnetizer's will in producing animal magnetic effects²³ and saying that the "vital fluid of magnetism" was directed to the patient's body by the magnetizer's will.²⁴ He eventually took the position that whether magnetic fluid existed made no practical difference in the application of animal magnetism.²⁵ If the will is the crucial faculty in employing animal magnetism, then good will must be an essential quality in the practitioner. Puységur insisted from the beginning that the magnetizer have as his sole purpose the good of the patient. Anyone operating from lesser motives was not worthy to practice the art.²⁶ The powerful influence of the magnetizer and his suggestions over the magnetized subject immediately brought to the fore the question of possible abuses of the situation. The secret report of the Franklin commission was concerned with this issue, and Puységur's emphasis on good will was at least in part aimed at preventing possible abuse.²⁷ Puységur did not believe that the magnetizer's influence was by any means absolute. He said that it applied to those things having to do with the individual's health, and beyond that one could use suggestion to get the person to perform such innocent acts as marching, dancing, singing, moving things—anything that the person might do in his or her natural state. But there were, he insisted, certain boundaries beyond which suggestions could not force a magnetized person to go. The person could not be forced to do things against his or her usual habits, and if asked to do so, would become disturbed and awaken from the magnetic state.²⁸

The Beginnings of Magnetic Psychotherapy

It was clear from the start that the discovery of magnetic somnambulism put the practice of animal magnetism on a different track from the one it had been following. Central to this new direction was

an emphasis on the verbal exchange between the magnetizer and the magnetized. This grew out of the fact that the magnetized person was clearly in an unusual state of consciousness and in that condition would say unusual things. Puységur discovered with his very first case, Victor Race, that the transformation in consciousness made the somnambulist a man of sharper intellect and a remarkable source of information:

It is with this simple man, a peasant, tall and robust, twenty-three years old, actually weakened by illness or rather by sorrow . . . , it is with this man that I learn and am enlightened. When he is in a magnetized state, he is no longer a naive peasant who barely can speak a sentence. He is someone whom I do not know what to call.²⁹

Much of what Victor spoke about concerned his medical condition and that of others, offering what Puységur believed to be accurate diagnosis and effective prescriptions for treatment. There was also a much more personal side to Victor's verbal communications, however, hinted at when Puységur spoke of him as "weakened by sorrow." Puységur came across this personal material in his very first meeting with Victor. He described Victor, in the magnetized state, speaking out loud about matters that were emotionally charged and upsetting.³⁰ On a later occasion, Puységur allowed him to speak more at length about these things:

You should know that this man has an internal trouble. This trouble is caused by his sister with whom he lives and who is fighting him for an endowment left him by his mother. This sister is the most spiteful woman of the district. She enrages him day and night.³¹

Puységur suggested to Victor that he might unburden himself about these worries to get some clarity about the situation. Victor, in the magnetic state, directed that a document in which his mother deeded her house to him be taken from its hiding place and given to Puységur for safekeeping. His sister did not know of this document and would have burned it had she been given the opportunity. After entrusting the document to Puységur, Victor became calm and peaceful. Puységur then brought him out of the somnambulistic state, and Victor recalled nothing of what had happened. In this minor episode, we can identify some of the elements of what would later be called "hypnotherapy": the trance state, the unburdening of secrets and emotionally charged material, helpful guidance from the therapist, and subsequent amnesia for the material of the session.

Some years later, Puységur became involved in another case in which he used magnetic sleep to do therapeutic work with emotionally disturbing issues. This was the case of young Alexandre Hébert, described in his 1812 *Les fous*, from which the following account has been drawn.³² Alexandre Hébert was a young boy, twelve and a half years old, who because of his disturbed mental condition, for years had been moved around from home to home. He was subject to severe headaches and would go into fits of weeping and moaning while he hit his head against the wall. If someone touched him in this condition, he would become violent, thrashing around and biting whoever might try to restrain him. When he was seven, Alexandre had undergone an operation to relieve the "pressure" in his head, but it seems to have merely aggravated his condition. In 1812, Alexandre was sent to stay with the pastor at Buzancy and there came under Puységur's care. The Marquis had the ability to calm the boy in his fits through the application of animal magnetism. With just a few magnetic passes, Alexandre would fall into a state of deep magnetic somnambulism. In this condition Puységur could question him about the history of his illness, its nature, and the remedies that should be applied to cure it. From the beginning of the treatment, Puységur showed himself quite willing to personally engage Alexandre and do whatever was needed to help him. Puységur was sympathetic to the boy's condition and was in a position to devote many hours to working with him. In this way, Alexandre was able to get from Puységur the attention and care that he had clearly been wanting. Somnambulistic, Alexandre would predict the time of his fits and give instructions about how to handle them. Puységur would wait for the appointed time, and when the fit began, he was ready to help the boy. Magnetism would immediately calm him, and he would then converse for a while in the somnambulistic state and often go to sleep at the end of the talk. It is fairly clear to the reader of Puységur's account that Alexandre liked having Puységur give him so much attention and carry out all his prescriptions. One notes the signs of a power play when, for instance, Puységur forgot to magnetize Alexandre at the time the boy had prescribed in trance. The result was a severe, unanticipated fit. Though he was able to calm Alexandre, the fit would flare up each time Puységur attempted to leave the room. Puységur ended up staying the night in Alexandre's room so that the boy could get some sleep. The following night, in order to get

more rest himself, Puységur had Alexandre stay with him in his own bedroom, and for the next few months, that became the usual arrangement. Puységur eventually had to cancel a business trip in order to look after the needs of Alexandre, and later took the boy with him on a journey to Paris. Puységur writes about how trying it was for him never to have control over how he could spend his evenings and schedule his affairs. He tells us, however, that it was worth it to help this poor boy who would otherwise have had no relief from his trouble.

Puységur's treatment of Alexandre was an early form of psychotherapy. There was a great deal of verbal exchange and personal contact between them. The boy felt looked after and secure. In addition, there were times when Alexandre, like Victor before him, "poured out his heart" to Puységur, describing the events of his childhood, the inner details of his family, his education, and so forth. Alexandre told Puységur on one such occasion that as a result of talking, his next attack would be delayed—a sign that his cure was progressing. Dreams, too, were seen as important. One night Alexandre woke up having had a nightmare. When he told his magnetizer about it, Puységur asked if it were not a bad thing for him to dream such things. Alexandre answered that dreams like this were inevitable and should not be stopped. He said they were the result of the weakness of his head and the effects of magnetism. Another aspect of magnetic somnambulism that Puységur noted in Alexandre was the peculiar way his memory was affected. In his natural state he would have no memory for what he had experienced in the magnetized state. When magnetized, however, he would be able to remember perfectly what had happened in every previous state of magnetic somnambulism, as well as in the states of spontaneous somnambulism to which he was periodically subject. Puységur, recognizing that it was important for Alexandre to be able to build up a strong dependence on his magnetizer, did not hesitate to involve him in his daily life, at some personal sacrifice.

Puységur described this dependence in terms of "magnetic rapport," and he illustrated his views of its importance with a story that he inserted in his account of Alexandre's treatment. It was the case of an artillery soldier with whom Puységur had worked in 1789 and 1790. Puységur used to magnetize the man with the assistance of a young woman who acted as a kind of co-magnetizer. In describing the situation, Puységur said that her involvement was perfectly straightforward and involved no improper feelings between herself and the young man. After a while the woman left France and the soldier was thrown into a state of great melancholy. At first Puységur had some difficulty in finding out the reason, but eventually the soldier revealed in a trance that he had for some time been in an extraordinary state of mind. On the surface he appeared to his comrades to be all right, carrying on with his duties as usual, but underneath he was consumed with an obsession. During the period when the young woman had magnetized him, a magnetic rapport had been established between them that was very strong and durable, and even though she was now gone, the connection remained and he felt suspended. He told Puységur:

You help me, without doubt; your magnetism sustains me. But you work with only half of my life. The other half—that which is my being, that which I really value—is with Madame de ..., united even today with hers. Her will alone can separate them.³³

Puységur was at a loss about how to dissolve this bond of rapport. He knew something had to be done because as long as it was there, the soldier was being detrimentally affected. As it turned out, it was the soldier who came up with the solution while in a magnetized state. He should, he said, go off immediately to search for the woman. Puységur should send along a letter telling her precisely what to do to release him. Once she had followed those instructions, he would awaken in his normal state. All this took place exactly as the soldier had said it would, and he returned to his usual life. At this point in the narrative, Puységur made a striking statement:

The example of this young artillery officer, that of little Alexandre, and other similar cases which I have had occasion to observe seem to fully justify my assertion that most of the insane are simply disorderly somnambulists.³⁴

With this comment, Puységur proposed a novel theory of mental disturbance, one based on his experience of magnetic somnambulism and the rapport involved. In the process of working with Alexandre, he discovered that the boy was a natural somnambulist—suffering from what would today be called "sleepwalking disorder." The episodes of spontaneous somnambulism were of two kinds: sleepwalking every night and occasional fits of violence during the day. The boy would have no memory of either type of occurrence

when he returned to his normal state. The soldier suffered from a different kind of madness: a dangerous depression of mind well hidden from his comrades. The soldier was in a continuous state of somnambulism, trapped in magnetic rapport with the woman magnetizer. With her absent, his state of rapport became an illness. He returned to normal when the rapport was broken and the condition of magnetic somnambulism was terminated. The clinical picture Puysegur drew was that most insanity is a state of disorderly or chaotic somnambulism. As previously mentioned, he believed that the only difference between magnetic and natural somnambulism was that in the first instance the subject is in rapport with someone, whereas in the latter he is in rapport with no one. Rapport with the magnetizer provides a kind of security. While directly connected with the magnetizer, the subject feels safe and benefits from the stable presence of the other person and the guidance that person can give. This is a state of orderly somnambulism, which promotes the healing that needs to happen. In contrast, when the person is in a somnambulistic state without such a stabilizing connection (as happens in spontaneous somnambulism or magnetic somnambulism with the magnetizer absent), chaos can result. Thus, says Puysegur, the cure for mental disturbance in which such disorderly somnambulism is involved will be frequent magnetic treatments in which the magnetizer provides—through rapport—a dependable, ordering connection with his patients while they learn to develop their own inner stability. Here we find the seeds of a genuine psychotherapeutic system.³⁵

Puysegur believed that his theory of mental disturbance was borne out by certain events in his work with Alexandre. One day, he discovered the boy in a catatonic state and could not succeed in his attempts to magnetize him. While working with him, Puysegur heard him say “Mama, Mama ... at Soissons.” He asked Alexandre, “Has your mother magnetized you?” The boy said, “At Soissons, Mama ... never to heal.” With that Puysegur concluded that Alexandre was in magnetic rapport with his absent mother and magnetized him vigorously to break that harmful rapport and reestablish the boy’s connection with him. In five minutes the boy woke up in his normal state. Puysegur thought he saw the same thing working in Alexandre’s “insane” fits that occurred in the daytime and in his disturbed dreams. He connected the two types of disordered somnambulism in this way: “If dreams are little fits of nocturnal madness, is not madness really only a dream more or less prolonged into the waking state?”³⁶

Although Puysegur did not set out to treat the mentally ill, his experimentation with the somnambulistic state and his inclination toward personal, verbal interaction inevitably led him in that direction. Many of those who became followers of his approach also found themselves engaged in psychotherapy with some of their subjects. For instance, the Count of Lutzelbourg, a disciple of Puysegur, wrote in 1786 that he knew from his own experience that magnetic somnambulism could help the emotionally disturbed by allowing them a chance to unburden themselves of their painful secrets.³⁷ In 1787 Charles de Villers wrote *Le magnétiseur amoureux*, a novel explicitly dealing with the subject of cure through the dynamics of the personal relationship between doctor-magnetizer and patient.³⁸ De Villers had been an artillery officer under Puysegur and was heavily influenced by his style of animal magnetism. In the novel he presents in fictional form the principles of cure for emotional disturbance that we have seen outlined in Puysegur’s writings.

The Alternate-Consciousness Paradigm at 1800

Puysegur pointed out that magnetic sleep reveals a division of consciousness and that memory plays an important role in this phenomenon. The division corresponds to two distinct memory chains. Puysegur stated that, when in his ordinary state, the subject has no memory of what has happened during his states of magnetic somnambulism, but when he is in a state of magnetic sleep, the subject can remember what has happened in each previous magnetic session. This indicates a cohesive memory chain that organizes a kind of somnambulistic identity that differs from the subject’s ordinary identity. In 1784 he wrote

I have never found a single patient who, when returning to the natural state from the magnetic state, could remember anything that he had done or predicted in his crisis. I have done what I could to tie their ideas together in their passing from one state to the other—whether in entering or leaving the crisis—but I found it impossible. The demarcation is so great that one must regard these two states as two different existences.³⁹

In *Les fous*, Puységur took this formulation one step further with his remarks about the continuity of memory not only between states of magnetic somnambulism, but also between magnetic and spontaneous somnambulism—the “disordered” somnambulistic state of the emotionally disturbed. In describing the phenomenon of double memory and identifying two distinct “existences,” Puységur set the stage for a new understanding of the human psyche. Divided consciousness was a phenomenon that occurred both in the normal (those seeking help for physical illness) and in the mentally disordered (such as Alexandre). With the work of Puységur, therefore, the paradigm of an alternate consciousness existing quite apart from ordinary consciousness was given its foundation in modern psychological thought. Puységur indicated that this alternate consciousness has its place in psychological healing. So within a few years of the discovery of magnetic somnambulism, the basic outline of the alternate-consciousness paradigm was clearly delineated, along with the rudiments of a corresponding psychotherapy. This psychotherapy had several distinct elements. They involved the recognition of (1) a second consciousness accessible to magnetic sleep, (2) the fact that this second consciousness often exhibits qualities uncharacteristic of the waking person, (3) the presence of two distinct streams of memory, with the waking person being unable to recall the events occurring in magnetic sleep, (4) the accessibility of painful secrets in the state of magnetic sleep, (5) a view of mental disturbance as disordered somnambulism, and (6) the importance of establishing a therapeutic rapport between magnetizer and patient to correct that disordered somnambulism. It would take about one hundred years after Puységur’s discovery for the alternate-consciousness paradigm to reach maturity. That delay was due in large part to a preoccupation with certain of the more spectacular byproducts of somnambulism that would characterize the majority of magnetizers in the first half of the nineteenth century. Nevertheless, the history of that period reveals a number of advances that helped to prepare the way for discoveries to come.

Magnetic Somnambulism in France after 1800

Among the most important of the followers of Puységur was Joseph Philippe Deleuze (1753–1835). After a career in the army, he devoted himself to the study of the natural sciences, eventually becoming assistant naturalist of the Garden of Plants in Paris and secretary to the association of the Museum of Natural History. Deleuze was respected by his contemporaries as a man of scholarship with a balanced approach to scientific ideas. He wrote a number of books on animal magnetism, the most important being his two-volume *Histoire critique du magnétisme animal*⁴⁰ and his *Instruction pratique sur le magnétisme animal*.⁴¹ Although much of his writing was about the physical healing effects of animal magnetism, Deleuze paid a great deal of attention to magnetic somnambulism. He agreed with his teacher Puységur that the somnambulist appears to be a distinct person, calling the somnambulist and the waking person “two different beings.”⁴² Deleuze believed that the somnambulistic “being” was the repository of memories not available to the individual in the waking state and could bring to light incidents and information long forgotten.⁴³ He also held that the somnambulist was more likely to reveal to the magnetizer his troubling secrets.⁴⁴ Following Puységur’s humanistic approach to animal magnetism, Deleuze emphasized the importance of the relationship between magnetist and subject for the healing process. He described the special attachment that often develops—one that can have a positive effect, but also presents its problems.⁴⁵ He specifically mentioned the sexual feelings that may be aroused in both magnetizer and subject through the rapport that is established, and pointed out the dangers inherent in that situation.

In his 1823 book *Traité de somnambulisme et des différentes modifications qu’il presente* the French physician Alexandre Bertrand (1795–1831) provided the first detailed and systematic treatment of magnetic somnambulism.⁴⁶ Echoing the thought of Puységur and Deleuze, Bertrand pointed out that somnambulists often speak of themselves in the third person, as though their waking self were a being separate and distinct from the magnetized self.⁴⁷ He also stated that the magnetized state could be used to heal emotional ills troubling the patient, illustrating this potential in a description of his treatment of a young girl embroiled in a serious conflict with her mother. Bertrand reconciled the two by employing a combination of suggestion and command while the girl was somnambulistic. Such therapeutic successes prompted Bertrand to believe that if magnetism could heal the infirmities of the body, it could also conquer those passions harmful to the soul.⁴⁸

Shortly before Bertrand published his observations, he was among the observers of magnetic experiments being conducted at the Hôtel-Dieu, a Paris hospital. In 1820, the hospital's director, Henri Husson, invited Baron Jules Denis Du Potet de Sennevoy (1796–1881) to give a demonstration before medical witnesses of the induction of magnetic sleep at a distance without using sensory cues. Du Potet had been treating an eighteen-year-old girl named Catherine Samson at the hospital for symptoms of apparent hysteria. She turned out to be a good subject and was the one chosen for the demonstration. Du Potet claimed he had been able to induce somnambulism at a distance many times before and was confident of the experiment.

Du Potet was concealed in a specially designed closet, and the young woman was brought into the room. He magnetized her, apparently without her being aware he was there. Within three minutes she was somnambulist. The experiment was repeated the next day with the renowned surgeon Joseph Claude Récamier in attendance. Husson and Du Potet were shocked when Récamier, in his report on the experiment, accused Du Potet and Samson of being in collusion.⁴⁹ In the course of her treatment, Catherine Samson demonstrated what had by now come to be considered a commonplace magnetic phenomenon: medical clairvoyance.

Interest in somnambulist clairvoyance and magnetization at a distance created a new climate of curiosity about animal magnetism. So when in 1825 Dr. Pierre Foissac made representations to the Paris Academy of Science and Medicine to set up a committee of inquiry into mesmerism, he received an affirmative reply.⁵⁰ On October 11, 1825, a five-man committee, with Husson as reporter, began a preliminary investigation. A year later they published a report recommending that a permanent commission be established to study the phenomena of animal magnetism. After a heated debate, a commission of nine doctors, again with Husson as reporter, was set up. The commission carried on its work for a lengthy period and published a report in 1833.⁵¹ It looked into, among other things, healing physical illnesses, eyeless vision, and the magnetic production of convulsions. The committee's proceedings contain the first acknowledgment by a medical group of the effectiveness of magnetic somnambulism as an analgesia for surgery, citing the painless removal in 1829 of a breast of a Madame Plantin by Dr. Jules Cloquet while the woman was in magnetic trance.⁵² The commission report was favorable to animal magnetism. Among its conclusions were the following: that generally magnetism did not act on healthy subjects; that visible means did not need to be employed to induce magnetic somnambulism, the silent will of the magnetizer being sufficient; that there were other sources besides magnetism for effects observed in the magnetized, and among these sources the committee cited the power of the imagination; that somnambulism occurred in only a small number of cases in which magnetism was applied; that the effects of somnambulism included clairvoyance, intuition, prevision, and insensibility to pain; and that because somnambulism could be simulated and therefore charlatanism might sometimes be involved, much data and numerous proofs were needed to prevent deception. In 1837 another committee was appointed to investigate magnetic somnambulism, this time concentrating on investigating the genuineness of magnetic clairvoyance. The committee's findings were negative, and its report went so far as to deny the existence of animal magnetism in general.⁵³ As attention became more and more focused on the extraordinary phenomena of magnetic somnambulism, particularly clairvoyance, the less spectacular but more psychologically interesting phenomena—such as analgesia, heightened memory, and somnambulist amnesia—were pushed into the background. The result was that, with a few exceptions, the investigation of non-paranormal psychological aspects of somnambulist consciousness was not much advanced during the first decades of the nineteenth century in France. It was not until 1860 and the introduction of Braidism into French awareness that these aspects would begin to be taken seriously. This development will be treated later.

Magnetic Somnambulism in Germany

Magnetic somnambulism came early to Germany. It flourished within the powerful stream of romanticism that held sway there in the late eighteenth and early nineteenth centuries, in some cases becoming associated with experiments in spiritualism and magic occurring at the time. The result was that the writings of many German investigators of magnetic somnambulism and divided consciousness had a strong mystical

flavor. It is noteworthy that animal magnetism got its first solid foothold in the German-speaking world not through its native son Mesmer, but through a disciple of the Marquis de Puységur, the Swiss theologian Johann Caspar Lavater (1741–1801). The result was that it was somnambulist magnetism, not the physical magnetization of Mesmer, that caught the imagination of Germans of the late eighteenth and early nineteenth centuries and exerted some influence over the romantic German culture then developing. Lavater had met Puységur in Lausanne in 1785 and learned the art of magnetizing from him. While still in Lausanne, Lavater received word that his wife was ill and he hurried home to find her in a dangerous condition. In desperation, Lavater wrote Puységur, asking what he should do. The Marquis told him to do exactly as he had been taught, to apply the magnetic treatment with a firm conviction of its efficacy. Lavater followed his advice and replied by letter a few weeks later with the good news of his wife's improvement. He wrote that as a result of his ministrations, she had eventually entered into a peaceful state of somnambulism and had prescribed some simple remedies for her illness. Lavater was extremely grateful to Puységur and became from then on an energetic promoter of magnetic somnambulism in Switzerland and Germany.⁵⁴ While on a visit to Bremen the following year, Lavater communicated his enthusiasm to the physician Arnold Wienholt and to Heinrich Olbers, the well-known astronomer. The three of them began secretly to heal the sick using Puységur's approach. What they were doing soon became known, and the city was abuzz with the news of remarkable cures. Bremen divided into two camps: those favoring mesmerism, and those who saw in it the work of the devil. Word of the phenomenon of magnetic somnambulism quickly spread from Bremen throughout Germany. Around 1787 a number of periodicals devoted to the subject began to appear in the German-speaking world, one of them originating in Bremen.⁵⁵ Wienholt published a study of animal magnetism⁵⁶ and continued his experiments for fifteen years, eventually producing a three-volume opus that had far-reaching influence.⁵⁷ The distinguished physician Eberhard Gmelin (1751–1808) also wrote of his experiments in animal magnetism.⁵⁸ With these works the tradition of magnetic somnambulism was well launched. Although the emphasis of magnetizers in Germany was on somnambulism and related phenomena, the investigation of the nature of the animal magnetic fluid and its action on living things also had impact there. As Ellenberger pointed out, the notion of an all-pervasive fluid fit in well with the evolving romanticism of late eighteenth century Germany, which envisioned the universe as a living organism vitalized by a universal soul.⁵⁹

The German romantics took very seriously the notion of a sixth sense (suggested by Puységur and others) by which somnambulists could perceive fluidic emanations, making its investigation one of their chief concerns. Justinus Kerner (1786–1862) saw magnetic somnambulism as a way to cure the body and the soul with the aid of the mediumistic powers of the somnambulist. His formative experience was with a young woman named Friederike Hauffe, the famous "Seeress of Prevorst," who Kerner met in 1826.⁶⁰ Kerner was a physician, and the woman was brought to him for treatment for a serious physical condition. He discovered that she had apparent clairvoyant powers, such as those noted by Puységur, but he also observed that she communicated with spirits and gained from them information relevant to the healing of other clients in Kerner's care. In one instance, the Countess of Maldenghem was placed in distant magnetic rapport with the seeress and was helped to unburden herself of a guilty secret to her husband. This resulted in her being cured of a serious mental disturbance. The cathartic aspect of the cure, however, took second place to the spiritualistic trappings surrounding it, and this kind of unburdening was not recognized for the potent tool it could be. Kerner began a tradition of magnetic experimentation with somnambulists as mediums, a tradition that would continue for some decades. One of the areas he investigated was spirit possession, for he believed that when dealing with mediumistic phenomena there is always the potential for possession by lower or demoniacal elements. Through his experiments he eventually developed a system of magical magnetic practices to counteract negative forces of this type. Kerner's influence was far-reaching. Among those who followed closely in his footsteps were the physician-philosopher Carl August von Eschenmayer (1768–1852), who wrote two major works describing his magnetic practices and mystical concerns (Eschenmayer 1816 and 1830), and Joseph Ennemoser (1787–1854), who brought considerable historical erudition to bear on the problem of the relationship of magnetic somnambulism to occult traditions.⁶¹ Ennemoser produced a massive history of magic (Ennemoser 1844) and a number of books specifically on

animal magnetism. He emphasized somnambulism as a state that taps the magical potentials hidden in the human soul, giving the individual access to visions, clairvoyance or second sight, prophecy, and other paranormal faculties. For Ennemoser, the rapport between magnetizer and somnambulist was just a special case of the rapport all individuals have with the universe as a whole. He saw this state of cosmic “sympathy” (an ancient magical notion) as the basis for all paranormal phenomena. Ennemoser was certainly not the first to connect the phenomena of magnetic somnambulism with sympathy. Friedrich Hufeland (1774–1839) wrote a work on sympathy that compared magnetic rapport to the relationship between a mother and the unborn fetus in her womb.⁶² Hufeland’s understanding of the phenomena of magnetic somnambulism was not situated in the context of the history of magic, as Ennemoser’s had been. Hufeland treated these matters in a more naturalistic vein and took as his starting point the known processes of living things. This more naturalistic understanding of animal magnetism and its phenomena in fact developed a strong tradition in Germany. One of its most influential spokesman was Karl Alexander Kluge (1782–1844), professor of medicine in Berlin. His 1815 handbook of magnetic medicine⁶³ was widely read and served as a model for serious study of the phases of magnetic somnambulism. Johann Stieglitz, writing at the same time as Kluge, saw magnetic somnambulism and its accompanying clairvoyance as a pathological condition created by the application of animal magnetism.⁶⁴ Karl Christian Wolfart, who collaborated with Mesmer near the end of Mesmer’s life, published a refutation to Stieglitz’s approach to animal magnetism in 1816.⁶⁵ Dietrich Kieser, professor of medicine at Jena, did not go that far, but in his 1822 masterwork on animal magnetism looked for hidden psychological rather than paranormal sources for the revelations of the magnetic clairvoyant.⁶⁶

In Germany, however, it was Johann Christian Reil (1759–1813) and Carl Gustav Carus (1789–1869) who moved the study of magnetic somnambulism into the realm of systematic psychological investigation. In his 1803 *Anwendung der psychischen Kurmethode auf Geisteszerrüttung*⁶⁷ Reil recognized that the phenomena of magnetic somnambulism had the potential for making possible a fully scientific investigation of the human mind. He stressed heavily the psychological side of magnetic phenomena and the information revealed through somnambulism about the nature of the inner workings of the psyche.⁶⁸ Ellenberger mounted a strong case for considering Reil the founder of rational psychotherapy,⁶⁹ for he devised a complete theory and practical system for treating the mentally disturbed. He gathered information in support of a theory of polypsychism, whereby the psyche is seen as composed of multiple centers that in healthy persons form a unity and are subject to the ego. For Reil, mental disturbance was related to a breakdown in that unity. Carus, writing much later, found that experiences with magnetic somnambulism led him to those same hidden reaches of the psyche but seen from a different perspective. In his main work on animal magnetism⁷⁰ he stated that illness does not arise from man’s conscious mind but from the realm of the unconscious. Because mesmerism acts most directly upon the essence of man’s soul, he wrote, it is the most effective cure for illness available—its curative powers applying preeminently to nervous illnesses, such as hysteria and hypochondria. Mesmerism, said Carus, calls on the unfailing healing power of the unconscious and allows it to do its work. In another treatise, published in 1846, Carus described in greater detail the nature and structure of an unconscious mental life, stating that in one of its aspects it contains all the feelings and perceptions that we have had but of which we have become unconscious. He pointed out that in entering the unconscious, these experiences are modified and developed. Carus also affirmed that communication takes place between individuals on an unconscious level and that studying such communication is crucial for understanding human psychology.

Magnetic Somnambulism in the United States

Whereas in Germany magnetic somnambulism was enveloped by the currents of romanticism, its fate was very different in the United States. In the atmosphere of individualism and practicality that pervaded there, somnambulist phenomena were employed to further a common sense understanding of human nature and develop techniques for its improvement. In the process it became the foundation for the first formulation of a truly American psychology and paved the way for the acceptance of the later French findings on

divided consciousness. Animal magnetism was first brought to the attention of the leaders of the newly formed United States by Mesmer himself. He wrote a letter to George Washington⁷¹ declaring that he was sure that the general, who had just led a noble revolution of his own, would see in animal magnetism a revolution of thought similarly undertaken for the good of mankind.⁷² Mesmer also tried to enlist the support of Benjamin Franklin before he was appointed to head the French king's commission of inquiry. Neither of these attempts bore fruit,⁷³ and Franklin eventually ended up, as head of the commission, denouncing Mesmer's discovery. Americans seem to have been generally hostile to mesmerism in the subsequent decades. It was rejected by the influential Benjamin Rush and condemned by many because of association with the controversial metallic tractors of Elisha Perkins.⁷⁴

The first effective promoter of mesmerism in the United States was Joseph Du Commun, a French magnetizer who arrived to teach French in the Military Academy at West Point in 1815. Already known to his countrymen from his articles in the *Annales du magnétisme animal*, Du Commun immediately set about teaching mesmerism and formed a society of magnetizers in New York. He delivered three lectures at the Hall of Science in New York City in the summer of 1829, which in their published form became the first American work to endorse the theory of animal magnetism.⁷⁵ The person who more than any other made animal magnetism widely known in the United States was Charles Poyen St. Saver (died 1844). While a medical student in Paris, Poyen had been cured of a debilitating illness through remedies prescribed by a magnetic somnambulist. After a visit to the French West Indies in 1833, he arrived in the United States to stay with an uncle in Massachusetts. He eventually moved to a home of his own and decided to remain permanently in the United States. Learning that mesmerism was almost totally unknown there, Poyen decided to travel and lecture on the subject in the towns of New England. He began his tour in January 1836 but found a cool reception for his lectures. He soon realized that people needed demonstrations to excite their interest and undertook to teach mesmeric practice to those who were interested. That same year he published, with a lengthy introduction, his translation of the Paris Academy of Medicine's 1831 report.⁷⁶ The following year he produced a report of his lecture tour and the response to his demonstrations.⁷⁷ By this time animal magnetism had become a going concern in the United States. In 1837, as a result of the interest stirred up by Poyen, a number of books on animal magnetism appeared on the market. The first was Thomas C. Hartshorn's translation of Deleuze's *Instruction pratique sur le magnétisme animal*, a book that would prove to be extremely influential in the United States, going through four editions in the next fifty years.⁷⁸ In addition, Colonel William L. Stone wrote a small work on a woman who had been treated with animal magnetism and manifested apparent clairvoyant abilities.⁷⁹ In the same year C. F. Durant published an attempt to refute the claims of animal magnetism based on his experiments.⁸⁰ It was his contention that the phenomena of magnetic somnambulism and clairvoyance were simply the result of suggestibility and self-delusion. Poyen immediately wrote a reply in defense of the phenomena.⁸¹ It is clear from these early writings that interest in magnetic somnambulism in the United States began with its focus on the allegedly paranormal aspects of that state, such as clairvoyant diagnoses and the finding of hidden objects. As had been the case in France, this preoccupation involved the promoters of animal magnetism in prolonged disputes about the genuineness of these supernormal powers. In 1839, Robert Collyer took up lecturing on animal magnetism in much the same fashion as Poyen had before him. He traveled along the Atlantic seaboard, weaving the theory of phrenology into his mesmeric presentations.⁸² Charles Caldwell, a Philadelphia physician and acquaintance of mesmeric apologist John Elliotson of London, also found it useful to combine the two disciplines of mesmerism and phrenology into one theory.⁸³ One of the most effective promoters of animal magnetism after Poyen was LaRoy Sunderland (1804–1885), although he preferred his own term "pathetism" to the traditional one.⁸⁴ He founded America's main mesmeric journal, *The Magnet*, in 1843 and continued to promote mesmeric doctrine for decades.

In the American writings on mesmerism produced between 1840 and 1870⁸⁵ one question began to assume increasing importance: How does the mind influence the body in the process of mesmeric healing? John Bovee Dods (1795–1872) and J. Stanley Grimes (1807–1903) tackled the question and came up with divergent answers.⁸⁶ Grimes answered them in terms of an "etherium," a material substance that connects all things, while Dods believed that a basically spiritual agent accounted for the effects of animal magnetism,

both physical and mental. One person who developed his own peculiar perspective on the issue of the action of the mind in mesmerism was Phineas Parkhurst Quimby (1802–1866). He heard Poyen lecture in Belfast, Maine, in 1838 and, discovering himself to have considerable talent as a mesmerizer, decided to become a professional magnetic healer. Quimby believed that the human mind has two levels. The upper level manifests itself through thought and the lower level through belief. He believed that it was the lower level that controlled the state of the body, so if the healer could reach and affect the lower level of the mind, he could cure the patient.⁸⁷ To do that meant taking the time to talk to the ill, listen to their complaints, give them a response, and provide a framework within which they could understand what was happening to them. In this way, Quimby developed an early, remarkably effective form of psychotherapy.⁸⁸ Reading these early American writings on animal magnetism, it becomes clear that these practitioners developed unique perspectives on the phenomenon. That practicality that characterizes American culture impelled mesmerists to go beyond the investigation of the extraordinary and find out how mesmerism could contribute to the improvement of everyday life. This preoccupation led American mesmerism to develop what has been called America's first true psychology.⁸⁹ In exploring magnetic somnambulism, the conviction developed that two kinds of consciousness, the normal and the somnambulistic, operated in two different worlds: the natural world, in which information is received through the senses, and the spiritual world, in which information is received intuitively and directly, such as in thought transference and clairvoyance. For the American mesmerists, however, "spiritual" did not mean subject to religious faith. For them "spiritual" and "psychological" were synonymous terms. The spiritual world was not governed by supernatural laws but by its own natural laws, which could be experimentally established. Animal magnetism, it was believed, had given the basis for such a scientific investigation, for it provided both an experimental technique—in magnetic somnambulism—and a theoretical framework within which to understand the data.⁹⁰

Magnetic Somnambulism in England

The exploration of magnetic somnambulism and divided consciousness got off to an early start in Great Britain. The physician J. B. De Mainauduc (died 1797), having received his medical training in England, moved to Paris in 1782 and while there learned animal magnetism from D'Eslon. In 1785 he returned to London and began to teach a "science" that he described as a form of healing without the use of conventional medical means. The influence of animal magnetism on this new "science" was clear, but De Mainauduc put his own spin on the technique with talk about spiritual healing and the physician's "invisible fingers" (energy extensions of the digits), which can penetrate the patient's body and beneficially affect internal organs.⁹¹ De Mainauduc and other early writers⁹² were mainly concerned with physical cures and the theory of the magnetic fluid. It was John Bell who first took up the matter of somnambulism in earnest and excited a broader interest in the subject with his 1792 book *The General and Particular Principles of Animal Electricity and Magnetism*. To show his professional legitimacy he reproduced at the beginning of his book a certificate of fellowship signed by the Paris mesmerists Bergasse, Kornman, the Comte de Puységur, and others. Although he had been trained in the art of magnetic healing at the Paris Society of Harmony, a teaching fraternity with scant recognition of somnambulistic phenomena founded by Mesmer himself, Bell was also influenced by the Marquis de Puységur's approach. He says that in 1784 he was present at Puységur's home and there witnessed the marvels of magnetic sleep.⁹³ Bell taught classes in the theory and practice of animal magnetism and intended to use his book as a supplement to his lessons. His enthusiastic teaching contributed much to the development of a widespread popular interest in the subject in England, an interest that would last for decades.⁹⁴

Despite persistent popular interest, it took a long time for the intellectual establishment of England to give serious attention to animal magnetism. That began to happen when Richard Chevenix gave lectures and demonstrations on mesmerism in London in 1829. One of those who attended was the physician John Elliotson (1791–1868), soon to become professor of medicine at University College. The lectures piqued his curiosity, and when, in 1837, the famous French magnetizer Baron Du Potet came to London, Elliotson was

further intrigued and decided to experiment with mesmerism. By this time Elliotson was a national figure, well known as a lecturer, diagnostician, and medical innovator. His prestige and acknowledged competence did not, however, protect him from criticism, and soon some of his medical colleagues formed a strong core of opposition to his mesmeric experiments. Antagonism to Elliotson's ideas grew and found its main expression in the pages of the medical journal *The Lancet*. The dispute resulted in Elliotson's resigning his professorship in 1838. One of Elliotson's projects was to promote the use of mesmeric trance for painless surgical operations. In 1843 he wrote *Numerous Cases of Surgical Operations without Pain in the Mesmeric State*, and he was supported in his crusade by the publication in 1846 of James Esdaile's *Mesmerism in India and its Practical Application in Surgery and Medicine*.⁹⁵ Elliotson ran into stiff opposition to this application of animal magnetism, and the introduction of ether as an analgesic into Britain in 1847 seriously weakened what interest had been developing.⁹⁶ In 1843 Elliotson founded *The Zoist, A Journal of Cerebral Physiology and Mesmerism, and Their Application to Human Welfare*. Until its demise in 1856, this periodical was the principal literary mouthpiece for the supporters of mesmerism in England. In *The Zoist's* thirteen volumes all the issues connected with mesmerism at the time were discussed and illustrated with an abundance of case material. The phenomena of magnetic somnambulism were among those most frequently described. These phenomena were commonly divided into the "lower" and "higher" phenomena. The lower phenomena included a sleepwaking⁹⁷ kind of consciousness, amnesia and double memory, loss of sense of identity, heightened memory, deadening of the senses, immunity to pain, suggestibility, and a special rapport with the magnetizer. The higher phenomena included community of sensation (the somnambulist experiencing the physical sensations of the mesmerizer), psychical rapport (the somnambulist being able to read the magnetizer's thoughts and to be magnetized at a distance), clairvoyance, and ecstasy (the somnambulist being immersed in an elevated state of consciousness with an awareness of spiritual things). An examination of the British literature on magnetic somnambulism through the middle of the nineteenth century reveals that interest in the higher phenomena, much more spectacular in nature, far outweighed interest in the lower. Neglect of the lower phenomena served to retard the investigation of those aspects of divided consciousness that would eventually prove to have far-reaching psychological implications.

There were a number of popularizers whose writings on animal magnetism helped to maintain it as a force to be reckoned with through the 1850s. J. C. Colquhoun translated the report of the French commission of 1831, expanding his editorial comments into a two-volume work entitled *Isis Revelata*.⁹⁸ Spenser Hall combined animal magnetism and phrenology in his popular *Mesmeric Experiences* (1845), while George Barth produced two books (Barth 1850, 1854) which were do-it-yourself manuals for home use.⁹⁹ There were also works produced by authors from more academic traditions. One was the clergyman Chauncy Hare Townshend's 1840 *Facts in Mesmerism*, which was widely read both in Britain and in the United States. William Gregory, professor of chemistry at Edinburgh, wrote *Letters to a Candid Inquirer on Animal Magnetism* (1851), a work that went into many editions. Two physicians also published significant books in 1851: Herbert Mayo, *On the Truth Contained in Popular Superstitions*, and Joseph Haddock, *Somnolism and Psycheism*.¹⁰⁰ Meanwhile, a Manchester physician was engaged in speculations of his own about mesmeric phenomena. In 1842 James Braid wrote his first pamphlet on the subject and launched a reexamination of the nature of animal magnetism that would have significant repercussions for the development of dynamic psychiatry.

James Braid and the Rise of Hypnotism

While many of the supporters of animal magnetism in England were embroiled in disputes about the genuineness of the phenomena of magnetic somnambulism, James Braid (1795–1860) was engaged in pondering the nature of the mechanism that produced that state. When Braid attended local demonstrations of the French magnetizer Lafontaine in 1841, he soon realized that the central issue was not whether the phenomena were being faked (Lafontaine was a competent magnetizer¹⁰¹ and it took only two sessions for Braid to see that he was producing real effects in his subjects), but rather the precise nature of the

effects and the agent that produced them. Braid's first published answer to that question appeared in his 1842 pamphlet *Satanic Agency and Mesmerism Reviewed*,¹⁰² one of the foundation works in hypnosis in particular and modern psychology in general. Its significance lies in its being Braid's first exposition of his theory of the cause of mesmeric phenomena and the first published use of the terms "hypnotic sleep," "hypnotise," and "neurohypnotism." Here Braid described his induction method of having the subject stare intently at a fixed spot and stated his view that mesmeric phenomena were solely attributable to a peculiar physiological state of the brain and spinal cord. He wrote,

I have already explained my theory to a certain extent, namely, that the continued effort of the will, to rivet the attention to one idea, exhausts the mind ... and that the constant effort of the muscles of the eyes and eyelids, to maintain the fixed stare, quickly exhausts their irritability and tone ... that the result of the whole is a rapid exhaustion of the sensorium and nervous system ... and a feeling of giddiness, with slight tendency to syncope, and a feeling of somnolency, ensue; and thus and then the mind slips out of gear.¹⁰³

Braid first treated the subject of hypnotism at full length in his 1843 book *Neurypnology or the Rationale of Nervous Sleep*,¹⁰⁴ in which he further elaborated his new terminology and shortened the central term "neuro-hypnotism" (nervous sleep) to "hypnotism." He declared his intention to do away with the notion that a magnetic fluid was responsible for the somnambulistic state, substituting instead the theory, contained in his previous pamphlet, that the phenomenon was subjective in origin. Although in this period Braid emphasized the physiological exhaustion of the nervous system as the cause of the hypnotic state, in later works he would place more stress on the role of suggestion in the process.¹⁰⁵ He gradually altered his induction techniques from his earlier use of mechanical methods and began employing direct verbal suggestions. By 1851 he had developed a theory that explained hypnotism as a state of mental concentration or monoideism, with heightened suggestibility as the main factor to distinguish the hypnotic state from the normal state.¹⁰⁶ In 1853 he propounded the notion of "fixed ideas" that dominate the mind and control the body and proposed a suggestive therapy to remove them.¹⁰⁷

It is now widely recognized that Braid was not the first to see suggestion as central for explaining the hypnotic state. Three men in particular had clearly noted the importance of suggestion before Braid: the Portuguese priest Joseph Custodi de Faria in his 1819 *De la cause du sommeil lucide ou étude de la nature de l'homme*, Etienne Hénin de Cuvillers in his 1822 *Exposition critique du système et de la doctrine mystique des magnétistes*, and Alexandre Bertrand in his 1826 *Du magnétisme animal en France*.¹⁰⁸ Although their views made some impression on their contemporaries, it was James Braid who revolutionized thought about the issue of magnetic somnambulism and eventually effected its acceptance by a significant segment of the medical and academic community. Why was Braid's system able to accomplish this when those of others could not? First, he did not quibble about the reality of the phenomena of animal magnetism. He strongly affirmed the genuineness of at least the lower phenomena of somnambulism and their usefulness for the medical practitioner. In this way he did not automatically alienate the mesmeric community and thereby exacerbate traditional quarrels. Second, Braid did not come out in support of the genuineness of most of the higher phenomena. In this way, he made his views more palatable to those who thought the claims to paranormal powers on the part of the mesmerists to be totally unacceptable. Third, Braid introduced a whole new nomenclature, free of associations with a controversial explanatory system, and therefore not particularly laden with emotional significance. It is important to add, however, that the paranormal phenomena associated with hypnosis were never refuted. The "scientific" community simply rejected them out of hand.

Hypnotism in France and Germany

Although Braid's system eventually achieved acceptance, it was not immediately successful. In England his works were received with mild interest but caused no excitement for many decades. Rather, it was France and Germany that gave his ideas their first broad appreciation.¹⁰⁹ In 1859, a year before Braid's death, France suddenly discovered his writing and Braidism overnight became an important system. The French

surgeon Paul Broca (1824–1880) had been reading Braid’s works and started to apply them to his surgical operations, reporting in 1859 on the usefulness of Braid’s approach to the Academy of Sciences.¹¹⁰ In the previous year the Bordeaux physician Eugène Azam had become acquainted with Braid’s writings and had begun to experiment with hypnotism, publishing in January 1860 a lengthy article on his findings in which he credited Braid with unifying the study of somnambulism and developing a simple way to induce it. Also in 1860 J. P. Durand de Gros published *Cours théorique et pratique de Braidisme ou hypnotisme nerveux*, the first full-length French treatment of the implications of Braid’s ideas. From 1860 on Braidism, as hypnotism was sometimes called, remained an influential current in French psychological medicine. Even Charles Richet, for example, who wrote mainly from the tradition of animal magnetism, appreciatively mentioned Braid and hypnotism in his important article on artificial somnambulism (see later discussion). But Braid’s emphasis on suggestion would find its strongest French supporter in the physician Ambroise Liébeault (1823–1901), founder of the Nancy school of hypnotism. Although Liébeault began writing about his hypnotic technique in 1866 (Liébeault 1866), it was not until the late 1880s, with the writings of his associate Hyppolyte Bernheim (1840–1919), that his ideas became well known.¹¹¹

In Germany, Braid’s writing first became known around 1880. In that year, demonstrations by the Danish stage mesmerist Carl Hansen (1833–1897), witnessed by Adolph Weinholt, Rudolph Heidenhain, and others, set off a wave of interest in the German scientific community.¹¹² Heidenhain soon published comments on Hansen’s phenomena and a description of experiments of his own (*Der sogennante thierische Magnetismus*, 1880), but it was especially Wilhelm Preyer (1841–1897) who, through his extensive knowledge of Braid’s writings, introduced Germany to hypnotic theory. Two of his works, published in 1881 and 1890, contain German versions of manuscripts written by Braid that have never been published in English: the first, Braid’s final summary of his position in 1860 (the year of his death), and the second, a treatise on the difference between nervous sleep and natural sleep.¹¹³ Largely because of Preyer’s descriptions of Braid’s work, hypnotism became a serious rival to the strong tradition of magnetic healing that had held sway in Germany since the time of Mesmer and Puységur.

Magnetic Somnambulism and Multiple Personality

When Charles Richet (1850–1935) wrote his classical article “Du somnambulisme provoqué” in 1875, he attempted to come to terms with an aspect of artificial somnambulism that had always been a puzzle:

Loss of memory [upon awakening from the somnambulistic state] is absolutely characteristic; I have never seen it to be absent. But—and this is very strange—what took place during the sleep is not entirely lost, since the reinduction of the state brings back the memory. This, I believe, is what is needed to explain the doubling of the personality of which so many magnetizers speak. What constitutes our “I” is the collection of our memories. And when that is reserved for a special physical state, one is justified in saying, theoretically understood, that the person is different, since it recalls in sleep a whole series of acts of which it knows nothing when awake.¹¹⁴

Here Richet provided a framework for understanding a phenomenon that was at that time only beginning to be recognized: the condition then known as dual personality and later as multiple personality. The first two well-authenticated cases of dual personality were both reported, strangely enough, in the same year: 1791. One was described by Eberhardt Gmelin and termed a case of “exchanged personality.” After encountering a number of aristocratic refugees from the French Revolution, a young German girl of Stuttgart suddenly exchanged her ordinary personality for that of a French lady, speaking French perfectly and German with a French accent. She alternated between her French state and her German state, maintaining full memory in her French personality for all she had experienced when in that state but having none of those memories when in her German personality. Gmelin compared the woman’s French state to the state of magnetic somnambulism and attempted to use mesmerism to treat her.¹¹⁵ The other 1791 case was from the United States and was reported by Benjamin Rush in a contemporary letter. Here a young man, son of a certain Captain Miller, would periodically be seized by “fits” in which his personality changed. The fits would last for a few

hours and be followed by a return to his normal state. When in his altered state, he possessed a physical agility far superior to that of his normal state. In addition, in his altered state he could remember all that had happened to him when in previous altered states but nothing of what happened in the intervals between. When in his normal state, he remembered all that had occurred in previous normal states, but nothing of his fits.¹¹⁶ It is easy to see why Richet compared these alterations and their discontinuities of memory with the “doubling of personality” in somnambulism. This similarity was also noted by those who described later cases of dual personality. Take, for instance, the case of Mary Reynolds, a young woman from rural Pennsylvania, who from 1811 to 1827 experienced alterations between two personalities with radically different temperaments. In her normal personality she was subdued, sad, and kept to herself. In her second personality, which she developed in 1811 at age thirty-six, she was bright, witty, and outgoing. Her two states alternated, with each having no memory of the other, for many years, until 1829 when she remained permanently in her second, extroverted state.¹¹⁷ Mid-nineteenth century writers tended to see her second personality in analogy with artificial somnambulism. As such states alternated naturally, rather than (as today) “discovered” under hypnosis; they give strong support to the resiliency of “dissociative” disorders (see also below).

An Alternate Consciousness

Between 1791 and 1880, many cases of double consciousness and dual personality were reported,¹¹⁸ and practitioners of animal magnetism were very interested in them. In his work with Alexandre Hébert, Puységur had pointed to a connection between mental disorder and somnambulism, and in 1846 John Elliotson made the link more explicit: “Mesmerism produces no phenomenon that does not occur in nervous afflictions without mesmerism. . . . It does produce all the most wonderful phenomena of all afflictions . . . of the nervous system.”¹¹⁹ William Gregory in Edinburgh drew a picture of magnetic somnambulism that closely parallels accounts of dual personality:

The sleeper, when in his ordinary state, and when in the deep mesmeric sleep appears not like the same, but like two different individuals. . . . As a general rule . . . the sleeper does not remember, after waking, what he may have seen, felt, tasted, smelled, heard, spoken, or done during his sleep; but when next put to sleep, he recollects perfectly all that has occurred, not only in the last sleep, but in all former sleeps. . . . He lives, in fact, a distinct life in the sleep, and has what is called a double or divided consciousness.

Gregory believed that the discontinuity of memory between the two states could even involve a discontinuity of identity: “He often loses, in the mesmeric sleep, his sense of identity, so that he cannot tell his own name, or gives himself another . . . while yet he will speak sensibly and accurately on all other points.”¹²⁰ While writers were finding more and more parallels between the divided consciousness of magnetic somnambulism and instances of naturally occurring dual personality,¹²¹ the notion was slowly growing in other quarters that artificial somnambulism reveals not merely a second consciousness that springs into being with each induction of the somnambulistic state, but a continuously active arena of consciousness that we simply glimpse when the somnambulistic state is present—in other words, a hidden mental world that exists simultaneously with normal, everyday consciousness. Conviction about the existence of this subterranean world of the mind was given a powerful boost from a most unlikely quarter—the table-moving fad that swept through North America and Europe in the 1850s. The table-moving fad grew out of the spiritualist movement of the United States and involved the communication of messages from purported spirits through the movement of tables. I have discussed the significance of this phenomenon elsewhere¹²² and cannot go into the matter in detail here. Suffice it to say that for many observers at the time, the only workable alternate explanation to the spiritualist one was that the mediums and/or other participants in the séances were themselves producing the messages without any conscious awareness that they were doing so. This could only be the case if a hidden alternate consciousness were at work within the participants, operating simultaneously with their normal consciousness, but with intentions distinct from that of normal consciousness. This was most clearly formulated in Paul Tascher’s anonymously published 1855 *Second lettre de gros Jean à son évêque au sujet des*

tables parlantes, des possessions et autres diableries. To explain the table-moving phenomena and the messages conveyed, the author asserts that the human psyche can be split into two parts, *the one operating with normal consciousness, the other operating outside the conscious intent of the subject by means of automatic writing, automatic speaking, or automatic movements of other kinds*. The author describes these two parts as two personalities, the second existing concurrently with the first and operating simultaneously with it.¹²³

The simultaneity of that alternate consciousness was illustrated in a remarkable way in the case of “Old Stump,” related by William James in an 1889 article on automatic writing.¹²⁴ In 1860 a Rhode Island woman named Anna Winsor was treated by the physician Ira Barrows for most unusual symptoms. It all began when Anna experienced a sharp pain in her right arm. The pain grew, and then her arm suddenly fell limp at her right side. She looked at the arm in amazement, believing it belonged to someone else. She could not be convinced it was hers (which she believed was drawn up behind her) and no matter what was done to the arm (cutting, pricking, etc.), she took no notice. Anna treated that arm as an intelligent being, alien to her, and tried to keep it away from her by biting it, hitting it, and generally trying to get rid of it. She called it “Old Stump.” After the initial limpness, Old Stump took on an intelligent life of its own, acting as a kind of guardian to Anna. At the same time her left arm would do violent, destructive things to Anna, tearing her hair, shredding her nightdress, ripping the bedclothes. When this occurred, Old Stump would protect Anna against the left arm, grabbing it and restraining it. When things quieted down, Old Stump would engage in all kinds of constructive activities, such as writing poetry and letters. At times Old Stump would answer questions put to it; at other times it would give directions about how to care for Anna. Old Stump never slept, but was always available to give aid; even when Anna was at her most delirious, Old Stump remained completely rational and helpful. The case of Anna Winsor was evidence for the fact that when dealing with dual consciousness, the two consciousnesses did not alternate with each other, in the sense that while one was active the other did not exist or was dormant. *Rather, the two existed side by side, acting and communicating simultaneously, manifesting as parallel streams of consciousness.*

Symptom Language

At the beginning of this chapter, I described three paradigms for explaining mental disorders: the intrusion paradigm, the organic paradigm, and the alternate-consciousness paradigm. The alternate-consciousness paradigm became possible only with the discovery of magnetic sleep. The recognition and investigation of artificial somnambulism opened the door to the notion of a hidden mental world within human beings that can affect our ordinary thoughts, feelings, and actions. By 1860 ideas about this somnambulist world had evolved to a critical point that could be formulated in this way: *there exists within human beings an alternate consciousness—distinct from normal consciousness in memory, personality, and identity—which operates with its own agenda and to some degree imposes that agenda on our conscious life*. Investigators of artificial somnambulism recognized *naturally occurring instances of these states* in certain reported mental disorders. Puységur’s Alexandre Hébert was one, but it was particularly cases of double consciousness and dual personality, such as Gmelin’s case and Mary Reynolds, that fit the picture, revealing, as they did, a second consciousness existing secretly below the surface that could suddenly break through into waking awareness. It was as though these individuals alternated between normal and somnambulist consciousness, with the latter appearing as an independent personality. Before Puységur’s discovery of magnetic sleep, the notion of an alien element producing thoughts, feelings, or actions contrary to a person’s usual behavior was explained by the intrusion paradigm. After him a new understanding of this kind of disturbance became possible. An examination of the literature reveals that before 1784 there were few clearly defined cases of double consciousness and dual (or multiple) personality, whereas after 1784 such cases were frequently reported.¹²⁵ It is my belief that the discovery of magnetic sleep and the appearance of multiple personality disorder are related. In nonorganic mental disturbance there are two elements: the experienced disturbances and the phenomenological expression of those disturbances—the symptom language of the illness. The symptoms are the language of the experienced disturbance, not in the full meaning of the concept of language, which would involve

an identifiable syntax, but in a more general sense by which the symptoms are the means of conveying a message to others. How the disturbances will be expressed depends on what categories for understanding about humans and the world are current in the individual's culture—the culture determines the language available.¹²⁶ *Until the emergence of the alternate-consciousness paradigm, the only category available to express the experience of an alien consciousness was possession, intrusion from the outside. With the rise of awareness of a second consciousness intrinsic to the human mind, a new symptom language became possible.* Now the disordered person could express (and society could understand) the experience in a new way: it was the second consciousness acting at odds with the normal self. This means that when Puysegur discovered magnetic sleep, he contributed significantly to the form in which mental disturbance could manifest itself from then on. He helped make possible a symptom language through which the experience of interior alienation of consciousness could be expressed without resorting to the notion of intrusion from the outside—in other words without experiencing that condition as possession.

The Duality of the Mind

Although speculations arising out of the investigation of table-moving in the 1850s led to an initial formulation of a concept of two simultaneously functioning consciousnesses in human beings, it took three decades for that formulation to come to fruition. It was helped along by two high-profile cases of multiple personality occurring in the 1870s and 1880s. The first was the case of Félicité X. In 1858 Eugène Azam, a physician instrumental in introducing Braid's ideas into France, began to observe a thirty-two-year-old woman who showed signs of dual personality. When fourteen she had become subject to profound bouts of sleep, at the end of which she would awaken in a different personality—her “second” state. In her primary state she was intelligent and industrious but unimaginative and melancholy, suffering from pains in various parts of her body, especially the head. In her second state, which occurred nearly every day, she seemed entirely different. She smiled a great deal, felt happy, and was emotional and imaginative. She was also completely free of the pains plaguing her in her primary state. In Félicité's secondary state she could remember everything that previously occurred in that state as well as in her primary state. But in her primary state she had no access to memories of events that took place in the secondary state. On returning from her secondary to her primary state, she would take up things precisely where she had left them. Azam came to the conclusion that Félicité's primary state corresponded to the normal waking condition of a hypnotic subject and that her second state corresponded to the somnambulistic state. He provided a physiological framework for understanding her alternating personalities through a theory of dual cerebral function, her second state operating out of one hemisphere of the brain and her primary state out of the other. He described the two states as “successive” and did not believe them to operate simultaneously.¹²⁷

Azam's scheme could not explain the case of Louis Vivé, who had not dual, but multiple personalities. Louis Vivé, born in 1863 in provincial France, eventually developed what appeared to be six personalities, each with distinct personal characteristics, each with its peculiar set of anesthetics and muscular contractions, and each having memory for a different period of his life. In 1888 Henri Bourru and P. Burot published a full study of Louis Vivé entitled *Variations de la personnalité. This work is important in that it is the first clearly to tie personality states to specific memories.*¹²⁸ The authors describe the periods of memory tied to each personality, and stated that they were able to get Louis to switch to a specific personality simply by mentioning the memories belonging to that personality. Azam's neat theory of dual cerebral function was of no help here because of the great number of personalities. The notion of double consciousness and dual personality, with a second personality corresponding to somnambulistic consciousness, was also useless. Bourru and Burot instead introduced the idea of “variations of the personality,” speculating that during each period represented by a particular set of memories, a new state of consciousness had been created. Each of these new states is seen as a separate hypnotically induced state. All impressions gained while in one of these states were tied to that state with its specific characteristics; over time a stable personality evolved from each state. In other words, Bourru and Burot claimed that multiple personality is a special instance of successive states of hypnotic consciousness.

Pierre Janet and Subconscious Mental Activity

While Bourru and Burot were conducting their observations, Pierre Janet (1859–1947)—who followed his philosophy Ph.D. with an M.D.—was carrying out experiments with hysterical patients, some of whom exhibited multiple personalities. He tackled the issue of duality of consciousness as a psychologist and with such originality that his ideas became formative to modern dynamic psychiatry. In his formulation of the nature and therapy of mental disorders, *Janet represented the culmination of ideas that had been evolving in the alternate-consciousness tradition*. At age twenty-three, Janet began work on his doctorate in philosophy at Le Havre, experimenting with hysterics and using his findings as the basis for his doctoral thesis, published in 1889 as *L'automatisme psychologique*.¹²⁹ Janet formulated a view of human psychology that consisted of two basic elements. The first was the notion that we are dual beings. We exist and operate in two different spheres simultaneously: the conscious and the subconscious. *The second element was a dynamic view of the subconscious as a region of multiple centers operating quite distinctly from each other and separately affecting conscious life*. Janet first published his theory in three articles that appeared in the *Revue philosophique*¹³⁰ (Janet 1886, 1887, 1888), in which he gave a much more complete presentation in *L'automatisme psychologique*. Reading Janet's citations in these works, it is clear how heavily the writings of the magnetizers influenced him. There can be little doubt that his notion of the subconscious was influenced by his study of magnetic somnambulism and divided consciousness. Janet, however, gave the concept of a second consciousness a particular degree of clarity. Particularly through his work with hysterics and those manifesting multiple personality, he showed that this second consciousness maintains a simultaneous existence with the waking consciousness. *He established that the second consciousness does not just come and go as the individual enters and leaves the somnambulist state, but rather that it continues to carry on a hidden life within, the continuing existence of which can be clearly demonstrated through the techniques of distraction and automatic writing*. Janet proved to his satisfaction that hysterics can carry out actions and produce communications demonstrating the operation of a consciousness completely unknown to their ordinary waking self. Janet coined the term “subconscious” to designate manifestations of the second consciousness. *Because Janet worked with hysterics, he limited his theory of subconscious dynamics to the mentally disordered and exempted the “healthy” from these phenomena*. He believed that subconscious mental acts only occur when the normal consciousness is not able to deal with particular thoughts because of a weakness in the psyche. Janet's formulation went much further than simply affirming the separate and simultaneous existence of the subconscious. He also showed that subconscious dynamics has a powerful, sometimes catastrophic influence on the individual's conscious life. Here we are touching on the second element of his theory: *the capacity of the subconscious to harbor multiple centers of influence that may build up strength and seriously affect the waking self*.¹³¹

Janet started from the fact that disturbing ideas can become imbedded in the subconscious and carry on a hidden independent existence. He derived this conclusion *from the phenomenon of posthypnotic suggestion*, which showed that an idea can be introduced into the mind of a somnambulist, continue to work there, and then appear as an action performed while the person is in the waking state. Here the individual believes he is operating freely, without any extraneous influence, when in fact he is performing preordained actions. Now if ideas suggested by a magnetizer could have this kind of hidden influence on the waking life, could not ideas implanted through other means do the same? Could not ideas formed because of traumatic experiences bury themselves somewhere in the mind and later emerge in problematic thoughts, feelings, or actions? Janet believed that they could. He said that these buried ideas draw related thoughts to themselves and coalesce into subconscious psychic centers that can attain a surprising degree of autonomy. *He called these dynamic psychic centers “subconscious fixed ideas”¹³² and demonstrated how they were formed through traumatic experience and expressed through symptoms of disturbance in the form of automatic reactions beyond the individual's conscious control*. Janet's formulation of human psychology was simple and it became a model for dynamic psychotherapies to follow. His patients were, he said, dual in that they had a conscious life and a subconscious life functioning simultaneously. Like the conscious part, the subconscious part is capable of independent mental acts and has its own responses to

experience. These fixed ideas, those powerful but isolated psychic units, could develop and manifest in waking life as bizarre symptoms. *They could even take on a kind of self-consciousness and manifest in the everyday world as multiple personalities—termed by Janet “successive existences.”* Therapy for these conditions consisted in devising ways to make the subconscious world conscious. This meant uncovering the fixed ideas and either removing them or altering them in such a way that they were rendered harmless. Through his work Janet established the psychotherapeutic territory of the alternate consciousness. In the process he identified and confirmed its four essential characteristics. He showed that it was (1) intelligent, capable of understanding facts and events and making judgments based on reasoning; (2) reactive, aware of what is happening in the environment and capable of responding to those events; (3) purposeful, able to pursue its own goals and take action based on its own criteria, which may differ from those of the individual’s normal consciousness; and (4) co-conscious, existing simultaneously with the consciousness of daily life (even though unrecognized by that consciousness) and carrying out its own operations concurrently with those of normal consciousness.

Subconscious Mental Activity: Further Developments

In 1890 William James (1842–1910) published a response to Janet’s notion of the subconscious. Writing about *L’automatisme psychologique*, James remarked on the importance of the discovery of a number of personalities in one individual that

are proved by M. Janet not only to exist in the successive forms in which we have seen them, but to coexist, to exist simultaneously. ... This simultaneous coexistence of the different personages into which one human being may be split is the great thesis of M. Janet’s book.¹³³

Six years later James again took up the subject in his Lowell Lectures.¹³⁴ There he spoke of a secondary intelligence that can attend to its own affairs without interfering with ordinary active consciousness. Given the proper circumstances, it shows itself in waking life, sometimes in most dramatic ways. These manifestations of the secondary intelligence form the topics of James’s lectures. They include the automatisms (such as automatic writing), hysteria, multiple personality, demoniacal possession, and witchcraft. James viewed all these phenomena as understandable in terms of the action of an intelligent subconscious mind *and saw in the psychology of the subconscious the potential for a therapy that could effectively come to terms with some of the greatest of human mental ills.* As James struggled with the mysteries of the subconscious, he continually cited the work of British psychical researcher Frederick Myers (1843–1901).

In the 1880s and 1890s Myers had written a number of articles on what he came to call the “subliminal self.”¹³⁵ James saw in Myers’s body of work a comprehensive and enlightened attempt to describe the nature of the hidden region of the mind. *When Myers died in 1901, James wrote that he considered Myers to be one of the most remarkable psychological synthesizers of his day.* He believed that Myers better than anyone else had mapped out the crucial uncharted regions of the subliminal self and that the challenge of exploring that inner landscape should thenceforth be named “the problem of Myers.”¹³⁶ For Myers, the subliminal self was the self “below the threshold” of consciousness. It was the individual’s main self, true self, or greater self. *Myers held that our ordinary consciousness, which he called the supraliminal self (that above the threshold of consciousness), was simply a subordinate stream that had evolved from the subliminal self in order to exercise those capacities we need for existing in the world. As such, the supraliminal self was but a small fragment of the whole person.* It was the seat of one’s ability to sense, think, solve practical problems, and adapt to the changing vicissitudes of everyday life. Shades of Freud!

In Myers’s conception of human personality, the subliminal self was the source of all faculties, lower and higher, operating outside our ordinary awareness. This means that it was both the source of control over our physiological functions and also the seat of our highest intuitive powers. At the same time it was *the repository of forgotten or dissociated memories and so served as a storehouse for split-off segments of experience (Janet’s subconscious fixed ideas),* which may become the seeds for hysterical symptoms or

even full-blown alternate selves. These split-off segments could break through the threshold of consciousness into supraliminal awareness and manifest in the individual's ordinary life. Using this paradigm of human personality, Myers could explain everything from disintegrations of personality to flights of inspired genius, and that is exactly what he did in his posthumously published two-volume *Human Personality and Its Survival of Bodily Death*.¹³⁷ Although *Human Personality* was a treatise on psychical research, Myers's viewpoint was preeminently psychological. The work contained an extensive treatment of the phenomena of dissociation drawn from sources in many languages. The two volumes contain more than seven hundred pages of appendices that summarize cases and contemporary opinions ventured by investigators in the field. *Its summary of cases of multiple personality was the most extensive in print up to that time, and it remains a valuable resource for the investigator.*

Myers's subliminal self differed greatly from Janet's subconscious. For Janet, the subconscious exists only where a weakness of the psyche prevents the individual from adequately processing experiences. For Myers, on the other hand, the subliminal self is the very core of all human beings—healthy or ill. A rich psychical universe exists below normal conscious awareness. Although unassimilated experiences may exist there as fixed ideas or even dissociated personalities, that is only a small part of the subliminal world. More important are the sublime capacities that reside there and manifest in uprushes of genius, outbursts of creativity, spiritual striving, and all that is best in human endeavor.

While Myers, James, and others were willing to talk about the metaphysical implications of such a view, there were those who felt, like Janet, that it was better to stay clear of such speculations. In this group one would have to place Morton Prince (1854–1929), professor of neurology at Tufts Medical School and founder-editor of the *Journal of Abnormal Psychology*. He experimented with automatism, particularly from his work with multiple personality.¹³⁸ Following Myers's lead, Prince formulated a notion of the subconscious that significantly enhanced Janet's theory. Prince believed that a principal source of information about the subconscious comes from automatisms, such as automatic writing. He thought that any attempt to explain such phenomena in terms of purely physiological processes was doomed to failure because of the complex nature of some automatic productions. Automatic writing often does not consist of words, phrases, or short pieces that are mere repetitions of contents previously shaped by the individual's conscious mind: frequently it produces elaborate compositions of great complexity and originality. Moreover, the products of automatic writing in many cases manifest as the creation of a personality quite unknown to the main personality of the writer, but with all the characteristics we ascribe to individual human personality. Such phenomena, says Prince, necessitate the postulation of a subconscious intelligence that can produce ideas dissociated from normal consciousness.¹³⁹

In his psychological writings, Prince offered a comprehensive framework for understanding dissociation that was based on a clarification and careful definition of terms that up to then had been employed in contradictory ways.¹⁴⁰ He pointed out that "subconscious" and "unconscious" had often been used as synonyms, but this was confusing because they referred to different classes of facts. *He undertook to replace the term "subconscious," as derived from Janet, with the term "coconscious" and to reserve the term "unconscious" to those basically physiological processes devoid of the attributes of consciousness.* For Prince "unconscious" refers to those neurological processes concerned with the registration, storage, and retrieval of memories. But "coconscious ideas" or "coconsciousness" has to do with one or more dissociated consciousnesses that coexist with one's normal personal consciousness. Prince pointed out that coconscious ideas have been called unconscious (for example, by Freud) because the personal consciousness is not aware of them. But this designation is confusing and so should be avoided. Coconscious ideas include both states of which we are not aware because they are not the focus of our attention as well as pathologically split-off and independently active ideas or systems of ideas, such as occur in hysteria and reach their most striking form in coconscious personalities and automatic writing. Prince preferred the term "coconscious" to Janet's "subconscious" for two reasons: first, because it expressed the simultaneous coactivity of a second consciousness; and second, because the coactive ideas or idea systems might not be outside the awareness of the personal consciousness at all. They might be recognized by the personal consciousness as a distinct consciousness existing alongside it. Through his redefinition of terms, Prince made simultaneous activity of two or more systems of

consciousness in one individual the key element in dissociation. In this way, Prince formulated the notion of a spectrum of dissociation, ranging from automatisms that may occur in healthy persons to full-blown multiple personality in which dissociated systems have taken on a stable, personalized form. Hence like Myers and Freud, and unlike Janet, Prince viewed subliminal mentation/motivation as present in “normals” as well.

Josef Breuer and Sigmund Freud

At the moment when the alternate-consciousness paradigm with an accompanying psychotherapy was reaching its maturity in the work of Janet and others, a new psychodynamic system was about to burst on the scene. That system, developed by Sigmund Freud, would take the stage with such dynamic force, that other actors—specifically those concerned with exploring the alternate-consciousness paradigm—were largely eclipsed. Psychoanalysis was itself a beneficiary of the alternate-consciousness tradition and could not have come into being without it. It so radically reshaped the ideas transmitted in that tradition, however, that the two could not stand comfortably together. Josef Breuer (1842–1925) can be situated in the stream of thought arising out of the tradition of magnetic sleep and hypnotic somnambulism. He knew about the flurry of interest Hansen’s mesmeric demonstrations had induced in Germany. He commented on Johann Czermak’s paper on the hypnotism of animals and wrote one of his own on the subject. This knowledge became useful when, in 1880, he began the treatment of a twenty-one-year-old woman named Bertha Pappenheim. Born to an Orthodox Jewish family, Bertha attended a Catholic private school and received a broad education. When her father fell seriously ill in 1880, she took on the duties of looking after him at night. After a short period of time, Bertha was suddenly seized by a paralysis in her right leg, the first of a series of symptoms that would incapacitate her. Breuer was called in to see what could be done for her. Bertha’s symptoms were typical of what was then diagnosed as hysteria, but Breuer did not choose the usual treatment methods of the time. Instead of seeing it as basically physiological in origin, he looked for psychological causes. *Bertha manifested two distinct personalities*: a “normal,” gloomy personality and an “abnormal,” crude, agitated personality that was subject to hallucinations. When in her secondary state during the day she would mention single words that hinted at a rich fantasy life. Breuer noted that at dusk each day Bertha would fall into a spontaneous state of self-hypnosis, and he used those periods for her therapy. He had her tell stories built around the words uttered during the daytime, and Bertha would wake from these sessions feeling peaceful. Then Bertha’s father died, and she got much worse. Breuer intensified his treatment and discovered that if Bertha was able to identify the incident that occasioned the formation of one of her symptoms, that symptom would disappear. *Using this treatment approach, the original traumatic events at the core of her illness were revealed and her symptoms lessened.* Bertha later became a distinguished social worker.

Breuer spoke to his young colleague Sigmund Freud about his therapy with Bertha, and in 1892 they put into systematic form the elements of the therapy that had evolved through this work (eventually published in *Studies in Hysteria* using “Anna O.” as a pseudonym for Bertha).¹⁴¹ They termed her illness a “traumatic hysteria,” seeing it as a psychological condition that could be treated by psychological means. The treatment had several elements. Breuer prevented the buildup of day-to-day anxiety by processing the traumatic material in story telling. He dealt with the morbid symptoms by having Bertha recall the occasion on which they first occurred, releasing the affect that had been trapped with the traumatic memory; this was called “abreaction of pathological affects” and led to a “catharsis” and freedom from the symptoms. Breuer concluded from this that the traumatic memories constituted “ideas inadmissible to consciousness” that were avoided through the symptom formation. *His psychotherapy brought the operative force of the idea to an end by allowing the patient to release its “strangled affect” through speech, in that way bringing the forbidden idea into consciousness.*¹⁴² Breuer’s published account of his therapy with Bertha shows that he had come to consider all psychopathological symptoms to be manifestations of “hypnoid states”—self-induced states of hypnosis.¹⁴³ Breuer believed that people like Bertha have an innate disposition to go into such states. He also believed that hypnoid states can be generated by a buildup of affect or emotion that cannot be integrated into normal

consciousness. Sometimes the affect is so powerful, and therefore so threatening, that the resulting hypnoid state exists in total isolation from ordinary consciousness. Breuer agreed with Janet that the memory of a psychic trauma can exist within a person like a foreign body affecting waking life. Like Janet, he spoke of “unconscious ideas,” but with a different meaning. He noted that in many patients there is a large complex of ideas that are admissible to consciousness and a smaller complex of ideas that are not, so that the individual’s “field of ideational psychological activity” is broader than consciousness and is divided into a conscious and an unconscious part. Breuer called this division the “splitting of the mind.” *He believed that this duplication of psychological functioning is present in all human beings—both the healthy and the ill.*

Breuer also disagreed with Freud about certain things. They agreed about catharsis but differed on the matter of hypnoid states. Freud believed that a splitting of the mind could be produced by the deliberate deflection of consciousness from distressing ideas, but Breuer held that the assistance of hypnoid states was necessary if a true splitting of the mind was to occur.¹⁴⁴ Later, Freud said that he regarded the use of the concept and term “hypnoid state” as “superfluous and misleading.”¹⁴⁵ *In this way Freud drew back from the tradition of double consciousness that had for decades related split-off segments of the mind to magnetic or hypnotic somnambulism. Breuer was still firmly planted in that historical stream, seeing spontaneously induced hypnoid states as the splitting mechanism and artificially induced somnambulism as the most effective tool for psychotherapy.* Freud looked in a different direction for the splitting of the mind and in the process made the use of artificial somnambulism in psychotherapy unnecessary. This was not the only way in which Freud turned away from the magnetic/hypnotic/alternate-consciousness tradition. *Nowhere did this divergence appear more clearly than in Freud’s controversy with Janet about the nature of unconscious ideas.* Janet, following Myers, believed that an individual can have a number of centers of consciousness operating subconsciously. For Janet, there was no problem in accepting the notion of the simultaneous functioning of more than one stream of mental activity, some of which escapes the awareness of ordinary waking consciousness. He described these separately functioning streams as one might describe independent minds in different people. Freud, however, saw consciousness as a unique thing—one person can have but one consciousness.¹⁴⁶ For Freud, dissociated systems are simply separate groups of mental but unconscious elements. As our consciousness turns now to one group, now to another, as a search light shines now on one object and now on another, the dissociated groups partake of consciousness or manifest in conscious life. Of themselves the dissociated systems are mental in character but not conscious. *Freud simply could not accept the identity of the conscious and the mental and insisted that mental acts are in the first instance unconscious.* Clearly, for Freud there could be no doubling of consciousness, no second consciousness.^{147,148} Many of Freud’s contemporaries criticized psychoanalysis for not recognizing dissociative phenomena in patients and for being incapable of dealing with severe dissociative conditions such as multiple personality disorder.¹⁴⁹ *Freud believed that within his framework he could explain automatisms and dissociations very well, suggesting that multiple personality could be seen as the seizing of consciousness by different identifications.*¹⁵⁰ *It remains true, however, that Freud said very little about dissociative conditions and by denying the possibility of secondary centers of consciousness made it very awkward to work with severe cases.* For all of his contributions to dynamic psychiatry, by discarding this aspect of the alternate-consciousness tradition, he removed a powerful therapeutic tool from his arsenal. This legacy remains in the disbelief of many psychoanalysts in “multiple personality disorder.”

The Alternate Consciousness Paradigm in 1910

The alternate-conscious paradigm for explaining disturbances of consciousness took more than one hundred years to evolve from its beginnings in magnetic somnambulism to its maturity in the systems of the late nineteenth century. In its developed form the paradigm embodied five key elements: (1) there is a mental life existing apart from normal waking consciousness, (2) which functions simultaneously with and parallel to normal consciousness, (3) and may exhibit ideas and values at odds with ordinary consciousness, (4) and exerts a profound influence on the conscious life of the individual, (5) so that psychotherapy must deal with the dynamics of this hidden mental life and its interaction with normal consciousness. These elements are the

principles on which modern dynamic psychiatry and psychotherapy are based. The rich magnetic tradition from which they evolved has up to now been little appreciated by contemporary practitioners, but there are signs that this is in the process of change. Freud was influenced—both directly and indirectly (through Breuer) by this paradigm. Still, it would be erroneous to deny Freud's great originality.

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87. Phineas Parkhurst Quimby. *The Quimby Manuscripts*, Horatio W. Dresser (ed.). New York: T. Y. Crowell, 1921.
88. Quimby's ideas were taken up and transformed by one of his patients, Mary Baker Eddy. They were important in her formulation of the philosophy of Christian Science.
89. Robert Fuller. *Mesmerism and the American Cure of Souls*. Philadelphia: University of Pennsylvania Press, 1982, pp. 48–68, 144–145.
90. Fuller, p. 59.
91. John Benoit De Mainauduc. *The Lectures of J. B. De Mainauduc, M. D. Part the First*. London: Printed for the Executrix, 1798.
92. D. Edwards. *Treatise on Animal Magnetism*. London: Wagstaff, 1789; Mary Pratt. *A List of a Few Cures Performed by Mr. and Mrs. De Louthembourg of Hammersmith Terrace, Without Medicine*. London: J. P. Cook, 1789; John Martin. *Animal Magnetism Examined: in a Letter to a Country Gentleman*. London: Stockdale, 1790; John Pearson. *A Plain and Rational Account of the Nature and Effects of Animal Magnetism*. London: W. and J. Stratford, 1790; *A Practical Display of the Philosophical System Called Animal Magnetism*. London: no publisher, 1790; Valentine Absonus. *Animal Magnetism. A Ballad, with Explanatory Notes and Observations; Containing Several Curious Anecdotes of Animal Magnetizers, Ancient as well as Modern*. London: no publisher, 1791; Samuel Stearns. *The Mystery of Animal Magnetism Revealed to the World*. London: M. R. Parsons, 1791; *Wonders and Mysteries of Animal Magnetism Displayed*. London: J. Sudbury, 1791.
93. John Bell. *The General and Particular Principles of Animal Electricity and Magnetism*. London: The Author, 1792, p. 68.
94. For a description of the popular interest in animal magnetism in Britain during this period, see Roger Cooter. *The Cultural Meaning of Popular Science: Phrenology and the Organization of Consent in Nineteenth Century Britain*. Cambridge: Cambridge University Press, 1984.
95. John Elliotson. *Numerous Cases of Surgical Operations without Pain in the Mesmeric State: with Remarks upon the Opposition of Many Members of the Royal Medical and Chirurgical Society and Others to the Reception of the Inestimable Blessings of Mesmerism*. London: H. Baillièrè, 1843. James Esdaile. *Mesmerism in India and its Practical Application in Surgery and Medicine*. London: Longman, Brown, Green, and Longmans, 1846. Esdaile also wrote a book on mesmerism describing other somnambulistic phenomena: *Natural and Mesmeric Clairvoyance*. London: H. Baillièrè, 1852.
96. See Crabtree 1993, pp. 137–142 for a more complete discussion.
97. This English term was coined by Chauncy Hare Townshend in *Facts in Mesmerism with Reasons for a Dispassionate Inquiry into It*. London: Longman, Orme, Brown, Green and Longmans, 1840.
98. John Campbell Colquhoun. *Report of the Experiments on Animal Magnetism, Made by a Committee of the Medical Section of the French Royal Academy of Sciences*. Edinburgh: Robert Cadell, 1833; *Isis Revelata: an Inquiry into the Origin, Progress & Present State of Animal Magnetism*. 2 vols. Edinburgh: Maclachlan & Stewart, 1836.
99. Spenser Hall. *Mesmeric Experiences*. London: H. Baillièrè, 1845. George Barth. *The Mesmerist's Manual of Phenomena and Practice*. London: H. Baillièrè, 1850; *Mesmerism Not Miracle*. London: H. Baillièrè, 1854. One of the curious works of the period (John Wilson. *Trials of Animal Magnetism on The Brute Creation*. London

- Sherwood, Gilbert, & Piper, 1839). described the production of magnetic somnambulism in animals. This study had relevance to the question of the degree to which the phenomena of animal magnetism were due to suggestion.
100. Chauncy Hare Townsend. *Facts in Magnetism*. London: Longman, Orne, Brown, Green, and Longmans, 1840. William Gregory. *Letters to a Candid Inquirer, on Animal Magnetism*. London: Taylor, Walton, and Maberly, 1851. Herbert Mayo. *Letters on the Truths Contained in Popular Superstitions, with an Account of Mesmerism*. 2nd edition. Edinburgh: William Blackwood, 1851; Joseph W. Haddock. *Somnolism and Psycheism, Otherwise Vital Magnetism, or Mesmerism: Considered Physiologically and Philosophically*. London: Hudson, 1849. Other influential writings on animal magnetism were [William Lang]. *Mesmerism; Its History, Phenomena, and Practice: With Reports of Cases Developed in Scotland*. Edinburgh: Fraser, 1843; Harriett Martineau. *Letters on Mesmerism*. London: E. Moxon, 1845; William Newnham. *Human Magnetism; Its Claims to Dispassionate Inquiry*. London: Churchill, 1845; George Sandby. *Mesmerism and Its Opponents*. London: Longman, Brown, Green, and Longmans, 1848; W. Scoresby. *Zoistic Magnetism*. London: Longman, Brown, Green, and Longmans, 1849; John Ashburner. *Notes and Studies in the Philosophy of Animal Magnetism and Spiritualism*. London: H. Baillière, 1867. Works critical of mesmerism included John Forbes. *Mesmerism True—Mesmerism False: A Critical Examination of the Facts*. London: Churchill, 1845; John Hughes Bennett. *The Mesmeric Mania of 1851*. Edinburgh: Sutherland and Knox, 1851; William Carpenter. *Principles of Mental Physiology*, 4th edition. London: Henry S. King, 1876.
 101. Charles Lafontaine. *L'art de magnétiseur ou le magnétisme animal considéré sous le point de vue théorique, pratique et thérapeutique*. Paris: Germer Baillière, 1847; Lafontaine. *Eclaircissements sur le magnétisme. Cures magnétiques à Genève*. Geneva: De Chateauevieux, 1855.
 102. James Braid. *Satanic Agency and Mesmerism Reviewed*. Manchester: Simms and Dinham, and Galt and Anderson, 1842.
 103. Quoted in Maurice Tinterow. *Foundations of Hypnosis from Mesmer to Freud*. Springfield, Ill.: Charles C. Thomas, 1970, p. 321.
 104. James Braid. *Neurypnology or the Rationale of Nervous Sleep Considered in Relation with Animal Magnetism*. London: John Churchill, 1843.
 105. James Braid. *Electro-biological Phenomena Considered Physiologically and Psychologically*. Edinburgh: Sutherland & Knox, 1851; *Magic, Witchcraft, Animal Magnetism, Hypnotism, and Electrobiology*, 3rd edition. London: J. Churchill, 1852; *The Physiology of Fascination and the Critics Criticized*. Manchester: Grant & Co., 1855.
 106. Braid, 1851.
 107. Braid, 1853.
 108. Abbé José Custodio de Faria. *De la cause du sommeil lucide, ou étude de la nature de l'homme. Tome premier*. Paris: Mme. Horiac, 1819; Etienne Félix, baron d'Hénin de Cuvillers. *Exposition critique du système et de la doctrine mystique des magnétistes*. Paris: Barrois, Belin le Prieur, Treuttel et Wurtz, and Delaunay, 1822; Alexandre Bertrand. *Du magnétisme animal en France*. Paris: J. B. Baillière, 1826.
 109. William Carpenter was one of the few prominent contemporary Englishmen to credit Braid with an important discovery (Carpenter 1853).
 110. Paul Broca. *Sur l'anesthésie chirurgicale hypnotique*. Paris: Noblet, 1859.
 111. Eugène Azam. *Note sur le sommeil nerveux ou hypnotisme*. *Archives générales de médecine* (Jan. 1860): 5–24; Joseph Pierre Durand [pseudonym: A. J. P. Philips]. *Cours théorique et pratique de braidisme ou hypnotisme nerveux*. Paris: J. B. Baillière, 1860; Ambroise Auguste Liébeault. *Du sommeil et des états analogues considérés surtout au point de vue de l'action du moral sur le physique*. Paris: Victor Masson et fils, 1866; Liébeault. *Ebauche de psychologie*. Paris: G. Masson, 1873; Hippolyte Bernheim. *De la suggestion dans l'état hypnotique et dans l'état de veille*. Paris: Octave Doin, 1884.
 112. Albert Moll. *Der Hypnotismus*. Berlin: H. Kornfeld, 1889, pp. 8–9.
 113. Though Preyer had previously written of his experiments using animal magnetism on animals and men in his 1878 *Die Kataplexie und der theirische Hypnotismus* (Jena: G. Fischer) and 1880 *Naturwissenschaftliche Thatsachen und Probleme* (Berlin: Paetel), it was apparently only with his exposure to Braid's ideas that he was able to formulate a cohesive theory, for which see his 1881 *Die Entdeckung des Hypnotismus* (Berlin: Paetel) and 1890 *Der Hypnotismus* (Vienna: Urban & Schwarzenberg)..
 114. Charles Richet, "Du somnambulisme provoqué." *Journal de l'anatomie et de la physiologie normales et pathologiques de l'homme et des animaux* (1875) 11: 348–378.
 115. Eberhard Gmelin. *Ueber den thierischen Magnetismus*. Tübingen: Heerbrandt, 1787, 1, pp. 2–89.

116. Eric T. Carlson, Jeffrey L. Wollock, and Patricia S. Noel (editors). *Benjamin Rush's Lectures on the Mind*. Philadelphia: American Philosophical Society, 1981, p. 669.
117. Eric T. Carlson. "The history of multiple personality in the United States: Mary Reynolds and her subsequent reputation." *Bulletin of the History of Medicine* 58: 72–82.
118. Adam Crabtree. 1988, pp. 283 and following.
119. John Elliotson, "Instances of double states of consciousness independent of mesmerism." *Zoist* (1846) 4, p. 157.
120. William Gregory, *Letters to a Candid Inquirer, on Animal Magnetism*. London: Taylor, Walton, and Maberly, 1851, pp. 84 and 85.
121. For example, H. Dewar, "Report on a communication from Dr. Dyce." *Transactions of the Royal Society of Edinburgh* 9 (1823), 365–379 and Thomas Mayo. "Case of double consciousness." *London Medical Gazette* 36 (1845), 1202–1203.
122. See Crabtree 1993, Chapter 12.
123. Paris: Ledoyen, 1855, pp. 11–44.
124. William James, "Notes on automatic writing." *Proceedings of the (Old) American Society for Psychical Research* 1 (1889): 551–554.
125. For a listing of pre-1784 cases, see Gauld 1992, p. 629, as well as his "Hypnosis, Somnambulism, and double consciousness." *Contemporary Hypnosis* 9 (1992): 69–76. For post-1784 cases see Crabtree 1988 and Carole Gottman, George Greaves, and Philip Coons. *Multiple Personality and Dissociation: 1791–1990: A complete Bibliography*. Atlanta: Privately published, 1992.
126. I am indebted to John Gach for suggesting that symptoms cannot actually be a language since they have no syntax independent of their semantic reference. Viewed semantically, however, symptoms are quite language-like in that the connection of both words and symptoms to their meanings is loose and severable, is culturally defined, and may change over time. In addition, both have synchronic and diachronic aspects: At any one time both words and symptoms can appear to be tightly bound to their meanings, while over time, meanings can change dramatically, even into their opposites.
127. Eugène Azam. "Amnésie périodique ou dédoublement de la vie." *Revue scientifique* 16 (1876): 481–489; "Le dédoublement de la personnalité: Suite de l'histoire de Félicité X***." *Revue scientifique* 18 (1876): 265–269; "Le dédoublement de la personnalité et l'amnésie périodique." *Revue scientifique* 20 (1877): 577–581; *Hypnotisme, double conscience et altérations de la personnalité*. Paris: Librairie J. H. Baillière, 1887; *Hypnotisme et double conscience. Origine de leur étude et divers travaux sur des sujets analogues*. Paris: Félix Alcan, 1893.
128. Henri Bourru and P. Burot. *Variations de la personnalité*. Paris: J. B. Baillière, 1885. Ian Hacking has published a study of the relationship between the evolution of multiple personality as a disorder and the evolution of thinking about memory, identifying the case of Louis Vivé as pivotal in this development. *Rewriting the Soul: Multiple Personality and the Sciences of Memory*. Princeton, NJ: Princeton University Press, 1995.
129. Pierre Janet. *L'automatisme psychologique: Essai de psychologie expérimentale sur les formes inférieures de l'activité humaine*. Paris: Félix Alcan, 1889.
130. Janet, "Les actes inconscients et le dédoublement de la personnalité pendant le somnambulisme provoqué." *Revue philosophique* 22 (1886): 577–592; "L'anesthésie systématisée et la dissociation des phénomènes psychologiques." *Revue philosophique* 23 (1887): 449–472; "Les actes inconscients et la mémoire pendant le somnambulisme." *Revue philosophique* 25 (1888): 238–279.
131. It is important to note that although Janet was first to develop the notion of intelligent subconscious centers of consciousness in a psychotherapeutic direction, he did not originate the concept. The idea of secondary centers of consciousness had been worked out by Frederic W. H. Myers in articles written in the 1880s. Elsewhere I have more fully described Myers's influence on Janet's thinking: Adam Crabtree. "'Automatism' and the emergence of dynamic psychiatry." *Journal of the History of the Behavioral Sciences*, 39 (2003): 51–70; and "Automatism and secondary centers of consciousness," in *Irreducible Mind: Toward a Psychology for the 21st Century* by Edward Kelly, Emily Williams Kelly, Adam Crabtree, Alan Gauld, Michael Grosso, and Bruce Greyson (Lanham, Maryland: Rowman and Littlefield, 2007).
132. The notion of "fixed ideas" in the context of hypnotic suggestion is found previously in Braid 1853 and Liébault 1873, p. 176.
133. William James. *Principles of Psychology*. New York: Henry Holt, 1890, pp. 367–368.
134. Eugene Taylor. *William James on Exceptional Mental States: The 1896 Lowell Lectures*. New York: Charles Scribner's Sons, 1983.

135. Frederick H. Myers. "The subliminal consciousness." *Society for Psychical Research Proceedings* 7 (1892): 298–355; "The subliminal consciousness." *Society for Psychical Research Proceedings* 8 (1892): 436–535; "The subliminal consciousness." *Society for Psychical Research Proceedings* 9 (1893): 2–128; "The subliminal self." *Society for Psychical Research Proceedings* 11 (1895): 334–593.
136. William James. In memory of F. W. H. Myers. *Society for Psychical Research Proceedings* 17 (1901): 13–23.
137. London: Longmans, Green, and Co., 1903. 2 vols.
138. Morton Prince. *The Dissociation of a Personality: A Biographical Study in Abnormal Psychology*. New York: Longmans, Green, 1905.
139. A symposium on the subconscious. *Journal of Abnormal Psychology* 2 (1907): 67–80.
140. Morton Prince. *The Unconscious: the Fundamentals of Human Personality Normal and Abnormal*. New York: Macmillan, 1914; *Clinical and Experimental Studies in Personality*. Cambridge, Massachusetts: Sci-Art Publishers, 1929.
141. Their original paper, "Über den psychischen Mechanismus hysterischer Phänomene: Vorläufige Mitteilung," appeared in the *Neurologische Centralblatt*, 12 (1893): 4–10, 43–47, and then in book form, with Freud writing the theoretical chapters, as *Studien über Hysterie*. Leipzig/Vienna: Franz Deuticke, 1895. English version as *Studies in Hysteria (1893–1895)*. In *The Standard Edition of the Complete Psychological Works of Sigmund Freud*. Vol. 2. London: Hogarth Press, 1964.
142. Freud, *Standard Edition*, Vol. 2, pp. 17 and 222.
143. *Ibid.*, p. 216.
144. *Ibid.*, pp. 215–230.
145. *Ibid.*, pp. 235–236.
146. *Ibid.*, p. 27 note.
147. *Ibid.*, pp. 21–22.
148. *Ibid.*, pp. 21–22, 170–171; and Freud, *An Autobiographical Study*. In *Standard Edition*, Vol. 20, p. 31). For more on the differing views of Freud and Janet in this matter, see my "Explanations of dissociation in the first half of the twentieth century." In *Split Minds and Split Brains*, edited by Jacques Quen. New York: New York University Press, 1986 and my "Automatism and secondary center of consciousness" (2007), pp. 327–332.
149. See, for example, Bernard Hart, "The conception of dissociation." *British Journal of Medical Psychology* 6 (1926): 241–263.
150. Sigmund Freud. *The Ego and the Id* (1923). In *Standard Edition*, Vol. 19, pp. 30–31.

Chapter 20

Psychoanalysis in Central Europe

The Interplay of Psychoanalysis and Culture

Hannah S. Decker

Preface

This chapter was originally written over a long period of time and revised and updated twice. Therefore, I wish to call attention to some of the issues I addressed originally so that I might give the reader the benefit of some new work on these subjects. I also have updated references to the periodical literature about Austria, Germany, and Switzerland in an attempt to provide guidance to some recent concerns. Some books are also included. All these additions, corrections, and references can be found in an Appendix at the end of this chapter. Also, note that in the text I have inserted “See Appendix” in specific places where it might be helpful for the reader to turn immediately to my commentary.

Introduction

Psychoanalysis began as a highly specific attempt by Sigmund Freud, a practicing neurologist, to treat the myriad and recalcitrant symptoms of hysteria. As Freud developed theories and techniques that would enable him to reach his goal, he came to believe that he had discovered more than a medical cure. By 1899, the year he completed *The Interpretation of Dreams*, he was theorizing about the psychological development of infants and children as well as the unconscious motives that governed much of adult behavior. Within a few years he was applying these ideas to virtually every sphere of social and cultural activity. It is within this broadened milieu that he sought first to gain academic legitimacy for psychoanalysis and then to institutionalize it. Thus, in the early years of the twentieth century, psychoanalysis began to claim a position in the scientific arena and general consciousness of the West, eliciting immediately a wide variety of reactions.¹

This chapter gives an account of psychoanalysis as a movement and a cultural entity in Austria, Switzerland, and Germany. It discusses, in each instance, the institutional growth of psychoanalysis and the roles of the leading personalities involved. Interwoven with these internal histories are a variety of broad issues. They include the tension in the psychoanalytic movement between the dedication of its members to the advancement of their cause as opposed to their furthering the accepted goals of science; the public association of psychoanalysis with other provocative movements of the early twentieth century, such as the Monist Association and the Medical Society for Sexual Science; the effects Freud’s emphasis on sexuality had on the reception of psychoanalysis; and the extent to which anti-semitism affected Freud’s career and the spread of psychoanalysis.

The chapter also compares the development and reception of psychoanalysis in each country and notes the differing extent to which psychoanalysis has achieved prominence and cultural integration in each

nation. In addition, it examines specific, pre-existing social, intellectual, and medical circumstances that help to explain the individual variances.

Unique environments are not the only factors that have played a pivotal role in the development of psychoanalysis. There are two ubiquitous circumstances whose influence has also been profound. This chapter, limited to three countries, can only begin to depict these trends. Yet, even here, enough evidence emerges to illustrate them. The first broad circumstance is the historical tension—indeed sometimes struggle—between organically and non-organically oriented science and medicine. In this contest, the organic-materialist approach has generally prevailed, even during periods of intense interest in nonmaterialist theories and investigations. One such period occurred from 1880 to 1915, when there was an upsurge of European interest in dissociative phenomena such as nonmaterial presence and communication, hypnotism, multiple personality, altered states of consciousness, and the existence of unconscious ideas. Freud formed his ideas as part of both the contemporary subordinate, nonmaterialist concerns and the dominant, materialist emphases. Psychoanalysis has continued to be shaped and at times afflicted by the ongoing materialist/nonmaterialist duel in Western science.

The second general factor affecting the course and reception of psychoanalysis has been nationalism. From its beginning until today, psychoanalysis has been viewed by Europeans as enunciating national or specific cultural philosophies of child rearing, education, and sexual expression.. Thus, psychoanalysis has often appeared to be foreign and either irrelevant, undesirable, or dangerous. Before World War I, psychoanalysis was assailed because of its identification with the Austro-German and Slavic worlds. (This was simultaneously separate from and related to its Jewish identity.) The French saw the “Germanic” Freud as a pupil of the discredited neurologist Charcot, while many Germans and Austrians saw him as unduly influenced by his French medical contacts. Although this chapter is specifically concerned with Central Europe, the Introduction is an appropriate place to note that between the two world wars, psychoanalysis suffered from Anglo-French prejudice insofar as it was regarded as German. In addition, after World War II, the fact that psychoanalysis was deemed to be American advanced its progress in Germany, Holland, and Scandinavia and retarded it in France and Italy.

Should the reader wish to pursue either particular developments or general trends in several Western European countries (and in Hungary), he or she can consult the bibliographic guide at the end of the chapter. It is not exhaustive but offers an entrée.

Austria

The logical place to begin the history of European psychoanalysis is in Vienna, the home of Sigmund Freud (1856–1939) from the time he was four years old. Freud completed medical school at the University of Vienna, took a mixed residency stressing neurology at the Vienna General Hospital, and in 1886 entered the private practice of neurology. In the 1880s and 1890s he developed the methods and theories that gave rise to psychoanalysis, a term he used for the first time in 1896. In 1902 he felt ready to gather around him a small group of physicians interested in his work so that he might share and spread his ideas. To his apartment, then, came Alfred Adler, Max Kahane, Rudolf Reitler, and Wilhelm Stekel. Kahane and Reitler had been attending Freud’s lectures on psychoanalysis at the University of Vienna, and Stekel had been analyzed by Freud on the advice of Kahane. How Adler and Freud got together has never been made totally clear.

The five men began to meet every Wednesday evening in Freud’s waiting room, and thus began the first psychoanalytic organization, at the time modestly dubbed the “Psychological Wednesday Society.” Stekel regularly reported the group’s discussions in the Sunday edition of the newspaper *Neues Wiener Tagblatt*. Additional men, some not physicians, began to join the society, so that by 1908 there were twenty-two members. Although only eight or ten attended regularly, the group felt sufficiently stable to begin to assemble a library and to change its name to the Vienna Psychoanalytic Society. In addition, from 1905 on, various members, besides Freud, began to publish psychoanalytic articles and books. By 1910, as more members attended each week, the group moved its meetings to an auditorium rented from the Vienna College of Physicians.

Although expanding, the Society was rent by tensions, rivalries, and quarrels, a state of affairs that has repeated itself numerous times in psychoanalytic societies the world over. The issues involved at that time included feelings—nourished by Freud—that psychoanalysis was getting insufficient recognition in Vienna. Hence, a sense of isolation and beleaguerment prevailed. There also existed jealousy of the attention Freud was paying his adherents in Zurich, especially the charismatic Carl Gustav Jung. Moreover, a few members were starting to question some of Freud's theoretical formulations, the foremost among these challengers being Alfred Adler (1870–1937.) Freud was growing disenchanted with his Viennese supporters, resenting their bickering and assaults. It was clear that neither individual members nor the group as a whole could give him the academic acceptance and legitimacy he sought. Early in 1910, Freud complained about the situation to his Berlin disciple Karl Abraham: “I no longer get any pleasure from the Viennese. I have a heavy cross to bear with the older generation, Stekel, Adler, Sadger. [Isidor Sadger had joined the Society in 1906.] They may soon be feeling that I am an obstacle and will treat me as such.”²

Nevertheless, when an International Psychoanalytic Association was founded in the same year and the Vienna Psychoanalytic Society became an affiliate, Adler became president of the local group. By the end of 1910, the Vienna Society had thirty-six members, and its officers besides Adler were Stekel, vice-president; Maximilian Steiner, treasurer; Eduard Hitschmann, librarian; Otto Rank, secretary; and Freud, scientific president. Early in 1911, the divergences between Adler and Freud were formally aired in two papers given by Adler and in two subsequent society discussions. Adler downgraded the importance of instinctual sexuality in the genesis of neurosis and stressed instead egoistic aggressive components, summed up in the phrase “the masculine protest.” The upshot was that later in the spring Adler resigned from the Society and from his position as co-editor of the monthly *Zentralblatt für Psychoanalyse*. He formed a group called the Society for Free Psychoanalysis (subsequently the Society for Individual Psychology), though most of its members continued to attend the Freudian Psychoanalytic Society's meeting as well. In October 1911, the Psychoanalytic Society passed a resolution that members had to choose to which society they would belong, whereupon a significant minority of members left to join Adler's group. This created a severe social crisis in the lives of several families, who no longer met or spoke to each other.³

In 1912, Freud's and Stekel's disagreements came to a head over whether Viktor Tausk, a member since 1909, should be in charge of the book review section of the *Zentralblatt*; Stekel, as editor, was strongly opposed. Rather than firing Stekel directly, Freud wrote to the publisher asking him to change editors. When the publisher refused, saying he planned to suspend publication shortly anyway, Freud got the entire editorial board to resign. Such an indirect method of dealing with opposition was not atypical for Freud. It was under these circumstances that Stekel withdrew from the Society in November 1912. Freud then started a new periodical without Stekel, the *Internationale Zeitschrift für Psychoanalyse*.

It should be noted that Freud's breaks with Adler and Stekel were not only over theoretical matters, but also involved Freud's dislike of each man's style. Freud did not care for Adler's vigorously outgoing and optimistic nature. He did not share Adler's social activism nor his unabashed manipulation of the Viennese institution of *Protektion*, the currying of favor through influential aristocrats. Adler liked coffeehouses and music, both of which Freud avoided. Adler, it must be added, was not an easy man with whom to deal. He intensified disagreements with his fierce temper and allowed an expansive ambition to govern many decisions. As for Stekel, he annoyed Freud with his proselytizing, his manners, his style of attack, and his shameless delight in revealing analytic confidences. The only member of the Psychoanalytic Society who ever dared to refer to Freud as “Freud” instead of “Herr Professor” was Stekel.⁴

Reception and Reaction

On the eve of World War I, with Adler, Stekel, and their followers gone, the Vienna Society was fairly united, if somewhat depleted. One cannot, though, sum up with an equally simple sentence the Viennese reaction to Freud before the war broke out. This is because the statements made by Freud and other early psychoanalysts about the reception of psychoanalysis in Vienna cannot be accepted as totally accurate.

Taking Freud and his disciple/biographer Ernest Jones at their word, one would conclude that the Viennese reaction was one of antipathy and rejection, relieved at times only by unknowing indifference. Jones argued that Freud endured “ostracism” before World War I, giving as an example a 1910 letter in which Freud wrote of “the constant depreciations I am suffering here.”⁵ Moreover, Freud and Jones concluded that psychoanalysis had been targeted for assault essentially on the grounds of anti-semitism and sexual prudery.

The reality is far more complex. There are manifold reasons for the negative reactions Freud encountered, and the reaction itself was mixed and certainly never as consistently intolerant as he and Jones claimed. To be sure, Freud did not have wide national acclaim and faced some strong opposition, in particular from Professor Emil Raimann, an assistant to the chief of the Psychiatric Clinic at the Vienna General Hospital. Yet Freud’s practice was full.

Medical recalcitrance to psychoanalysis must be viewed in terms of the peculiar Viennese version of the dominance of medicine by organically oriented science: therapeutic nihilism. Therapeutic nihilism originally arose in the Medical Faculty at the University during the nineteenth century as a skeptical attitude toward traditional therapies that might be doing more harm than good. The new approach was based on faith in the healing powers of nature; let illness run its course rather than allow a physician to inflict harm. The view was at its height about mid-century but lingered for decades after. Its strength can be gauged by the fact that for a while no medicine other than cherry brandy was used at the General Hospital.⁶

Therapeutic nihilism received powerful modern scientific assistance from the influence of Carl von Rokitsky (1804–1878) and Josef Skoda (1805–1881), pathological anatomists who preached that diagnosis was the overriding goal in medical practice. When treatment was called for, the one that accorded best with the emphasis on pathological anatomy was surgery, and this was reflected in the career and authority of the surgeon Theodor Billroth (1829–1894). Skepticism about other medical intervention and drug therapy remained. When at its worst, therapeutic nihilism spawned dangerous conditions, terrible nursing, and indifference to human life at the General Hospital. Freud and his contemporaries were schooled by lectures devoted exclusively to diagnosis; therapy was not mentioned. Students learned by performing postmortem examinations.⁷ Even after the notion of therapeutic nihilism waned among the Medical Faculty, it was kept alive by social critics and philosophers who argued that there was no remedy to relieve social suffering or forestall decline. Disease was to be accepted as a part of life.

Thus “physicians trained in anatomy ignored neurotic patients, on whom postmortem examinations could reveal nothing.”⁸ These heirs of therapeutic nihilism gave little credence either to Freud’s claims of the existence of nonphysical disease or to his proposals to cure its symptoms. Even at a time (c. 1890 to 1910) when a strong, European-wide interest in unconscious ideation, hypnotism, and dissociative phenomena challenged materialist science, the Austrians remained convinced that the soundest medical practice was the thorough extirpation of a physical entity. Any other form of therapy was seen as palliative at best and perhaps harboring dangers for the patient. Thus, the objection to psychoanalysis reflected both a specific, indigenous attitude based on the local legacy of therapeutic nihilism as well as the worship of materialism so prevalent in the West at the turn of the twentieth century.

The Viennese reception of psychoanalysis was affected by another situation of almost equal importance to the scientific emphasis on organic factors and limited confidence in therapeutics. This was Freud’s ambivalence toward working for the acceptance of his ideas through established medical channels. In part, this posture was bound up with his ambivalent feelings about Vienna itself.⁹ Although it was a city he refused to leave until literally forced to on peril of his life, he held it in great contempt and often talked about moving. His correspondence with Wilhelm Fliess, the Berlin nose and throat specialist who was his confidant, is replete with his fantasies that in Berlin it was easier to achieve a full practice quickly and secure economic success. He thought that if his sons went to Berlin they would “get on in the world.” He seemed persuaded that there, unlike in Vienna, the liberals were politically effective and that there was much less anti-semitism in society and among physicians.¹⁰ Freud’s antipathies toward Vienna were only partially based on conditions there and were fueled by Fliess’s nationalistic pride in Wilhelmine Germany and the erroneous belief that followers would arise more readily if Freud were located elsewhere in Europe.

Although at times his assessment of his situation was realistic,¹¹ Freud’s course of action during this early period only made matters worse. He withdrew from the Viennese medical scene and thus isolated

himself from potential followers. After 1896, Freud “eschewed academic medicine, teaching two hours per week while working eighteen hours a day on his own concerns.”¹² In 1899, he even gave up lecturing temporarily “in spite of numerous enrollments.” He wrote Fliess,

I have the same horror of the uncritical adulation of the very young that I used to have for the hostility of their elders . . . Pupils *a la* Gattel [*sic*; Felix Gattel had come from Berlin to study with Freud] are to be had for the asking; as a rule they end by asking to become patients themselves.¹³

Freud always had the ability to attract students; he was a compelling speaker, lecturing clearly without notes. When he did resume his lectures, he was very popular, though a contemporary observer reported that Freud was reluctant to have personal contacts with students. Moreover, students at the University, unless simultaneously working at the Psychiatric Clinic, needed his permission to attend the lectures, an unusual constraint.¹⁴

From the start, Freud wanted acceptance on his own terms. In 1900, the reviews of *The Interpretation of Dreams* in the Viennese press tended to be favorable, but they were not favorable enough nor did they appear quickly enough to satisfy him, as his letters to Fliess indicate. In the years following, although Freud and his adherents were able to publish their psychoanalytic articles and books with ease, they felt isolated and unappreciated. So in 1909 Freud inaugurated a psychoanalytic journal. But when the next year the liberal newspaper *Neue Freie Presse* asked him for a paper about his work, he refused, “feeling that he was already conspicuous enough in Vienna.”¹⁵ Yet six months later he complained to Jones about the “constant depreciations” he was suffering.

Offsetting Freud’s rigid pride about the proper dissemination of psychoanalytic knowledge was the more eager attitude of followers who spread his ideas through widely read newspaper *feuilletons*. Before 1910 Fritz Wittels (1880–1950), and afterward Theodor Reik (1888–1969), popularized psychoanalysis for the educated public. However, Freud did not value their activities on his behalf. Wittels left the Vienna Psychoanalytic Society in 1910 and then followed Stekel for a number of years before returning to the fold. As for Reik, Freud told him not to dissipate his talents through prolific writing, demanding of him, “Why do you pee around so much? Just pee in one spot.”¹⁶

Thus, the progress of psychoanalysis in Vienna suffered from a medicine ruled by skepticism and materialism and from a leader with confused notions of how and where to achieve recognition and even how to recognize it. Was psychoanalysis also retarded by its sexual emphases? Jones charged that Freud lived in a time of “*odium sexicum*” and that “Freud and his followers . . . were regarded . . . as sexual perverts.”¹⁷ The actual situation was complex. As regards the existence of open attention to human sexuality, psychoanalysis appeared during an era of transition; Victorian suppression of references to sexuality was waning, although far from gone. The turn of the twentieth century was a period of burgeoning sexual reform, with strong interest in changing the laws regarding homosexuality and in redefining sexual offenses. There were movements for birth control, campaigns against venereal disease and programs for sex education. Women’s rights were being pressed. The study of sexual symbolism in folklore was common. Why, then, was Freud’s concern with sexuality specifically attacked?

There are three circumstances to be considered in answering this question. The first is that in a time of transition the groups supporting the status quo respond to the groups advocating change with greater vigor and bitterness since accepted customs and morality are under siege from many directions. There is not the slightest doubt that psychoanalysis was the recipient of vicious attacks from those who felt, and correctly so, that their way of life was at stake. But this was a rear-guard action, hardly monolithic, and inevitably doomed by time. The true strength of resistance to Freud’s emphasis on sexuality did not come from these guardians of morality, noisy though they were.

More meaningful objections came from two other sources. One was the psychiatrists, although their opposition was actually expressed more emphatically in Germany than in Vienna. For hundreds of years, popular legend had linked illness to sexuality. Psychiatry, as a new medical specialty, was striving to become part of modern medicine and was intent on divorcing itself from any program that was not scientific in the material sense. So when Freud linked neurosis to the repression of sexual feelings, that was seen as dragging psychiatry back to its pre-scientific days.

The most significant objection to the sexual themes in psychoanalysis was contained in the charge by both physicians and laymen that Freud was promoting “pansexualism.” Actually, these critics were attacking something they found far more unacceptable than the stress on sexuality; they were really resisting Freud’s *psycho*-sexual explanations. They were objecting to Freud’s expansive definition of human sexuality, which enabled him to posit and then to link together vast areas of unconscious ideation in an explanatory scheme. Freud found evidences of sexuality in many realms that superficially had nothing to do with sexuality: early childhood experiences, dreams, mistakes, jokes, legends—the list was endless. Freud declared that universal human experiences were composed of common sexual elements of whose very existence most people were not aware and of whose influence on their lives they had no inkling. This meant, as Freud was later to say grandly, “the ego is not master in its own house,” and that the healthy and the sick shared common developmental experiences. Thus sexuality was the basis in which Freud was able to claim the existence of a controlling unconscious and to close the gap that supposedly separated the mentally ill from the mentally well.

The charge of “pansexualism” concealed general resistance to explanations based on psychic rather than organic etiology. It also masked specific resistance to the hypothesis that there were universal, unconscious experiences that shaped every person’s life. There was discomfort with a notion that dismantled the psychological and social barriers between the “crazy” and the sane and between doctors and their patients. Almost all commentators agreed that Freud was on solid ground when he said that sexuality played a great role in human affairs. Only he went “too far.” “Too far” signified that the critics refused to acknowledge the omnipresence of psychic etiology and its concomitant, universally repressed experiences. The unconscious, in short, was a greater stumbling block than sexuality.

Just as the issue of resistance to psychoanalysis on sexual grounds is more complex than Freud or Jones realized, so is the matter of resistance because of anti-semitism. Anti-semitism never truly determined the course of psychoanalysis in Vienna. It has been alleged that Freud’s promotion to extraordinary professor was held back because he was Jewish. But Freud’s university professorship was delayed possibly because of certain ministerial decisions that raised the qualifications for medical promotions, and certainly because for several years Freud resisted utilizing the *Protektion* system that governed all bureaucratic appointments. Once Freud decided to play the game, he got his appointment.¹⁸ Freud stated that if his name had been Oberhuber, psychoanalysis would have fared better.¹⁹ But that was his fantasy. The actuality was that one could be simultaneously anti-semitic and attracted to psychoanalysis. Jung is the perfect example of this.²⁰ It was not primarily Jung’s anti-semitism that he had to overcome to become Freud’s disciple, and it was not primarily his anti-semitism that led him into an antagonistic relationship with Freud and a rejection of some of Freud’s theories.²¹ In the early years, psychoanalysis would have advanced no more quickly than it did if Freud had been Christian; obviously antagonists had more decisive objections than that Freud was Jewish. Moreover, many Jewish scientists and physicians themselves were critical of psychoanalysis.

But even this assessment does not completely deal with the complexities of the relationship between psychoanalysis and anti-semitism. There was indeed in Vienna a view of psychoanalysis as a Jewish cult. Ninety percent of Freud’s adherents were Jews. This situation, without a doubt, fostered anti-semitic resistance. Freud, extraordinarily sensitive to anti-semitic slights—as were all Central European Jews—always noticed and was repeatedly hurt by these gratuitous attacks endemic in his society.²² But since anti-semitism had repeatedly stung and provoked him at least since his adolescence, he came to believe that a large part of the rejection of psychoanalysis on medical, philosophical, and social grounds came about primarily because he was a Jew.

Freud clearly felt more comfortable in the company of other Jews, both socially and professionally. He would not have minded simply continuing psychoanalysis in the association of mainly Jews. He wrote to Karl Abraham, his Berlin disciple, that Abraham could follow his ideas more easily than Jung because “you are closer to my intellectual constitution because of racial kinship.”²³ But for practical reasons Freud knew that he had to woo Christians, even though that meant the Jews “must . . . be ready to suffer some wrong.” Such “masochism” was necessary if they wished “to join in” with the Christian world. Jung was all “the more valuable [because] it was only by his appearance on the scene that psycho-analysis escaped the danger of becoming a Jewish national affair.”²⁴ Two months later, Freud added decisively: “Just because I get on most

easily with you (and also with our colleague Ferenczi of Budapest), I feel it incumbent on me not to concede too much to racial preference and therefore neglect the more alien Aryan.”²⁵ The realities of existence in Central Europe always made life more complicated for a Jew.

On one hand, then, the story of resistance to psychoanalysis in Freud’s Vienna must be told in terms of its subtleties and intricacies. On the other hand, a sketch of the appeal of psychoanalysis there has its own revealing aspects. Psychoanalysis riveted the attention of those with strong interests in literature and art, a phenomenon that recurred throughout Europe. Freud’s early circle included a significant number of men who wanted to apply psychoanalysis outside the clinical sphere. There was Stekel, who emphasized the theory that geniuses are neurotic. Then came Max Graf (1875–1958), music critic and father of the child Freud wrote about in the famous case of “Little Hans.” Graf developed a psychology of musical creativity. Eduard Hitschmann (1871–1957) wrote pathographies of Schubert, Schopenhauer, and Samuel Johnson. Otto Rank (1884–1939) had escaped his miserable adolescence by going to the theater and reading. Eventually, he did more than anyone in the early group to apply psychoanalysis to literature. Isidor Sadger (1867–1940?) wrote pathographies, and his nephew Fritz Wittels (1880–1950) psychoanalyzed rulers and revolutionaries. It was Wittels’s penchant for utilizing psychoanalysis indiscriminately that turned the satirist Karl Kraus so violently against Freud’s theories.²⁶ Hanns Sachs (1881–1947) developed a psychology of art and together with Rank founded *Imago*, a journal for applied psychoanalysis. Finally, Herbert Silberer (1882–1922) saw connections between dreams and alchemy and was interested in the role symbols played in both.

The 1920s and 1930s

World War I brought a temporary halt to the development of psychoanalysis in Vienna. Institutional advances, however, as well as recognition of Freud, resumed afterward. Freud was promoted to a titular full professor at the University in October 1919. As the 1920s progressed, he became increasingly popular both as a physician and as an author. He was deluged with new patients and requests to write articles, both of which he continually turned down. Jones says that Freud found his popularity an intrusion and a burden and that he regularly declined invitations for lectures from such diverse groups as the Medical College and the police. Honors, soon to become a steady stream, began to flow in. In 1924, the *Neue Freie Presse* published a laudatory article, and the City Council, which had a socialist majority, gave Freud the keys to the city on his birthday (see Appendix).

In spite of unsalutary postwar economic conditions, there was institutional growth. A psychoanalytic clinic (*Ambulatorium*) was established in May 1922 with Hitschmann at its head. The clinic provided low-cost psychoanalytic treatment and was the basis two years later for an institute for training new analysts. Helene Deutsch was the director, Siegfried Bernfeld the assistant director, and Anna Freud the secretary. The curriculum included a wide variety of courses taught by Paul Federn, Ludwig Jekels, Hermann Nunberg, Wilhelm Reich, Theodor Reik, Paul Schilder, August Aichhorn, Isador Sadger, Helene Deutsch, and J. K. Friedjung. Two psychoanalytic child guidance clinics were founded, the first in 1925 under Hermine Hug-Hellmuth and the second in 1932 under Aichhorn. In 1926 the Vienna Society began sponsoring lectures to educate the public about psychoanalysis, and by 1931, 401 patients had been treated at the *Ambulatorium*. But the economy also worked against expansion. Plans to found a psychoanalytic sanatorium with private financing failed, and Freud had to turn down a donation of land from the city for a new institute because there was no money for the building.

The Viennese medical establishment remained ambivalent. On one hand, the psychiatrist and neuropathologist Paul Schilder (1886–1940), who had a deep interest in psychoanalysis and was a member of the Vienna Society, became a full professor of psychiatry at the University. Schilder, through his articles in psychiatric journals, was outspoken in spreading analytic findings among European psychiatrists. On the other hand, although recognized fully by the press and the city government on his seventieth birthday in 1925, Freud did not receive official congratulations from the University or from the Society of Physicians.

In spite of an increasingly deteriorating political and economic situation in Austria in the 1930s, psychoanalysis continued to develop, although a few analysts left for the United States, much to Freud's displeasure. (He had nourished a dislike for the New World since his visit there in 1909.) Freud attracted the attention of the world on his seventy-fifth and eightieth birthdays in 1931 and 1936, respectively, but on March 12, 1938, the Nazis occupied Austria, and soon turned their attention to "the Jewish science" and its leader. The executive board of the Vienna Psychoanalytic Society immediately voted that all members should leave the country; henceforth, the headquarters of the Society would be wherever Freud settled. In an effort to save the books in the Society's library and the stock of the Verlag, the official psychoanalytic publishing house, the German Psychoanalytic Society proposed that the Vienna Society be made a part of it. The Nazi head of the umbrella German Society for Psychotherapy agreed, but a revealing letter on the subject fell into the hands of the Gestapo, and the plan fell through. Thus the Vienna Society and the publishing house became extinct (see Appendix). After many perilous weeks—during which friends paid a ransom to the Nazis and negotiated for visas—Freud, with some members of his family and staff, left Vienna for England on June 4, 1938. His four sisters remained behind and died at the hands of the Nazis.

A new, Nazi-controlled professional society was created for Viennese psychotherapists, the "Vienna Study Group," a branch of the German Society for Psychotherapy (later a Reichsinstitut). August Aichhorn, a non-Jewish analyst who had remained in Vienna, joined the Study Group and secretly offered orthodox psychoanalytic training to young physicians. Alfred von Winterstein, a non-Jewish member of the Vienna Society since 1910, also stayed, but he had never been a practicing analyst.

Out of this near decimation, the Vienna Psychoanalytic Society came into being again in 1946. Very slowly, scientific work and training resumed. In 1968 a Sigmund Freud Society was founded with the help of the Austrian government, and it bought Freud's former apartment and established a small museum in it.

It is improbable that Vienna will ever again be a center of psychoanalysis. In 1992 the Psychoanalytic Society there was a respectable group of fifty-two members and one hundred candidates in training.²⁷ But the culture that spawned psychoanalysis has vanished. Moreover, psychiatry in Austria is dominated by two organicist groups: researchers who are interested in pathological anatomy and brain localization, and biological psychiatrists whose interests are in descriptive psychiatry, large scale studies, and biological treatments. Although the Austrian parliament decided to fund psychotherapy, Freud's dictum that much of mental illness stems from universal psychological and instinctual development did not take deep root.

Switzerland

Medical and psychiatric traditions in certain parts of Switzerland were such as to assure psychoanalysis of a more positive reception than it encountered in Austria. This was true originally, and is still the case today, although according to Freud and Jones, the issues of sexual respectability and propriety were more troubling to the Swiss than to the Austrians. Obviously, however, they have not proved major obstacles to the Swiss interest in psychoanalysis.

It is of undoubted significance that, unlike in Austria, therapeutic nihilism never established a dominant foothold in Switzerland. This was owing to long-standing cultural conventions that dictated that the local community would take care of the needs of its inhabitants, including their health. Such centuries-old commitments received intellectual reinforcement during the Enlightenment from the theories of Jean-Jacques Rousseau (1712–1778) and Heinrich Pestalozzi (1746–1827).²⁸ Historic traditions of care meant that psychiatric hospitals, once established in the nineteenth century, were dedicated to treatment. Moreover, there was no separation of hospitals into those for custodial care and those for therapy, as was often the case elsewhere in the Western world. A psychiatrist in a cantonal hospital had a responsibility to all the mentally ill of the canton and because of the smallness of the canton and density of the population could not "dump" chronically ill patients.

There was yet another distinctive development that was to have significance for Swiss psychiatry as well as for the eventual growth of psychological awareness in Swiss medicine. This was the fact that psychiatry and neurology, linked in most Western countries well into the twentieth century, were separated in Switzerland at the end of the nineteenth century. As long as psychiatry is combined with neurology,

psychiatry is dominated by the organic approach. In Switzerland, by 1900, separate chairs of psychiatry had been established in the country's five medical schools. Additional power and prestige accrued to these positions by virtue of their usually being held by the medical directors of the cantonal psychiatric hospitals. Eugen Bleuler, for example, was both professor of psychiatry at the University of Zurich and director of the Burghölzli psychiatric asylum and clinic.

Bleuler (1857–1939) became convinced during the 1890s that patients with dementia praecox did not inevitably deteriorate, and, eager to help them, he looked for ways to understand their symptoms. A utilizer of psychotherapy before coming across psychoanalysis, he welcomed Freud's ideas for their psychological interpretations of mental illness. Under Bleuler's leadership and commitment, the Burghölzli became the center of European dynamic psychiatry and, for at least a decade, a hothouse of psychoanalytic activity.²⁹ Within six months of Carl Gustav Jung's (1875–1961) arrival as a resident, Bleuler had him prepare a summary of Freud's *Interpretation of Dreams* and present it during a staff meeting.³⁰ Later, because of Bleuler's belief that the basic symptom of schizophrenia (then still called dementia praecox) was a "loosening of the tension of association," he asked Jung to experiment with word-association tests; from these Jung drew conclusions that supported psychoanalytic theories. Jung found certain groupings that he explained were a result of the patient's repressions; Jung called these groupings "complexes." Bleuler also encouraged dream interpretation both for patients and among the staff. It was common for the staff to analyze each other's dreams at the morning breakfast table.

In September 1904 Bleuler initiated a correspondence with Freud, informing him about all these activities at the Burghölzli. A year and a half later, in the spring of 1906, Jung also began writing to Freud and sent him a copy of his book on the word association tests (*Diagnostic Association Studies*). In the foreword to a book on dementia praecox (dated July 1906) Jung acknowledged his "indebted[ness] to the brilliant discoveries of Freud," although he inserted the caveat that he would still "maintain an independent judgment." Freud sent Jung a volume of his collected papers in October 1906, and Jung replied with "sincerest thanks" and hopes that "your scientific following will continue to increase." Freud immediately answered, and the Vienna–Zurich connection was solidified, with Freud harboring fervent hopes for the future.³¹

Indeed, for several years it seemed as if the acceptance and legitimization of psychoanalysis in Europe would come through Zurich. Studying under Bleuler or Jung in the years before World War I was a pantheon of greater and lesser psychoanalytic pioneers: Karl Abraham, Ludwig Binswanger, Franz Riklin, Alphonse Maeder, Max Eitingon, Hermann Nunberg, A. A. Brill, Otto Gross, J. J. Honegger, Sabina Spielrein, and Philip (Fulop) Stein. In September 1907 a "Freudian Society of Physicians" started in Zurich with Bleuler as the chairman and Jung taking a leading role. The membership included physicians who traveled in from hospitals far out in the country.³² Eduard Claparède (1873–1940), a medical psychologist and educator, made the trip from Geneva, and Ludwig Binswanger (1891–1966), a future existential analyst, eventually commuted from Kreuzlingen on Lake Constance.

Early in 1907, Jung had journeyed to Vienna—with Binswanger in tow—to meet Freud, and the two men had hit it off instantly. They talked for thirteen hours without a break. Jung was aware of being before a great presence, although that did not check his natural vitality and liveliness. Freud listened "with uncontrolled delight," charmed by the newcomer's intelligence and charisma. In September, Jung attended the First International Congress for Psychiatry in Amsterdam to give a paper on Freud's theory of hysteria. Then Jung acted on Jones's idea of having "a Congress of Freudian followers" in the spring of 1908, thus initiating the series of international psychoanalytic meetings that exist until this day. Six physicians represented Switzerland at the first psychoanalytic congress: from Zurich, Bleuler, Eitingon, Jung, and Riklin; from Geneva, Claparède; and from Schaffhausen, H. J. Bertschinger. Jung and Riklin gave papers. At the Congress it was decided to publish a semiannual yearbook (*Jahrbuch für psychoanalytische und psychopathologische Forschungen*) to be issued by Bleuler and Freud and edited by Jung; the first number appeared in 1909.³³

Freud could not have been more pleased by these developments. Zurich now appeared as a likely place for the academic institutionalization of psychoanalysis. Jung, because of his intelligence, energy, and obvious qualities of leadership, glittered on the horizon as the perfect replacement for Freud when he would get too old to lead the psychoanalytic movement. Moreover, when compared to other followers who also had potential for authority, Jung had the unique distinction of not being Jewish, a quality of enormous

value in the academic and medical worlds in the first half of the twentieth century. (Ernest Jones, another non-Jew, was then in North America and not yet prominent in the movement; in addition, Freud never had the same fond feelings for Jones as he had for other close disciples.) Jung was also attractive because Freud was beginning to have his troubles with the group in Vienna; he reflected how satisfying it would be not to have to depend upon them.

Freud's hopes for the expansion of psychoanalysis via Zurich are apparent in the events surrounding the Second International Psychoanalytic Congress in Nuremberg, March 30–31, 1910. Right before the meeting, Jung had to leave for the United States to see briefly a very ill former patient. Although he assured Freud he would return in time for the congress, Freud's anxiety was palpable. He wrote the Reverend Oskar Pfister (1873–1956) of Zurich, who had been involved with psychoanalysis for over a year, "I still have not got over your not coming to Nuremberg. Bleuler is not coming either, and Jung is in America, so that I am trembling about his return. What will happen if my Zurichers desert me?"³⁴ At Nuremberg, Freud tried to cement the Zurich alliance. He convinced Jung, somewhat against his wishes, to become president of the International Psychoanalytic Association (IPA), just founded. Riklin was elected secretary, and Zurich became the headquarters of the IPA. Jung and Riklin were also made editors of a new monthly IPA publication, the *Bulletin (Correspondenzblatt)*. To appease the Viennese, a second periodical was also established, under the editorship of Adler and Stekel (*Zentralblatt für Psychoanalyse*).

Although it was Zurich Freud was depending on, psychoanalysis was also being disseminated elsewhere in Switzerland. In Geneva, the famous physician and psychologist Théodore Flournoy (1854–1920) was regularly lecturing on psychoanalysis at the university; his writings on Freud's theories had been appearing in the *Archives de Psychologie* since 1900, the same year he had published his best-selling exposé of a medium, *From India to the Planet Mars*. Raymond de Saussure (1894–1971), later to become one of Switzerland's most notable analysts, used to sneak into Flournoy's lectures while still in high school.³⁵

It was in Zurich, however, that psychoanalysis had found the most secure academic and psychiatric home, and this now crumbled. No sooner did the Freud Society constitute itself as the Zurich Psychoanalytic Society and become a local branch of the IPA than Bleuler and a few others resigned. Upset, Freud, who had hopes that Bleuler would become president of the Zurich Society, began a campaign to woo him back. At first he relied on correspondence, and when that did not work, he arranged a personal meeting, during which Bleuler promised he would rejoin. In September, 1911 Bleuler attended the Third Psychoanalytic Congress at Weimar and gave a paper, but in November he resigned again, this time permanently.

The event proved to be pivotal in the history of psychoanalysis in Europe. With Bleuler, of course, went the academic connection. In addition, the position of psychoanalysis as a recognized partner with other legitimate theories and treatments of twentieth century European psychiatry was severely compromised. It was to be forty years—in the 1950s—before psychoanalysis in Europe once again began to have the kind of medical imprimatur that it had enjoyed through its association with a physician of Bleuler's stature.

Few episodes in psychoanalytic history portray as unambiguously as Bleuler's resignation some of the central issues that have affected the reception of psychoanalysis. The Freud–Bleuler correspondence provides the most accurate source for understanding the issues at stake, and the contemporaneous Freud–Jung letters clearly depict Freud's and Jung's attitudes at this crucial time.³⁶

Freud and most of his close followers wanted only loyal adherents of psychoanalysis, as Freud defined it, to belong to the newly established (1910) psychoanalytic societies. They also expected members to speak up in favor of all aspects of psychoanalysis and to denounce anyone who questioned negatively or criticized. The belief behind this expectation was that the critics' questions and attacks were a result of neurotic resistance; any criticism of or failure to support psychoanalysis was conceived of as neurotic. Thus, a member realistically had two choices if he disagreed with some portions of psychoanalysis. He could keep his doubts to himself, or he could quit. If he voiced his criticisms, he was not wanted. A member was also expected to break publicly with those in his profession who took an anti-analytic stance. This situation, of course, created difficulties for persons who were interested in psychoanalysis but who either had greater or lesser reservations or lacked the commitment to let their professional and social relationships be governed by considerations of advancing or retarding the cause. From the view of Freud and his

disciples, however, members were expected to “make sacrifices.” The impact of these circumstances on the wider issue of the nature of scientific inquiry was not addressed by loyal Freudians.

It was over the issues of exclusionism, total dedication, and the scientific spirit that Bleuler, a strong advocate of psychoanalysis, refused to be a member of the psychoanalytic movement. Bleuler, for example, would not openly break with other university professors of psychiatry, like Alfred E. Hoche or Theodor Ziehen, who attacked psychoanalysis. Furthermore, he condemned the deliberate exclusion of Max Isserlin—one of Emil Kraepelin’s assistants who wrote critically about psychoanalysis—from the Second International Psychoanalytic Congress at Nuremberg. In several letters to Freud, Bleuler stated his position with great clarity:

[October 19, 1910] I can’t simply go along; it is expected from me that I cooperate. There would be always a false note in my speeches and writings, which would harm the cause and would unavoidably paralyse me. There is a difference between us For you evidently it became the aim and interest of your whole life to establish firmly your theory and to secure its acceptance. I certainly do not underestimate your work. One compares it with that of Darwin, Copernicus and Semmelweis [F]or me, the theory is only one new truth among other truths [and] it is not a major issue, whether the validity of these views will be recognized a few years sooner or later. I am therefore less tempted than you to sacrifice my whole personality for the advancement of the cause.

[March 11, 1911] . . . “Who is not with us is against us”, the principle “all or nothing” is necessary for religious sects and for political parties . . . but for science I consider it harmful. There is no ultimate truth . . . For me, Maier’s position is as valid or invalid as that of anyone. [Hans W. Maier, a psychiatrist at the Burghölzli was asked to resign from the Zurich Society because of differences in scientific opinion.] You say he wanted only the advantages [of being a member], but wanted to make no sacrifice. I cannot understand what kind of sacrifice he should have made Everyone should accept views only as far as they are his own views; if he accepts more he is insincere. . . .

The introduction of the “closed door” policy [in the Zurich Society] scared away a great many friends and made some of them emotional opponents. My joining did not change that in the least, and neither will my resignation change this fact. [October 13, 1910] . . . I could understand the position—although I do not believe in it—that one does not want time to be wasted by arguments with unworthy opponents [But] if I discuss something, I personally have a strong desire for opposition and believe that everything—even the very best—becomes one-sided in lack of opposition. If I want to remain true to myself, I cannot go along. I regret it very much; I am the one who loses. For many reasons I need stimulation. [January 1, 1912] . . . The ways of the [International Psychoanalytic] Association are harmful. Rather than strive to have many points of contact with the other sciences and scientists, the Association isolated itself with barbed wires from the external world which hurts both foe and friend Everything was favorable [in Zurich] at the beginning as psychoanalysis attracted serious attention and willingness for cooperation among leading physicians. All this is now destroyed by the ways of the Association and can no longer be remedied. The psychoanalysts themselves have validated the malicious words of Hoche about sectarianism, which at that time was [*sic*] unjustified.³⁷

Freud and Jung did not think that Bleuler was stating his real reasons for withdrawing from membership in organized psychoanalysis. They believed his leaving had to do with emotional resistances such as Bleuler’s anger against Freud for convincing Jung to break his oath of abstinence from alcohol, or Jung’s dislike of Bleuler, or Jung’s using Bleuler’s son’s name as the name of a patient in an article. Freud and Jung never took Bleuler’s position seriously. Moreover, Freud never questioned the validity of his own attitude. Freud thought that if Bleuler truly agreed with psychoanalysis, he—one of the major academic psychiatrists of the Western world—would cut himself off from German psychiatry, then the leading Western psychiatry. Bleuler was under continual pressure from the German psychiatrists to publicly denounce psychoanalysis, which he consistently refused to do. The German establishment was very aware that Bleuler’s endorsement of Freud’s work carried great professional weight.³⁸

Ironically, at the same time that Freud and Jung were sparring with Bleuler, their own relationship was deteriorating. Although several mutual interests and goals had drawn them together, their relationship from the start was dominated by unrealistic expectations of what each would do for the other, as well as fundamental differences that each strove to overlook because of their strong initial attraction. In 1911 they began to disagree over theoretical issues, and by 1912 they were also at odds over organizational matters. After November 1912 ill-feelings grew rapidly, and the friendship disintegrated. In January 1913 Freud proposed that their personal relations be abandoned. The two men continued to correspond on

business and scientific matters, although Freud stopped even this contact in February after writing three letters.³⁹

Jung explicitly made public his growing independence and altered theoretical position at two lectures in London in August 1913. He talked of a “new psychological science” that he called “analytical psychology.” He said his dream theory agreed with Adler’s. He enunciated his differences with Freud’s theory of neurosis and advocated a “psychoanalytic theory ... freed from the purely sexual standpoint.”

Nevertheless, as president of the IPA, Jung attended the Fourth Psychoanalytic Congress in Munich on September 7 and 8; he also delivered a paper on psychological types, presaging his later work in this area. He was even re-elected president, though with only sixty percent of the vote; twenty-two of the fifty-two members abstained. Six weeks later, however, he resigned as editor of the *Jahrbuch*, and in April 1914 he stepped down as president. In the same month, Jung also resigned from the medical faculty of the University of Zurich; sources indicate he was entering a troubled period of his life.

Most of the Swiss adherents of psychoanalysis remained loyal to Jung. In July, in response to Freud’s polemical attack on Jung in the essay, “On the History of the Psycho-Analytic Movement,” the Zurich Society voted to withdraw from the IPA.⁴⁰ Oskar Pfister was one of the few Zurichers to stand with Freud. When Jung addressed the British Medical Association at the end of July 1914, he spoke on the importance of the unconscious in psychopathology but never used the word psychoanalysis. The psychoanalysts had preceded the world into war by only a few days.

Reception and Reaction

How had psychoanalysis fared in Switzerland before the Great War? On the whole, it had prospered, not surprisingly in light of national pioneering movements promoting care for the sick and educational reform, the latter perhaps linked to Swiss Protestantism.

It is clear that psychoanalysis received considerable medical attention and respect because of Bleuler’s strong involvement for many years. Not only did Bleuler introduce his residents to psychoanalysis and use it in treatment at the Burghölzli, but he also published reviews of psychoanalytic works, defended Freud against attacks, and delivered psychoanalytic papers at psychiatric meetings. Concerning one such meeting of Swiss psychiatrists in Zurich—also attended by a number of German psychiatrists—Jung wrote to Freud that “your (that is, our) cause is *winning all along the line*, so that we had the last word [against the opposition], in fact we’re on top of the world.” The psychoanalysts at the meeting had even managed to dominate a rival group in attendance, the newly formed Society of Neurologists, who were antipathetic to psychoanalysis.⁴¹

The psychoanalytic cause was also aided immeasurably by Jung, who was invaluable not only because of his initial devotion to Freud, but also because he had a great penchant for publicity and proselytizing. Possessed of enormous energy, he wrote about psychoanalysis for those critical of Wilhelmine society (*Die Zukunft*, 1905), for lawyers and judges (*Juristisch-psychiatrische Grenzfragen*, 1906), and for the Swiss literary set (*Raschers Jahrbuch*, 1912.) He lectured publicly about psychoanalysis to students, educators, and ministers.⁴² Jung’s activities almost never hurt him professionally. When the Society of Neurologists began to promulgate alternate methods of psychotherapy, he wrote to Freud, “The hullabaloo has not harmed my practice; on the contrary, I am inundated.”⁴³

Switzerland was probably the first place in the world where psychoanalysis influenced educational practices. Historically, the Swiss have had strong concerns for educational reform, partly as a result of the Protestant injunction that a Christian should be able to read the Bible in his own language. The eighteenth century produced two Swiss whose pedagogical ideas were to have extensive impact on Western education and child-rearing—Rousseau and Pestalozzi. Many Swiss clergy and lay people in the nineteenth century were committed to the notion of seeking out and institutionalizing techniques that would have positive effects on child development. Before educators elsewhere, the Swiss saw the educational possibilities inherent in Freud’s ideas; the prime example of such a pioneer was the Reverend Pfister.⁴⁴ Pfister was rapidly followed by Ernst Schneider (1878–1957), director of the Bern Teachers’ Seminary, and Hans Zulliger (1893–1965),

at that time an elementary school teacher.⁴⁵ Some of Jung's largest public lectures were to teachers or students. Pfister also pioneered child analysis; and translated some of Freud's books into English.

Protestant ministers in Switzerland were also among the first clergymen anywhere to be drawn to psychoanalysis. In addition to Pfister, there was Pastor Eduard Blocker (1870–1942), although he did not remain active in the psychoanalytic movement. Pastor Adolf Keller (1872–1963), however, did continue his interest via Jungian psychology. After World War I, there was a large contingent of ministers in the Swiss Society for Psychoanalysis.

As more people in different fields became involved in psychoanalysis and the number of analysts grew, it was inevitable that psychoanalysis would receive press coverage. The first article took the form of a review in the *Neue Zürcher Zeitung* on February 8, 1911. "Psychoanalysis" was presented as the discovery of a Zurich neurologist and psychotherapist, Ludwig Frank (1863–1935), and as the embodiment of a materialist philosophy. Freud's name was mentioned nowhere. Then at the end of 1911, the *Zeitung* reported on a lecture to a local philological society by Franz Riklin (1878–1938), a psychiatrist and psychoanalyst. Riklin had ranged widely, declaring not only that psychoanalysis cured neurotics by uncovering repressions and interpreting dreams, but also that Freud had discovered the meaning of universal symbols and myths by showing them to be linked with the symbols found in dreams and delusions. Riklin offered definitive meanings of such symbols as the sun, gold, snakes, and feet.⁴⁶

Because of the growing number of public lectures by Jung and others, and the related publicity, the Kepler Association (Keplerbund) of Zurich decided to devote a meeting to psychoanalysis. By understanding the significance of this meeting and the arguments it engendered, we can see a telling example of the way psychoanalysis, when it became better known, was inevitably drawn into contemporary intellectual controversies. Indeed, such embroilments continue to this day. Analysts, then and now, often complain bitterly of distortions made by their critics and of attacks based on misinformation. The analysts point to these affairs as proof of the hostility against psychoanalysis. They rarely recognize, however, the controversies for what they fundamentally are: part of the customary process whereby the lay and professional worlds are educated about new ideas and also a necessary step toward their coming to terms with such ideas.

The Kepler Association had been founded in Frankfurt in 1907 as a reaction to the establishment the year before of the Monist Association (Monistenbund). The Monist Association was an outgrowth of Darwinism and was dedicated to the worship of science as the only possible answer to the world's problems. The Monists were thus zealous materialists and enemies of traditional religion since it supported supernatural explanations. Naturally, the Monists aroused a considerable counterattack both from the churches and from those scientists who were vitalist and, by virtue of their belief in a life force, were repelled by any materialistic reductionism. The vitalists, led by the natural philosopher Eberhard Dennert (1861–1942), joined together in the Kepler Association.⁴⁷ In some places, psychoanalysis became caught in this vehement antimaterialist reaction because Freud's ideas were mistakenly seen as a variety of the new "scientific religion" of monism. The Zurich branch of the Kepler Association was one of the groups that took this view of psychoanalysis.⁴⁸

On December 15, 1911, Max Kesselring, a well-known local neurologist opposed to psychoanalysis, spoke to the antimaterialist Zurich Kepler Association.⁴⁹ His lecture was summarized in the *Neue Zürcher Zeitung* of January 2, 1912, with the reporter observing that Kesselring had not been entirely fair to Freud. For the next month an intense correspondence appeared in the *Zeitung* with contributions from many interested parties: Kesselring; a member of the Kepler Association; J. M., an opponent of the Kepler Association; Jung; Franz Marti, an opponent of psychoanalysis; August Forel, former director of the Burghölzli; and the officers of both the International Psychoanalytic Association and the Zurich branch of the IPA.⁵⁰

The *Zeitung* debate of 1912 is a rich mine of information about the reception of psychoanalysis in Switzerland and in Europe generally. For one thing, a close reading of the letters and statements that appeared gives the lie once again to traditional psychoanalytic legends that criticism of Freud was always a matter of neurotic resistance and sexual repression and that the critics were an irrational bunch whose responses were limited to violent assaults on psychoanalytic theory and practice. Rather, the *Zeitung's* pages reveal a clear mix of reasonably argued as well as emotionally weighted positions.

On the emotional side, there is clear evidence of the part played by nationalistic prejudices and anti-semitism in the Swiss reaction to psychoanalysis. Nationalism had a definite role in the European reception of psychoanalysis. Franz Marti, probably a reporter, attacked the validity of Freud's observations because they had been "made in half-Slavic Vienna." This was not a disguised anti-semitic remark. In the tense period just preceding the outbreak of World War I, Northern and Central Europeans regarded Slavic peoples as unruly and untrustworthy, if not outrightly barbaric. We will come across further evidences of nationalist bias, but rarely will we see in print, in a reputable publication, open anti-semitic attacks on psychoanalysis. One such, however, was the "condemnation" in August Forel's letter of the "Talmudic-exegetic-theological interpretations ... of the Freudian School."⁵¹

Perhaps the most important information to emerge from the *Zeitung* debate is the indisputable fact of the widespread interest in and impact of psychoanalysis in Zurich. In his original talk to the Kepler Association, the neurologist Kesselring bemoaned the current popularity of psychoanalysis among educators and pastors. In one of his later letters to the newspaper, Kesselring pointed out how Pastor Pfister and the anti-analytic educator Friedrich Wilhelm Förster (1869–1966) had unfortunately brought psychoanalysis to a lay audience through their dispute in the pages of the religious journal *Evangelische Freiheit*. Finally, Marti wrote that what troubled him was that psychoanalysis had more fanatical adherents in Zurich than anywhere else.⁵²

The extent to which psychoanalysis had found acceptance in Zurich before 1914 can also be seen in the existence of an organization truly unique in the world at that time. Within two weeks after the exchange of letters in the *Neue Zürcher Zeitung*, a Society for Psychoanalytic Endeavors was founded, with Franz Riklin as chairman.⁵³ The Society was a lay organization which accepted only analyzed persons! It had twenty members at its inception, and one of its main interests was applied psychoanalysis.⁵⁴

Of course, the great interest of Zurichers in psychoanalysis did not mean that there were no difficulties. Pastor Pfister, as noted, was singled out for attack by Förster. The pastor's outspokenness and loyalty to psychoanalysis jeopardized his parish position more than once, but he survived in place and was even offered a professorship of philosophy at the University of Riga, which he declined. Schneider, the head of the Bern Teachers Seminary, did not fare as well. Jones reported that he was dismissed as director in 1916 because of his psychoanalytic teaching. Zulliger, who in 1912 began to use psychoanalysis with children of twelve and thirteen in the public schools, wrote that he "had to proceed with caution ... as psychoanalysis was under heavy attack."⁵⁵ After the publicity that arose from the Kepler Association's lecture and the *Zeitung* debate, Riklin wrote to Freud that his and Jung's analytic practices had been hurt and asked Freud to send them patients.⁵⁶

Moreover, from the viewpoint of Freud and his close adherents, there were also serious problems within the Swiss analytic group itself. Freud's emphasis on sexuality seemed to be a sticking point. Both Freud and Jones interpreted the Zurich Society's leaving the IPA in July 1914 as a renunciation of the sexual etiology of the neuroses: The Swiss had left in order to remain with Jung because they preferred his non-sexual definition of libido. Jones believed that the Swiss analysts held up poorly under the attacks against psychoanalysis that began to circulate after 1910, particularly the openly expressed hope that the Swiss would not succumb to the immorality emanating from Vienna. It was Jones's view that there is an "intimate bond" among the Swiss that makes it particularly hard for the "individual to stand apart from the prevailing moral standards of the community."⁵⁷ History supports Jones's position that there is a tradition of community loyalty in Switzerland. Whether the Swiss deserted Freud over the issue of sexuality or because of their loyalties to Bleuler or Jung, their native sons, is not clear. But that the Swiss were very "proper" regarding sexual matters does seem to be borne out by their reaction to the psychoanalytic publishing house's publication in 1921 of Georg Groddeck's *The Seeker of the Soul (Der Seelensucher)*. Jones describes it as "a racy book, with some bawdy passages" and recounts, "Several analysts, particularly Pfister, felt it was not the type of book for an avowedly scientific firm to publish, and the Swiss Society [newly reformed in 1919] held a special meeting of protest."⁵⁸ Freud had found Groddeck's book entertaining and wrote to Pfister, "I energetically defend Groddeck against your respectability. What would you have said if you had been a contemporary of Rabelais?"⁵⁹

Freud also had to cope with Swiss analysts' anti-semitism. Ferenczi wrote to Freud in the spring of 1913 that he had received a letter from Alphonse Maeder (1882–1971), head of the Zurich Psychoanalytic

Society, that “the scientific differences between the Viennese and the Swiss resulted from the former being Jews and the latter ‘Aryans.’”⁶⁰

The 1920s

Immediately after World War I, a new Swiss Psychoanalytic Society was formed to replace the prewar Society that had withdrawn from the IPA. Its Council consisted of Ludwig Binswanger, F. Morel, Emil Oberholzer, Oskar Pfister, and Hermann Rorschach (of ink-blot fame). The new society applied for and was granted membership in the IPA. Nevertheless, some of the prewar antagonisms and mutual suspicions continued. A Viennese analyst, Hanns Sachs (1881–1947) (who later moved to Berlin), was installed by Freud in Switzerland as a liaison between the new Society and the IPA. Freud visualized Sachs’s role as protecting orthodox interests in a somewhat suspect environment.⁶¹ He felt justified in having a representative on the scene when he learned from Sachs that the Swiss had “the intention to leave the factor of sexuality if possible untouched.” But the Swiss vehemently protested Sachs’s interference “as an emissary of the High Inquisition,” and Freud was cast once more into the role of reconciling the Viennese and the Swiss.

Yet internecine instincts did not prevail, and psychoanalysis in Switzerland was able to progress satisfactorily in the 1920s. In 1926, not only did Ludwig Binswanger, a recognized analyst, become president of the Swiss Psychiatric Society, but he also was able to persuade its members to elect Freud to an honorary membership opened up by the death of the great Emil Kraepelin. There could not be a more dramatic statement of psychoanalytic legitimization in Switzerland.

Post-World War II

Within the context of a system of compulsory disability insurance and the continuing notion that the canton assumes responsibility for the medical care of its citizens, psychoanalysis thrived in Switzerland after World War II. Swiss psychiatric training met the national demand for psychotherapeutic treatment by requiring courses in psychotherapy for all psychiatric residents. There was also increasing interest in Freudian psychoanalysis. A “great proportion” of the new generation of psychiatrists were trained as Freudians in the various psychoanalytic institutes in the major cities.⁶² Zurich continued to show itself as the locale with the greatest interest in depth psychology. The Jungian movement, the existential school, and the school of Léopold Szondi (1893–1986) all had training centers there.⁶³ In addition there was a group of French speaking analysts (Baudouin, Odier, and Rambert) who were interested in children. Starting in the 1950s, psychoanalysis was applied to seriously ill, psychotic patients by psychiatrists such as G. Benedetti, C. Muller and M. Sechehaye.

Psychoanalysis benefited by the fact that most psychiatric care, whether inpatient or outpatient, was paid for by each canton. There was a great demand for private psychiatrists, many of whom used psychoanalytic methods and, therefore, saw only a small number of patients. This led to waiting lists for these physicians. To fill the gap, psychologists trained in psychoanalysis furnished treatment. When psychologists practiced as “delegated psychotherapists” in the office of a physician, the insurance companies contributed to the cost of the treatment.⁶⁴ Swiss social and medical traditions, as well as national wealth, allowed psychoanalysis to prosper.

Germany

In contrast to Switzerland, psychoanalysis in Germany, although blossoming after World War II, remained separate from psychiatry. German psychiatry has emphasized the organic over the nonorganic, the psychoses over the neuroses, and custodial care over active intervention. These phenomena have their

roots in nineteenth century German intellectual and medical conditions; in some cases even earlier traditions have played a determining role.

Not surprisingly, psychoanalysis officially came to Germany via the Burghölzli. Karl Abraham (1877–1925), designated by Freud as his first German “pupil and follower,” had spent three years in Zurich as Bleuler’s assistant. Then, at the end of 1907, Abraham decided to leave Switzerland and open a private practice in Berlin as a specialist for nervous and mental diseases. He hoped that his psychiatric training at the Burghölzli and his knowledge of psychoanalysis would bring him patients. Although unanalyzed, he was depending on being able to turn to Freud for advice as problems arose.⁶⁵ Abraham’s early letters to Freud and Freud’s replies reveal just how little Abraham knew about psychoanalytic technique.⁶⁶ Nevertheless, Freud valued his Berlin pupil for his eagerness, intelligence, and readiness to rely on Freud’s theoretical and clinical advice.

It was also the case that Abraham had referrals from Hermann Oppenheim (1858–1918), a relative by marriage, who was the head of a well-known clinic in Berlin and a highly respected neurologist in German academic circles. Though Oppenheim was antipathetic to psychoanalysis, he sent Abraham patients, seemingly out of the dual motives of keeping his relatives fed and challenging psychoanalysis to cure recalcitrant patients.

In dubbing Abraham his first official German follower—even before the young psychiatrist had left the Burghölzli—Freud was downplaying the previous psychoanalytic efforts of a number of German physicians, not to mention the writings of yet others who had publicized Freud’s ideas in a variety of ways before Abraham arrived.⁶⁷ Freud also warned Abraham that he would find in Germany not only the usual hostility to psychoanalysis, but also colleagues who were “a whole lot more brutal on top of it.”⁶⁸ Certainly this was so in comparison to Switzerland, but Freud was neglecting (and possibly did not even know) to inform Abraham that early reaction to psychoanalysis had ranged widely, from hostile to enthusiastic.

Freud’s misjudgments and ignorance were further distorted and concretized in Jones’s biography. For example, Jones unaccountably deprecated the work that the psychiatrist Otto Juliusburger (1867–1952) had published on the Freudian theory of obsessions as early as 1902.⁶⁹ Furthermore, Jones declared that a paper Juliusburger gave before the Berlin Psychiatric Society in 1907 had encountered “unanimous opposition,” when the reports of the discussion clearly indicate otherwise.⁷⁰ When Jones wrote Freud’s biography in the 1950s, he demoted Juliusburger to a minor, ill-informed analytic contributor, although this was not what both Freud and Abraham thought of Juliusburger in the early years. Moreover, interpreting the past to support later developments, Jones chose to overlook Abraham’s initial rudimentary analytic knowledge and to condemn Juliusburger for not doing “proper” psychoanalysis. Thus, Jones’s evaluations of the early practitioners of psychoanalysis in Germany, as well as the reaction to them, cannot be accepted as unbiased.

At any rate, by the summer after his arrival in Berlin, Abraham felt enough optimism to create the Berlin Psychoanalytic Society with four other physicians: Iwan Bloch (1872–1922), a sexologist and sexual reformer; Magnus Hirschfeld (1868–1935), also a sexologist, with a particular interest in homosexuality; Otto Juliusburger (1867–1952); and Heinrich Koerber (d. 1927), a member of the Board of Health of Berlin and the head of the local branch of the Monist Association. Freud took seriously only Juliusburger’s membership—the sole “pure gain,” he called it. But the historian, with wider interests than Freud, must also note that, from the very start, psychoanalysis was publicly associated in Germany, as in Switzerland, with controversial movements. This early linkage of psychoanalysis with physicians who advocated sexual reform and the worship of science had to affect the reception of Freud’s ideas. In France and in Spain also, psychoanalysis was to be initially connected with groups on the cultural or social periphery.

After founding a psychoanalytic group, Abraham’s next step, in November 1908, was to address the Berlin Psychiatric Society, where his paper received a mixed reception.⁷¹ Abraham was fairly satisfied with the way the evening had gone, looking on it as a preliminary maneuver that had “prepared . . . the ground” for future “heavier artillery.” He summarized the experience as “quite successful on the whole” and the audience as “attentive.” While Oppenheim had spoken up against infantile sexuality, on other points he was “appreciative” both publicly and privately. He even offered to publish the paper in his journal, the *Deutsche Zeitschrift für Nervenheilkunde*.⁷²

Looking back over his first year's practice, Abraham announced to Freud that he was "pleased with the result." He foresaw being able to make a living just as he had planned. His income had been aided by "a number of court and other reports to write, mostly through the good offices of [fellow Society member] Dr. Hirschfeld." By May 1909 Abraham reported that even without referrals from Oppenheim over the last several months, his practice had "surprised even me by its progress. I am busy for the greater part of the day with long-term treatments. I have nine patients tomorrow, six of them psycho-analytic cases." Most of his patients came from doctors' referrals or personal contacts.⁷³

Six months later Abraham was joined in Berlin by a former colleague from the Burghölzli, Max Eitingon (1881–1943.) Eitingon had perhaps ten psychoanalytic training sessions while he visited Freud in 1907 and 1909. For the time being, however, his chief role in Berlin psychoanalysis was that of moral supporter. Coming from a very wealthy family, Eitingon felt no pressure either to pursue a regular practice or to become heavily involved in professional activities. He was even uncertain about remaining in Berlin.⁷⁴ Thus he provided slight ballast to offset Abraham's disappointment at the way his second paper before the Berlin Psychiatric Society was received. There were foreign guests at the Society's meeting, and the chairman refused to allow discussion in order to avoid the impression that psychoanalysis was officially recognized by German psychiatry.⁷⁵

Never one to be long put off, Abraham bounced back at the New Year with a course of lectures for physicians that he gave in his apartment to a paying audience. It was so successful that he was asked to give a second course, which he did in February and March 1910, charging thirty marks per person for eight 1 1/2-hour sessions.⁷⁶ At the conclusion of the Second Psychoanalytic Congress in Nuremberg at the end of March, the Berlin Society became the first local affiliate of the new International Psychoanalytic Association. Abraham, naturally, was president. He was joined by eight others: Eitingon; Hirschfeld; Juliusburger; Koerber; a Dr. Simon; Arnold Stegmann, a Dresden psychiatrist who had been using psychoanalysis at least since 1904; Wilhelm Strohmayer, a psychiatrist whom Jung declared to have "a good understanding and a very clear brain" and who had been doing analyses for two years; and Wolfgang Warda, of whom Freud did not think much.⁷⁷

Two psychiatrists from southern Germany, Leonhard Seif (1866–1949) from Munich and Wolf Stockmayer (1881–1933) from Tübingen, found it more convenient to join the Zurich Society. In 1911, Seif organized a psychoanalytic group in Munich with six members, but this venture was short lived. During the psychoanalytic wars of 1913 to 1914, Seif separated from Freud, although he did not become a Jungian, as Jones maintained. Rather, in the 1920s, Seif adopted Adler's Individual Psychology.⁷⁸ Also not in the Berlin Society was Leopold Löwenfeld (1847–1923), a prominent Munich psychiatrist, who publicized Freud's work widely, gave a paper at the 1910 Nuremberg Psychoanalytic Congress, and remained a friend of psychoanalysis; however, he never joined the IPA.

The Third Psychoanalytic Congress of 1911 in Weimar had an upsetting effect on some members of the Berlin group. Why is not clear, although we know that Jung's behavior toward Hirschfeld irked the latter so much that he used it as an excuse to resign. Abraham speculated that Hirschfeld's professional goals were limited to investigating sexuality and that he had lost interest in psychoanalysis. Juliusburger and Koerber also came away from Weimar unhappy but did not resign.⁷⁹ However, Strohmayer and Warda soon followed Hirschfeld. It is noteworthy that the group portrait taken at the Congress includes none of the five malcontents.

Thus, the start of 1912 found psychoanalysis in Germany officially set back, although Abraham's professional life was thriving. He reported in February,

I am up to my neck in psycho-analytic work. Since January the practice has been overwhelming, never less than ten hours a day. This has brought about the desired effect that I am no longer dependent on Oppenheimer's support . . . I had recently to refuse a few cases because I could not take on any more, and passed one on to Eitingon who occasionally accepts a patient. The lack of a fellow-worker is gradually making itself felt, and I do not know where to look for one. [Most of the psychiatrists in the Berlin Society had institutional affiliations and could not treat private patients.]⁸⁰

Searching for new talent, Abraham encouraged the professional psychoanalytic interests of a young physician who had recently been in analysis with him for depression. This was none other than Karen

Horney (1885–1952), who probably met Abraham at Oppenheim’s clinic while she was a medical student.⁸¹ Early in 1912, Horney delivered a paper to the Berlin Society on sex education in early childhood that Abraham “enjoyed” because it “showed a real understanding of the material.”⁸² Although Horney joined the Psychoanalytic Society around this time or even earlier, she was not ready to see private patients until the spring of 1919. However, Abraham was able to rely increasingly on Eitingon, who became more involved in psychoanalytic activities, partially at Freud’s request.

Abraham was also able to deal with his work overload by raising his fees. This was suggested to him by Freud in July 1912, and Abraham readily assented, increasing his fee in the fall from ten to fifteen marks. The following spring he began to charge twenty marks, since he still had ten hours’ work everyday.⁸³

The autumn of 1913 brought some “new colleagues” to whom Abraham hoped to send referrals. In addition, after the first fall meeting of the Berlin Society, Abraham believed “life within [the] group” would be picking up. Physicians whom Abraham and other Society members were getting to know at the newly founded Medical Society for Sexual Science were attending psychoanalytic meetings. Membership of the analytic group rose to eighteen, but only nine lived in Berlin.⁸⁴

The outbreak of war brought psychoanalytic progress virtually to an end, as Abraham and most other German psychoanalysts were pressed into the military. Abraham went to work at an army hospital that had been set up on the Grunewald race-course on the outskirts of Berlin. Most of his time was spent operating on the wounded, although he still saw three or four private patients at the end of the day. In the fall he called one last informal meeting of the “greatly reduced” Society. In March 1915 he was posted to a hospital in East Prussia, from where he wrote, “The psycho-analyst in me stands amazed while I operate on a hydrocele or carry out a rib resection for empyema. But war is war.”⁸⁵

Reception and Reaction

World War I had arrived at a time when psychoanalysis was widely known and discussed among educated groups in Germany. In medical circles it had never been ignored by knowledgeable psychiatrists and neurologists, who had immediately paid it attention. There was a wide diversity of motivations that governed the reactions of specific doctors to psychoanalysis. The medical hypnotists immediately took the 1893 and 1895 works of Josef Breuer and Freud on hysteria seriously and commented on them. After 1900, psychiatric and neurological journals, monographs, and textbooks contained frequent references to Freud. The only professional sphere in which Freud was initially ignored was that of large medical congresses, and Freud must share part of the responsibility for this situation since he refused to attend such meetings even when invited. When prominent psychiatrists and neurologists compiled lists of the outstanding workers in the fields of neurasthenia, hysteria, psychotherapy, and hypnotherapy, they usually included Freud’s name.⁸⁶

Psychoanalysis received the least attention from the experimental (physiologic) psychologists of the day. Although Freud’s work was consistently reviewed in their leading journal, *Zeitschrift für Psychologie*, from 1895 onward, the reviews were often written by physicians, a fact indicating that the psychologists believed that psychoanalysis was a field distinctly unrelated to their own. Texts and monographs by psychologists usually overlooked Freud. Only psychologists such as Willy Hellpach (1877–1955) and Gustav Störring (1860–1946), who were also trained as physicians and were investigating the new field of psychopathology, considered Freud’s ideas at length. We can say that German psychologists before World War I were frequently exposed to Freudian thought but were minimally concerned with it, and their response to psychoanalysis was more negative than that of physicians.

The most enthusiastic reception of psychoanalysis ultimately occurred in lay circles, although initial lay reaction was scanty. We cannot speak of a popular response to psychoanalysis before *The Interpretation of Dreams* was published in November 1899 (with a publication date of 1900.) Since it was not common practice for German physicians to popularize issues current in medicine for a mass audience, the public had to wait until Freud published his ideas in a book with a nonmedical title before lay authors and reviewers (or physicians in popular periodicals) began disseminating information about psychoanalysis.

The Psychopathology of Everyday Life (1904), an essentially popular work, did not initially receive early lay attention because it had the medical word psychopathology in the title. Freud's notions of symbolism, which were often not congenial to scientists, were frequently appealing to the educated public. (Several of the Germans who eventually did become psychoanalysts had originally, as adolescents, been oriented toward literary rather than scientific careers.) Thus it was the generally educated public that became the source of Freud's greatest acceptance in Germany after World War I.

Perhaps earlier, but certainly by 1912, psychoanalysis was a common topic of conversation among educated people. Evidence for this comes not only from the steadily increasing published references, but also from anecdotal data supplied by Abraham and, eventually, Freud. Not surprisingly, these reports began to appear at about the same time as Abraham found himself overwhelmed by patients. In a 1912 letter that related that "public interest in psycho-analysis is on the increase in Berlin," Abraham also passed along a story that after a meeting of the Halle Kant Society, there was an informal discussion of psychoanalysis: "Many people showed themselves to be well-informed and ... the general feeling was favorable rather than not." Two months later, Abraham declared his satisfaction that a new journal (*Imago*) dedicated to applied psychoanalysis had recently appeared. Such a periodical came "at the right moment. Interest is rapidly increasing, except in medical circles."⁸⁷

A year later, the qualifying "except" was no longer necessary. Abraham wrote,

I notice with amazement how interest in psycho-analysis has grown in Germany. One thing is certain: no topic in the realm of medicine and psychology is at present so widely discussed in professional circles as psycho-analysis, and no doctor's name is mentioned as often as yours even though the speaker crosses himself three times as he says it. It is just the same in lay circles.

A year after that Abraham reported that even the physicians were coming around. He had read a paper on marriage between relatives before the Medical Society for Sexual Science, and it had "met with more understanding and appreciation than [he] had anticipated."⁸⁸

As the guns of September 1914 thundered, Freud at last admitted to "the beginning of a changed attitude to psycho-analysis even in Germany."⁸⁹ Freud was referring to an article on symbolic forms in schizophrenia that had come from the neurologic clinic of the famous brain anatomist Paul Flechsig (1847–1929) of Leipzig. The paper had appeared in a highly regarded psychiatric journal edited by Alois Alzheimer (1864–1915), chief of psychiatry at Breslau. From its first paragraph, the case study showed its indebtedness to "the teachings of the Freudian school."⁹⁰ Freud did not know the authors, Paul Schilder and Hermann Weidner, although after the war he was to invite Schilder to join the Vienna Psychoanalytic Society.

Schilder was on his way to becoming one of the most brilliant contributors to the synthesis of psychiatry and psychoanalysis, but it was a while before Freud could accept his creativity with good grace. After Freud read a monograph, *Delusion and Knowledge* (*Wahn und Erkenntnis*) that Schilder had written during the war, Freud complained to Abraham that, although it

is quite analytic in its conclusions ... it dutifully ignores the Oedipus complex. Schilder of course writes as if these gentlemen [German neurologists] had discovered everything, or most of it, by themselves. That, in short, is the way in which our findings will be "adopted" by German medicine.⁹¹

Freud's response to Schilder's book raises the question of whether at other times his reception of the psychoanalytic efforts of German physicians may have been equally grudging. Even his essentially positive reaction to Ernst Simmel's (1882–1947) psychoanalytic pamphlet on war neuroses was tempered by petty carping.⁹²

Of course, Freud's skin had been rubbed raw by some of the dramatic condemnations that had been publicly hurled against psychoanalysis before the war. At several meetings and congresses, a few of the leaders of German psychiatry had been not only vehement, but also coarse in their objections. The assaults had been painful to Freud even though they were short lived and never constituted more than a fraction of the German medical reaction. Although understandable in the context of contemporary social and medical vicissitudes, many of these criticisms were unbridled.

The outcry commenced about 1906 and was largely spent four years later. It was clearly a response to the growing knowledge and impact of psychoanalysis in Germany. Its particular intensity and vituperation at just this time can also be accounted for by Freud's publication in 1905 of his analysis of "Dora," a case in which he had discussed sexual passion, adultery, and fellatio with an eighteen-year-old girl⁹³ (see Appendix). This report aroused two groups of physicians especially. One encompassed the defenders of the social status quo, who already felt threatened by the various contemporary movements to redefine sexual morality. It included such men as Walther Spielmeier, Gustav Aschaffenberg, Hermann Oppenheim, and Wilhelm Weygandt. The second group was composed of doctors worried about the insecure scientific position of German psychiatry. Oswald Bumke, Alfred Hoch, Konrad Alt, and Oppenheim were prime examples.⁹⁴ Although the fundamental social and medical issues raised by the two groups remained unresolved, the sensational attacks against psychoanalysis diminished as Freud's theories slowly began to win acceptance and attract adherents.

Extremism was not the standard German response to psychoanalysis, but certainly before the 1970s, psychoanalytic thought was also not a part of German medicine and culture. Why was the early reception of psychoanalysis fundamentally negative?

Medical and psychological thinkers of the late nineteenth century shared a revulsion against the philosophically dominated science of the early part of the century, *Naturphilosophie*. The "philosophy of nature" taught the existence of an unconscious, of irrational motivation, and of mind-body interaction and sought after the purposes and goals of natural phenomena. These interests came to be regarded as "metaphysics" in the second half of the nineteenth century. It was believed that the researchers of the earlier decades had advanced knowledge but little by asking fundamental questions regarding human existence and the complex interrelationships in nature. The new outlook in the latter part of the century also corresponded to the emphasis on reality and materialism in politics. It was evident that Bismarck's unification of Germany through an adroit combination of diplomacy and force had been successful, whereas the parliamentary attempts of the intellectuals in 1848 to bring about a liberal Germany had failed. The changed scientific orientation was in keeping with the new political viewpoint, as well as being a reaction against the "speculative physics" of the earlier philosophers and scientists. The purpose of science was now seen to be amassing data, dealing only with what was tangible, and explaining nature in physical, chemical, or mathematical terms.

Moreover, there being no "proof" of a mind-body interaction, the mind and body were to be considered as separate, and stress was to be laid on the study of the body since it alone was tangible. The theory underlying these viewpoints was that of psychophysical parallelism, which held that the relationship between physical and mental phenomena is not causal, but parallel. What happens is that "identical conditions give rise to both physical and psychical processes," but the processes are only concurrent; they are "neither identical nor causally related to each other."⁹⁵ Although the theory seems to encourage a neutral stance on mind-body interaction, in reality, this was not the situation among most physicians, physiologists, and experimental psychologists. Their actual preference was for theories of physical causation. This inclination resulted from the discovery of cerebral localization, beginning especially with the demonstration in 1870 by two young German physicians, Gustav Fritsch and Eduard Hitzig, that one part of the cerebral hemisphere of a dog's brain controls motor function. Fritsch and Hitzig concluded their report with the influential statement that "some psychological functions and perhaps all of them, in order to enter matter or originate from it need certain circumscribed centers of the cortex."⁹⁶ The principle of cerebral localization, once established, led scientists to search for cerebral centers of other functions in addition to those of motion, and prompted many to believe that one day researchers would discover specific brain centers that controlled all mental processes. Though there were exceptions—Freud was one—exponents of the theory of psychophysical parallelism generally championed the primacy of physical causation of psychic events.

Another factor that made the philosophy of nature appear totally outdated was Darwin's discoveries, which seemed to show that all of nature could be explained rationally, without recourse to explanations that relied on hidden forces or energies.

So the new psychiatry and psychology turned to worship science and serve in its temple, the laboratory. Freud's teacher, the psychiatrist and neuroanatomist Theodor Meynert (1833–1892), wrote in the preface to his textbook that

the reader will find no other definition of “Psychiatry” in this book but the one given on the title page: *Clinical Treatise on Diseases of the Fore-Brain*. The historical term psychiatry, i.e., “treatment of the soul,” implies more than we can accomplish and transcends the bounds of accurate scientific investigation.⁹⁷

Gustav Störing, an early experimental psychopathologist, rejected the definition of psychology as “the science of the soul.”⁹⁸ Psychiatrists wished to form close links with neurologists, and psychologists close ties with physiologists.

Psychoanalysis was, therefore, viewed by both psychiatrists and psychologists as a regressive force, a throwback to the days of the philosophy of nature. To ally with Freud was to break with science and to open one’s field to the charge that it promulgated metaphysics, mysticism, or superstition. This argument against psychoanalysis, especially when used by psychiatrists, was not entirely without justification if one considers the historical development of German psychiatry. The discipline was, at the start of the nineteenth century, almost nonexistent, and then emerged at the century’s end as a full-fledged specialty replete with modern medical enterprises. German psychiatrists, remembering the nonscientific years that had preceded this outburst of activity, had realistic grounds for fearing a development that might be regressive. Of course, Freud’s critics also applied the epithet “unscientific” to psychoanalysis when they were reluctant to express the true reasons for their hostility.

Not to be allied publicly with science when German science was leading the world took a great deal of courage, more than practitioners of the recently established psychiatry and psychology had. When Freud began publishing his psychoanalytic ideas, German psychiatry had been an accepted medical specialty only for about fifty years, and psychology had been an acknowledged branch of science, as opposed to being part of philosophy, for less than twenty-five years. Psychiatrists were still protesting that psychiatry must stop being the stepchild of German medicine.⁹⁹ The brand-new experimental psychologists were especially defensive. They felt unfairly trapped between, on one hand, charges by their numerous philosophical colleagues that the experimentalists were turning psychology over to physiology, and, on the other hand, the prevailing notion of most of the academic world that all psychology was still philosophy. German psychiatrists and psychologists were insecure professionally and believed that the materialistic and organicist science of the day would speed them on the road to progress. They would not break with it.

The scientists were strengthened in their anti-psychoanalytic views by their Kantian-idealist philosophic education, which had taught them that there were limits to knowledge, that human nature was fundamentally inexplicable, and that there was a mind–body dualism. A good illustration of this viewpoint was the criticism of psychoanalysis by the psychiatrist-turned-philosopher Karl Jaspers (1883–1969).¹⁰⁰ A science of human psychology, said Jaspers, was not feasible because no one could know the mind of another. It was, therefore, impossible to make generalizations and build a system of the mind. Every psyche was unique and could only be examined individually. It is noteworthy that the idealistic orientation of Jaspers and other Germans led them to criticize psychoanalytic hypotheses as base and shallow explanations of human nature. They argued that Freud’s theory of sublimation undermined man’s greatest artistic, intellectual, and religious achievements. Psychoanalysis robbed people of their dignity not only by analyzing creativity, said the critics, but also by finding the source of creativity in sexual and aggressive drives.

Physicians and psychologists, at the time Freud’s work appeared, shared other assumptions that predisposed them to be anti-psychoanalytic. The commitment of most physicians and psychologists to the overriding role of heredity led to sharp distinctions between the definitions of “sick” and “healthy,” creating an unbridgeable polarity in the minds of many. “Healthy” and “sick” were thought to have no relation to each other; a person was either one or the other. The psychiatrist studied only abnormal processes, the psychologist only normal ones. Freud disconcertingly declared that mental health and mental illness were not so obvious and self-defining. Rather they constituted a continuum on which everyone had a variable place. Freud’s assault on the comforting distinction between “us” and “them,” between “doctor” and “patient,” was revolutionary and is still not completely accepted in the West today (see Appendix).¹⁰¹

Also influencing events was the fact that German psychiatry was made up of warring schools. Even those who presumed physical etiologies of mental illness were divided into clashing subgroups. These organicists in turn were ranged against the clinicians, who were predominantly Kraepelinian in outlook,

concentrating on diagnosis and prognosis and eschewing etiological explanations for which evidence was lacking. Each school had its own professors, journals, and loyal university departments. An ambitious young man seeking his career usually chose among them and joined the ranks. Eclecticism in such an atmosphere was hardly possible, and this was one obstacle to the recognition of any new field such as psychoanalysis. Psychoanalysis faced an even greater problem in this fiercely competitive and closed system, however, because to be accepted it needed a university affiliation. This would provide authoritative backing and direct teaching of students and residents. Freud and Karl Abraham knew this and tried to achieve it both before and after World War I, but they failed utterly.

Another obstacle to the acceptance of psychoanalysis by psychiatrists was their nationalistic bias, such chauvinism being a common trait of German intellectuals, academics, and the upper middle classes at the turn of the century. This manifested itself in two ways. One was suspicion of or even disdain for the close association of psychoanalysis with hysteria, the first illness Freud had tackled. Hysteria was the subject made much of by the French neurologist Jean Charcot (1825–1993)—too much of, thought the Germans, who, preoccupied with psychoses, condemned Charcot’s “theatrical” presentation of hysterical women (see Appendix). In the German medical literature hysteria was spoken of as a disease that Germans did not have as much of as did the “degenerate” Latin French,¹⁰² whom the Germans had roundly beaten in the war of 1870. Another nationalist manifestation was criticism of Freud’s use of the French word *conversion* instead of the German *Umformung* or *Umwandlung* to describe his theory of the transformation of repressed emotions into somatic symptoms. Commentators stuck to the German and refused to use the French term.¹⁰³ One physician expressed annoyance at what he called a

peculiar manner of expression [and] unnecessarily strange words, e.g., “conversion into a somatic phenomenon”; perhaps it gives the appearance of evoking scientific depth, but in reality it only impedes and obscures.¹⁰⁴

It seems likely also that the coincidence of Freud’s Jewishness, his “untidy” (*schlampig*) South German (Viennese) background, and his visits to Charcot and to the French psychotherapist Hippolyte Bernheim (1840–1919) conjured up an “un-Germanic” image.

With regard to the reaction of the experimental psychologists, Freud’s emphasis on the unconscious was crucial in arousing their distrust or at least disinterest. Psychology, as they reiterated, dealt only with consciousness. The grand old man of physiological psychology, Wilhelm Wundt (1832–1920), put it succinctly: “Assumptions as to the state of the ‘unconscious’ or as to ‘unconscious processes’ of any kind ... are entirely unproductive for psychology.”¹⁰⁵ This disagreement with psychoanalysis was fundamental, but there were severe differences about other matters as well. The psychologists’ theories were also at odds with the psychoanalysts’ views on the possibly infinite connections among a person’s thoughts, a notion that underlay the use of free association in analysis; with Freud’s use of concepts of “force” and “energy” to explain mental mechanisms; with psychoanalytic views of dreams as meaningful, unconscious mental processes; and with Freudian acceptance of hypnosis as a valuable tool (see Appendix).

The professional insecurities of the new psychologists were even greater than those of the psychiatrists, and they were determined to avoid “assistance from without.” Oswald Külpe (1862–1915), one of Wundt’s followers, indicated that the experimentalists should make it on their own:

For the beginnings and foundation of our knowledge of the facts and relations of consciousness we must always have recourse to [psychological] methods It is but very rarely either necessary or practicable to obtain from ... secondary sources information which we could not have acquired in a more direct way.¹⁰⁶

Külpe defined secondary sources as the study of the insane, knowledge based on experiments in hypnotism, the psychology of childhood, and the study of law, art, and language. Thus, theoretical differences as well as professional preoccupations kept the psychologists away from psychoanalysis.

There was yet another element affecting the reception of psychoanalysis in Germany, one that, although not decisive, did influence the course of response in the early years—Freud’s avoidance about publicizing his work. Freud never attended a general medical or psychiatric meeting and repeatedly urged his followers not

to do so. He revealed to Jung, “I detest gladiatorial fights in front of the noble rabble and cannot easily bring myself to put my findings to the vote of an indifferent crowd.”¹⁰⁷ Freud was also against the popularization of his ideas, believing that they would inevitably be distorted or watered down. He viewed the more favorable but eclectic acceptance of psychoanalysis in the United States with dissatisfaction.

Freud’s way of dealing with hostility seems to have been to dismiss a critic or withdraw from attack rather than risk another entanglement. Having learned from his Berlin friend Wilhelm Fliess (1858–1928) that the influential liberal periodical *Neue Rundschau* had decided not to review *The Interpretation of Dreams*, Freud rejected Fliess’s suggestion that he write an article about dream interpretation for the magazine. Freud explained,

I want to avoid anything that savors of advertisement. I know that my work is odious to most people. So long as I behave perfectly correctly, my opponents are at a loss. If I once start doing the same as they do, they will regain their confidence that my work is not better than theirs So I think the most advisable course is quietly to accept the *Rundschau*’s refusal as an incontrovertible sign of public opinion.¹⁰⁸

Obviously, authors are not always so prideful, and their desire to spread their ideas is not usually held against them. But Freud seems to have been more concerned with “correct” behavior before his medical colleagues than with convincing a generally educated audience. “Odious” was certainly not to be the response in lay periodicals to psychoanalytic dream theories. Thus, Freud bears a small measure of responsibility for the fact that five years after this incident, in 1905, the *Rundschau* published a laudatory article hailing the significance of Freud’s work on dreams, but without a mention of his name.¹⁰⁹

Although psychoanalysis encountered fundamental obstacles, “no educated person in Germany could have failed to know of the existence of Freud’s work in the period before the World War and have perhaps some rough idea of its nature.”¹¹⁰ Moreover, by 1914, there was in Berlin a steady demand for psychoanalytic treatment, as well as a small group of physicians-in-training who would soon practice psychoanalysis privately.

The war itself was a catalyst for psychoanalytic activity since certain cathartic and analytic techniques proved to be among the very few effective ways to deal with soldiers suffering “shell shock.” This application of psychoanalysis was discovered through battlefield and hospital experience not only by doctors like Abraham, who were well versed in analysis, but also by general physicians such as Ernst Simmel.¹¹¹

Freud brought Abraham’s attention to Simmel’s pamphlet *War Neuroses and Psychological Trauma* (1918), and Abraham immediately determined to get in touch with Simmel and “win him completely over” to psychoanalysis. This proved a decisive overture because Simmel joined the Berlin Society and soon became an active and important member. Abraham’s 1917 prediction that with peace “our science will be sure to rise to unprecedented heights” was quickly fulfilled. By February 1919, the Berlin Society was meeting three times a month, and Abraham’s practice was growing. In May the practice was “lively” and the Society’s meetings “far more productive than they used to be.” Considering the chaotic postwar conditions in Germany, it is astonishing to read that Abraham’s work day was full by June 1919.¹¹² In the fall Abraham crowed that “Berlin is clamoring for psycho-analysis,” and a clinic was being planned.¹¹³

The 1920s and 1930s

In spite of the precarious state of the new Weimar government, the Berlin Psychoanalytic Polyclinic opened in February 1920, financially underwritten by the wealthy Eitingon. In addition to providing low-fee analyses, it was the world’s first psychoanalytic training facility, and later led the way in formalizing psychoanalytic instruction. The eventual universal practice of students’ carrying out supervised analyses developed there—as did the designation of students as “candidates” (from the German *Kandidaten*). Between 1920 and 1930, 721 people were treated at the Polyclinic.¹¹⁴ In 1926 Simmel founded the first

private psychoanalytic sanitarium at Tegelsee, designed for patients who needed continual observation. Simmel tried treating alcoholics in this setting. Within three years, however, the sanitarium was on the verge of bankruptcy, and the Depression finished it off. Although Berlin clearly remained the center of German analytic activities—first under Abraham and then, after his death in 1925, under Simmel—new societies were founded in Dresden, Leipzig, Munich, Frankfurt, and Stuttgart.¹¹⁵ In Frankfurt, Karl Landauer (1887–1944) showed a potential for leadership within the movement.

Psychoanalysis did not find a home in official Weimar psychiatry, and there continued to be a small and vociferous number of physicians who denounced Freud's ideas as unscientific or immoral. However, psychoanalysis influenced an ever-growing group of medical psychotherapists (including some psychiatrists), who formalized their interest in 1926 with the founding of the General Medical Society for Psychotherapy, intended as an international organization. The German Psychoanalytic Society did not recognize this eclectic group, but some of its members joined anyway, for example, Frieda Fromm-Reichmann, Karen Horney, Felix Deutsch, and Ernst Simmel. Prominent independents, revisionists, or non-Freudians in the Society for Psychotherapy included Alfred Adler, Carl Jung, Georg Groddeck, Viktor von Weizsäcker, and Harald Schultz-Hencke.

It was among the educated public and intellectuals, however, especially in Berlin, that psychoanalysis flourished in the 1920s. The postwar atmosphere in Berlin was receptive to new ideas, and the Polyclinic at first opened its classes to all. When classes were later limited to trainees, the clinic established (and publicized) extension courses for lay persons, especially teachers. New entertainment media offered vehicles for publicity, which some psychoanalysts were quick to appreciate. The clinic sponsored radio talks on psychoanalysis, and in 1925 Abraham and Hanns Sachs cooperated with UFA, the giant film combine, in making a movie about a successful analysis entitled *The Mystery of the Soul*. The next year, on the occasion of Freud's seventieth birthday, many newspapers published commemorative articles. In 1928, the Marxist social philosopher Max Horkheimer (1895–1973) founded a seminar in psychoanalysis at his Institute for Social Research in Frankfurt. Theodor Adorno and Herbert Marcuse were among those influenced by this.

During the Weimar period, psychoanalysis also began to affect jurisprudence and education. In 1929, Franz Alexander (1891–1964), a psychoanalyst, and Hugo Staub (1886–1942), a lawyer, co-authored a book applying psychoanalytic thought to criminal behavior.¹¹⁶ This attracted sufficient attention from judges and criminal lawyers to prompt the Berlin Psychoanalytic Institute, the training organization that had grown out of the Polyclinic, to offer a seminar for members of the legal profession. Shortly after that, Kate Friedländer (1903–1949), a young analyst, became a psychiatrist for the Juvenile Court in Berlin and used psychoanalytic theories in dealing with juvenile delinquents. Educational circles became increasingly familiar with psychoanalysis through the articles and books of Heinrich Meng (1887–1980) as well as through the works of the Swiss educational and pastoral pioneers Schneider, Zulliger, and Pfister. In 1931, teachers' organizations tried to secure a professorship in education and psychology in Brunswick for Siegfried Bernfeld (1892–1953) so that psychoanalytic theories would become part of the teacher training curriculum.¹¹⁷ These trends ended with Hitler's coming to power in 1933.

Psychoanalysis, however, did not totally disappear from Germany with the advent of National Socialism. It was seriously curtailed and compromised, however, beginning with the emigration of almost all Jewish analysts in 1933 and 1934. Simultaneously, Nazi policies of "coordination" (*Gleichschaltung*), designed to merge the activities and goals of all German organizations with the Nazis' own, made it illegal to have Jewish officers of the German Psychoanalytic Society. Furthermore, the naive belief that Nazism was the hope for the German future, coupled with wishes for their own professional enhancement, led some non-Jewish analysts into cooperation—"self-coordination"—with the new regime.¹¹⁸ Thus, by November 1933, the executive committee of the Society had shrunk to two "Aryan" analysts. With the Berlin Institute's faculty reduced 80% and the candidates halved, psychoanalytic training and treatment continued, more or less undisturbed by the Nazis, for the next two years.¹¹⁹

The Nuremberg Racial Laws of 1935 offered a new challenge to the existence of official German psychoanalysis. In a vain attempt to allow the Society to survive, the few remaining Jewish members resigned. Whether this was a wise move or whether the Society should have voted to disband itself has

been lengthily and emotionally debated ever since. In the same situation several years later, the Dutch Psychoanalytic Society voluntarily dissolved itself. At any rate, a few months after the German Jews resigned, it became clear that the Nazis would not allow an independent psychoanalytic group to exist. Casting about for a merger, the rump Society accepted the invitation of the German (no longer international) General Medical Society for Psychotherapy to join with Jungians and Adlerians in a new Institute for Psychological Research and Psychotherapy. The director of the General Medical Society was Matthias Heinrich Göring (1879–1945), a psychiatrist, an Adlerian, and a cousin of the Nazi leader Hermann Göring. Dr. Göring wanted to establish a psychotherapeutic clinic in Berlin but lacked the funds to do so. The solution, approved by the Ministry of the Interior, was that Dr. Göring would take over the offices, library, and clinic of the Berlin Psychoanalytic Institute, and the Freudians would continue their activities as part of an officially Nazi-approved psychotherapeutic group. This amalgamation became a reality in the fall of 1936, having first received the assent of Freud and his daughter Anna.¹²⁰

For another two years, the Freudians within the Göring Institute preserved a fairly autonomous state, sufficient at least to train candidates within the orthodox tradition.¹²¹ After the German *Anschluss* with Austria in 1938, however, the Gestapo learned of Göring's plans to save the Vienna Psychoanalytic Institute by incorporating it into his Berlin Institute. This spelled the end of the separate status of the German Psychoanalytic Society within the Göring Institute, and the Freudians henceforth became "Study Group A." Significantly, their two leading members could no longer conduct training analyses of candidates.

As one author notes,

Freudian theory and practices, though loudly condemned by Nazi Germany [nevertheless] survived by two means. The first was the sheer fact that psychoanalytic thought had already penetrated into almost all systems of psychotherapeutic theory and praxis; the second was the persistence of the practice of psychoanalysis itself in both its orthodox and neo-Freudian forms. [Moreover, a few of the neo-Freudian forms actually had] some lines of congruence with the approved psychotherapy of the Nazi era¹²² (see Appendix).

The harnessing of psychotherapy by various agencies of the Nazi government, particularly the military, lent psychoanalysis, in a bizarre twist of circumstances, a legitimacy, including governmental financial support it had never before received. For a while, this laid the basis for the eventual public health insurance underwriting of psychoanalytic psychotherapy up to 300 sessions in the Federal Republic of Germany.¹²³

After World War II, separate traditions developed in the two Germanies. In keeping with Marxist ideology, there was no psychoanalysis in the German Democratic Republic, although there was psychotherapy, especially group therapy. The East German government recognized the category of "specialist in psychotherapy," but only in combination with the practice of another medical specialty.¹²⁴ In West Germany things were entirely different, and in the reunified Germany, Freudian and neo-Freudian psychoanalysis grew under two organizations: the German Psychoanalytic Association (affiliated with the International Psychoanalytic Association) and the German Psychoanalytic Society. In 1990 the former group had 200 full members and 400 associate members.¹²⁵ After 1970, many training institutes opened, both affiliated and unaffiliated with the International Psychoanalytic Association. Arising out of their forced association at the Göring Institute, almost all German psychoanalytic and psychotherapeutic groups belong to an umbrella organization, the German Society for Psychotherapy, Psychosomatics, and Depth Psychology (DGPPT).¹²⁶ However, psychoanalysis was still not widely accepted in departments of academic psychiatry. Rather, university-trained psychologists played an increasingly important role in psychoanalytic organizations, partly because they were the only nonmedical psychotherapists funded by state insurance. In examining relevant categories in the Yellow Pages of the telephone books in large German cities, one got the impression that the words "psychoanalysis" and "psychoanalyst" were used freely and had the type of fashionable appeal they contained in the United States in the 1950s and 1960s. Thus, intense interest—negative or positive or gradations in between—has always been the hallmark of the German reaction to psychoanalysis.

Conclusion

This limited survey of the reception of psychoanalysis has wider ramifications. It suggests that scholars in the history of modern science should investigate the impact in their fields of two factors: (1) the continuous, artificial distinction between materialist and nonmaterialist science and (2) national allegiances and rivalries. Interpreting scientific development in the light of these two themes argues against the existence of “pure science,” if the course of science is viewed over a lengthy enough period of time. For example, psychiatric research on severe mental illnesses has rarely been carried out by workers with vital commitment to and knowledge of both organic and nonorganic treatments. Furthermore, some biological research is swayed, now in this direction and now in that, as its practitioners become enmeshed in sociopolitical debates over the strength of the environment versus the strength of heredity. Moreover, one has only to look at the competition that existed between the United States and the former Soviet Union to see the influence of nationalism on the growth of scientific fields.¹²⁷

In addition, in studying the considerable variety in the development of psychoanalysis from country to country, the reader may observe the high frequency of particular, predisposing scientific, intellectual, and social forces that are persistent over time. In Switzerland, psychoanalysis was immediately popular owing to its educational, supportive, and pastoral potential and remains desirable today; until recently, medical analysts had waiting lists of patients. In Germany, psychoanalysis received much initial noisy negative attention—its critics cared intensely about the subject. This reaction was unlike that in Austria, where there was much more indifference, a product of nineteenth century medical “therapeutic nihilism.” Today, still, there is no great interest in Austria, while psychoanalysis bloomed in Germany, with lots of activity. What remained constant in Germany was that the medical establishment was unreceptive throughout. Clinical psychologists (officially recognized only since 1941) and school counselors were eagerly involved, however, and new psychoanalytic institutes opened to accommodate their desires for training.

One may also comment briefly about other countries. In France, psychoanalysis only began to attract real interest in the 1950s and became vital after the May 1968 students’ and workers’ riots. The same French intellectual and psychological traditions that mitigated against the immediate acceptance of psychoanalysis have sharply shaped the distinctive ways analysis has developed (and flourished) since the 1970s. In England, interest in psychoanalysis was confined early to a small circle and continues similarly today, in large measure owing to the dominant neurological control of British psychiatry. These are but a few examples of the nature of the interplay between psychoanalysis and culture.

Appendix

In general, it is fair to say that when this chapter was first written, psychoanalysis was blossoming in many European countries and was often generously covered by governmental health plans. Today, psychoanalysis in Europe is facing the same challenges of biological psychiatry, competing forms of psychotherapies, and financial limitations by third-party payers that psychoanalysis confronts in the United States. Nevertheless, it is not easy to generalize. In Scandinavia, where health insurance has historically been strong, there are still marked differences among the countries. A Finnish psychoanalyst reports:

Despite the relatively homogeneous social and health care politics in Scandinavia, there are marked differences between the respective countries in terms of the financing of psychoanalysis. . . . The situation in Norway is very good, and in Sweden there is also a good possibility of getting a psychoanalysis financed by the community. In Denmark, no psychoanalyses are supported, and in Finland we are in between. The situation in Sweden seems to be deteriorating, and there is some threat in Finland, too. Whether this reflects the overall standing of psychoanalysis in Scandinavia is hard to determine. (Henrik Enckell, “Where does the Money Go?” *International Psychoanalysis*, Vol. 13, No. 2, December 2004.)

Austria

1. Page 557: Much of the local recognition Freud received in the 1920s was owing to the fact that a Socialist majority ruled Vienna. More information on this subject can be found in Elizabeth Ann Danto, *Freud's Free Clinics: Psychoanalysis and Social Justice, 1918–1939*, 2005.

2. Page 557: More information on the Vienna Psychoanalytic Society after the Nazis entered Vienna in 1938 can be found in the *second* edition of Geoffrey Cocks *Psychotherapy in the Third Reich: The Göring Institute*, 1997 and in James E. Goggin and Eileen B. Goggin, *Death of a Jewish Science: Psychoanalysis in the Third Reich* (2001).

3. Periodical Literature in Abbreviated Form:

Eisold K. Freud, as leader: the early years of the Viennese society (1997)

Leitner M. Too Rankian, for the Freudians, or too Freudian for the Rankians: Otto Rank's contributions to psychoanalysis in the 1920s (1997)

Martin-Cabre L.J. Freud-Ferenczi: controversy terminable and interminable (1997)

Germany

1. Page 569: A full consideration of Freud's "Dora" case is in Hannah S. Decker, *Freud, Dora and Vienna 1900*. New York: Free Press, 1991.

2. Page 571: It is probably more accurate to say that drawing a sharp distinction between mental health and mental illness has been only fitfully and selectedly accepted in Western psychiatry and psychology. Today, the preponderance of thought holds that there is a clear boundary between the normal and the sick. This is the position of biological psychiatry which is so dominant while the influence of psychoanalytic views has waned. The biological view is strengthened by the near universal acceptance of the famed Diagnostic and Statistical Manual (DSM) of the American Psychiatric Association.

3. Page 571: It has turned out the Germans were right. Charcot, with little compunction, used young "hysterical" girls as models for his photography, probably contributing to their psychic illnesses. See Georges Didi-Huberman, *Invention of Hysteria*.

4. Page 572: Freud's concepts of "force" and "energy" to explain mental mechanisms have been found by most psychoanalysts today to be of little use and are now seen as the result of the influence nineteenth-century physical concepts had on Freud.

5. Page 574: Probably the most discussed topic in German psychoanalytic history today is whether psychoanalysis was saved or destroyed under the Nazis. Refer again to Cocks' and the Goggin's books on the subject as well as to articles (mostly) and books by R. Brockman (2003), Geoffrey Cocks (2001), Stephen Frosh (2003 and 2005), Edith Kurzweil (2001), Zvi Lothane (1999 and 2001), and Berndt Nitzschke (2003). In general, see the *Psychoanalytic Review*, April 2001, Issue 2 and *International Forum on Psychoanalysis*, 2003, Special Issue 2–3.

6. Overall Survey of Psychotherapy and Psychoanalysis in Germany Since World War II: Volker Roelcke, "Psychotherapy between Medicine, Psychoanalysis, and Politics: Concepts, Practices, and Institutions in Germany, c. 1945–1992," *Medical History*, 48:4, October 2004: 473–492.

7. Periodical Literature in abbreviated form:

Deter H-C. Psychosomatic Medicine and Psychotherapy: On the Historical Development of a Special Field in Germany (2004).

Eickhoff F.W. The Formation of the German Psychoanalytic Association (DVP): regaining the psychoanalytical orientation lost in the Third Reich (1995).

Groen-Prakkan H. Towards a Pan-European Psychoanalytical Federation: On the Development of the Psychoanalytic Movement in Central and Eastern Europe, 1987–1996 (1997).

Nitzschke B. and Lothane Z. Psychoanalysis during national socialism: present-day consequences of a historical controversy in the "case" of Wilhelm Reich (1999).

Rothe H-J. Karl Landauer and the South West German Psychoanalytic Study Group 1 (1996).

Switzerland

Interest in the relationship between Jung and Sabina Spielrein continues to run unabated. See below under *Journal of Analytical Psychology*. There is also a new, comprehensive biography of Jung by Deirdre Bair, Little, Brown and Company, 2003.

Periodical Literature in Abbreviated Form:

- Buhler K.E. Existential analysis and psychoanalysis: specific differences and personal relationship between Ludwig Binswanger and Sigmund Freud (2004).
 Feldman B. Jung's infancy and childhood and its influence upon the development of analytical psychology (1992).
 Lothane Z. Tender Love and Transference: unpublished letters of C.G. Jung and Sabina Spielrein (1999).
 Reppen J. Ludwig Binswanger and Sigmund Freud: portrait of a friendship (2003).
 Samuels A. The professionalization of Carl G. Jung's analytical psychology clubs (1994).

Newer journals and special issues to find articles about the history of psychoanalysis:

- Bulletin of the European Psychoanalytic Federation
 International Dictionary of Psychoanalysis (now available in English)
 International Forum of Psycho-Analysis (see in particular Vol. 12, No. 2, June 2003, Special Issue on Psychoanalysis and the Third Reich)
 International Journal of Psycho-Analysis (see in particular Vol. 78, Part 1, February 1997)
 International Review of Psycho-Analysis
 The Journal of Analytical Psychology (see in particular Vol. 46, No. 1, January 2001, articles on Sabina Spielrein).
 Luzifer-Amor: Zeitschrift zur Geschichte der Psychoanalyse (for those able to read German)
 Political Psychology, especially Vol. 10, No. 1, 1989
 Psychoanalysis & History
 The Psychoanalytic Review, Vol. 88, No. 2, April 2001
 Recent *Complete* correspondences include letters between Freud and Karl Abraham, Max Eitingon, and Sándor Ferenczi. On the general subject of Freud studies consult John Burnham, "The 'New Freud Studies': A Historiographic Shift," *The Journal of the Historical Society*. June 2006, Vol. VI, No. 2, pp. 213–233.

Notes and References

1. Sigmund Freud, "On the History of the Psycho-Analytic Movement," in *The Standard Edition of the Complete Psychological Works* [hereafter *S.E.*]. London: Hogarth Press, 1957, Vol. XIV, pp. 30, 34–35.
2. Freud's letter to Abraham, February 24, 1910. Quoted by Harald Leupold-Löwenthal, "Central European Psychoanalysis," in *International Encyclopedia of Psychiatry, Psychology, Psychoanalysis, and Neurology*, Benjamin B. Wolman, ed. New York: Aesculapius Publishers, 1982, Vol. I, p. 345. These lines were excised from the published correspondence, *A Psycho-Analytic Dialogue. The Letters of Sigmund Freud and Karl Abraham, 1907–1926*, H. C. Abraham and E. L. Freud, eds. New York: Basic Books, 1965. Peter Gay had access to the complete Freud–Abraham correspondence in the Library of Congress. See *Freud. A Life for Our Time*. New York: W.W. Norton, 1988, *passim*.
3. While Gay also sees Freud and Adler as opposites in many ways, he stresses their intellectual differences. See p. 220.
4. Ernest Jones, *The Life and Work of Sigmund Freud*. New York: Basic Books, 1955, Vol. II, pp. 7–8. Freud eventually wrote to Stekel that it was his personality more than his theories that had bothered him. See Paul Roazen, *Freud and His Followers*. New York: Alfred H. Knopf, 1975, pp. 219–220. Gay, based on his access to Freud's letters to Otto Rank, Jones, and Sandor Ferenczi, relates several colorful anecdotes about Stekel on pp. 213–214.
5. Jones, II, p. 123.
6. William M. Johnston, *The Austrian Mind. An Intellectual and Social History. 1848–1938*. Berkeley: University of California Press, 1972, p. 224.
7. *Ibid.*, p. 227.
8. *Ibid.*, p. 229.
9. As the Central Powers were collapsing in November 1918, he told the young Ernst Lothar, "Like you I feel an unrestrained affection for Vienna and Austria, although perhaps unlike you, I know her abysses." Quoted in *Ibid.*, p. 238, from *Das Wunder des Überlebens: Erinnerungen und Ergebnisse*, 1961.

10. *The Origins of Psychoanalysis. Sigmund Freud's Letters to Wilhelm Fliess, Drafts and Notes (1887–1902)*, Marie Bonaparte, Anna Freud, and Ernst Kris, eds. New York: Basic Books, 1954, pp. 10–11, 57, 276, 304, 308. One no longer finds these notions in Freud's correspondence with Abraham.
11. For example, he wrote Fliess, "Your news of the dozen Berlin readers pleases me greatly. I have readers here too; the time is not yet ripe for followers. There is too much that is new and incredible, and too little strict proof." Letter of December 9, 1899, in *Ibid.*, p. 304.
12. Johnston, p. 249.
13. *Origins of Psychoanalysis*, p. 280.
14. Roazen, pp. 174–175.
15. Jones, II, p. 78.
16. Joseph M. Natterson, "Theodor Reik," in *Psychoanalytic Pioneers*, Franz Alexander, Samuel Eisenstein, and Martin Grotjahn, eds. New York: Basic Books, 1966, pp. 253–254.
17. Jones, II, pp. 108–109.
18. For the various details and investigations concerning Freud's professorship see Henri F. Ellenberger, *The Discovery of the Unconscious*. New York: Basic Books, 1970, pp. 452–454. I must add that the question has been raised as to whether the ministerial decisions themselves were grounded in an attempt to limit Jewish appointments.
19. *A Psycho-Analytic Dialogue*, p. 46.
20. I am aware not everyone would agree with my judgment that Jung was anti-semitic, though Richard Noll (*The Jung Cult: Origins of a Charismatic Movement*. Princeton, NJ: Princeton University Press, 1994) finds new evidence for Jung's anti-semitism.
21. Hannah S. Decker, "A Tangled Skein: The Freud–Jung Relationship," in *Essays in the History of Psychiatry*, E. R. Wallace and L. C. Pressley, eds. Columbus, SC: Wm. S. Hall Psychiatric Institute, 1980, pp. 103–117.
22. One is reminded of the eloquent words of Walther Rathenau, the wealthy and gifted German government official, only nine years Freud's junior: "In the youth of every German Jew, there comes a moment which he remembers with pain as long as he lives; when he becomes for the first time fully conscious of the fact that he has entered the world as a citizen of the second class, and that no amount of ability or merit can rid him of that status." A slightly different translation of the original German is quoted in Frederic V. Grunfeld, *Profits Without Honour: A Background to Freud, Kafka, Einstein and their World*. Holt, 1979, page 17.
23. *A Psycho-Analytic Dialogue*, p. 34. In another letter to Abraham, Freud declared, "May I say that it is consanguineous Jewish traits that attract me to you? We understand each other." *Ibid.*, p. 46. Gay writes about the Jewish "relatively closed, defensive psychoanalytic culture," pp. 184–185.
24. *A Psycho-Analytic Dialogue*, pp. 46, 34. At the international congress of psychoanalysis in 1910, he emotionally told the Viennese, "The Swiss will save us—will save me, and all of you as well." Fritz Wittels, quoted in Gay, p. 218.
25. *A Psycho-Analytic Dialogue*, p. 54.
26. Kraus (1874–1936) edited *Die Fackel*, a satiric periodical devoted to exposés; it had a large Jewish readership. Kraus was Jewish but converted to Roman Catholicism in 1911. He respected Freud's work until 1910, when Wittels, a former writer for *Die Fackel*, "analyzed" him at a meeting of the Wednesday Psychological Society. In his talk, Wittels claimed that Kraus was anti-semitic and jealous of the reputation and circulation of the intellectual and progressive newspaper *Neue Freie Presse*, which also had many Jewish readers. Wittels made the interpretation that Kraus's envy of the *Presse* was the motive behind his mocking attacks against journalists in *Die Fackel*. Kraus found out about Wittels's presentation and soon added psychoanalysis to the long list of subjects that he furiously denounced. See Johnston, pp. 203–205, 250; Jones, II, p. 118; and Harald Leupold-Löwenthal, "The Minutes of the Vienna Psychoanalytic Society," *Sigmund Freud House Bulletin*, Vol. 4 (2), Winter 1980.
27. Wolfgang Berner, "The Viennese Psychoanalytical Society After 1945," in *Psychoanalysis International*, Vol. I, *Europe*, Peter Kutter, ed. Stuttgart-Bad Cannstatt: Frommann-Holzboog, 1992, p. 21.
28. The customs of local autonomy and civic responsibility and their significance for Swiss psychiatry are spelled out by Oscar Diethelm in *World History of Psychiatry*, John G. Howells, ed. New York: Brunner/Mazel, 1975, pp. 238–239, 247–248.
29. The ferment at the Burghölzli was widely recognized at the time. See, for example, A. A. Brill, "Reflections, Reminiscences of Sigmund Freud" [1940], reprinted in *Freud As We Knew Him*, H. W. Ruitenbeek, ed. Detroit: Wayne State Press, 1973, p. 155; Peter I. Loewenberg, "The Creation of a Psychoanalytic Scientific Community at Burghölzli, Zurich, 1902–1912," Plenary Presentation to the American Psychoanalytic Association, New York City, December 15, 1989, and "The Creation of a Scientific Community: The Burghölzli, 1902–1914," in *Fantasy and Reality in History*. Oxford: Oxford University Press, 1995.

30. The typescript is dated June 25, 1901. See Vincent Brome, *Jung, Man and Myth*. New York: Atheneum, 1978, p. 75.
31. "I must own," he concluded in his letter to Jung, "that whenever a work such as yours or Bleuler's appears it gives me the great and to me indispensable satisfaction of knowing that the hard work of a life time has not entirely been in vain." See *The Freud/Jung Letters*, William McGuire, ed. Princeton, NJ: Princeton University Press, 1974, p. 6 (also pp. xvii, xviii, 4 for other quotations listed above).
32. *A Psycho-Analytic Dialogue*, p. 11.
33. *Freud/Jung Letters*, p. 101; *Psycho-Analytic Dialogue*, p. 24; Jones, II, p. 39.
34. Quoted in *The Freud/Jung Letters*, p. 304. Freud was also pleased that he was attracting nonmedical people in Switzerland, at this time, particularly, Pfister and Lou Andreas-Salomé. He wrote that he felt "intellectually isolated" in Vienna and was happy that "a number of [Swiss] nonmedical researchers" had become interested in psychoanalysis. See Gay, pp. 190–193.
35. Raymond de Saussure, "Sigmund Freud" [1956], in *Freud As We Knew Him*, p. 357.
36. See Franz Alexander and Sheldon T. Selesnick, "Freud–Bleuler Correspondence," *Archives of General Psychiatry*, 1965, Vol. 12, No. 1, pp. 1–9. This somewhat neglected article contains only excerpts (albeit significant ones) from seven letters written by Freud and fifty letters written by Bleuler in the period 1910–1925. Also see *The Freud/Jung Letters*. Jones's account and explanations are biased, contain errors, and should be used with caution.
37. Alexander and Selesnick, pp. 5–7.
38. John C. Burnham, *Jelliffe: American Psychoanalyst and Physician*. Chicago: University of Chicago Press, 1983, pp. 73–74.
39. The rise and fall of the Freud–Jung relationship is detailed in my article, "A Tangled Skein," op cit. Gay (pp. 225–243) has a long section on the dissolution of the friendship—"Jung: The Enemy"—which favors Freud unduly. See also E. R. Wallace, IV, "A Commentary on the Freud-Jung Letters," *Psychoanalytic Review* 67 (1980): 111–137.
40. *S.E.*, vol. XIV, 1957, pp. 7–66.
41. Jung's letter to Freud, November 22, 1909, in *The Freud/Jung Letters*, p. 268.
42. *Ibid.*, pp. 288, 483, 484, 487.
43. Letter to Freud of November 27, 1908, in *Ibid.*, p. 181.
44. See Pfister's letter of February 18, 1909, to Freud in *Psychoanalysis and Faith. The Letters of Sigmund Freud and Oskar Pfister*, H. Meng and E. L. Freud, eds. New York: Basic Books, 1963, p. 18. Also see the brief biography of Pfister by Hans Zulliger in *Psychoanalytic Pioneers*, pp. 169–179.
45. *The Freud/Jung Letters*, p. 484; *Psychoanalytic Pioneers*, pp. 171–172, 342–347.
46. See Ellenberger, p. 810, for details on Frank's booklet "Zur Psychoanalyse" and Riklin's lecture to the Society for the German Language.
47. For Eberhard Dennert see http://www.bautz.de/bbkl/d/dennert_e.shtml. It must be noted that the precise aims of the Keplerbund remain somewhat obscure, whether one turns to contemporary accounts or to modern evaluations. Such widespread confusion is significant, indicating that (1) an outsider's *perception* of organizations such as the Monist Association, the Kepler Association, or the International Psychoanalytic Association may turn out to have more historical significance than what an actual member thought it meant; and (2) organizations with intellectual/philosophic goals invariably, albeit often inadvertently, leave behind a legacy of interlaced fact and legend. The histories of these organizations must be interpreted carefully; there is rarely anything "straightforward" about them. In this confusing case, Jung in 1911 dismissed the Kepler Association as a group of "ultramontanists." But in 1974 the editor of *The Freud/Jung Letters* said the aim of the Association "was to reconcile natural science and Christian faith." Yet, a distinguished historian of psychiatry wrote in 1970 that the Association's "official purpose was to defeat pseudoscientific speculations [that were being made] in the name of science." My account is in accord with that of a noted historian of German intellectual history, who based his view on a contemporary (1911) German intellectual history and on the writings of a biologist and a neo-vitalist of the 1920s. See *The Freud/Jung Letters*, pp. 471–472; Ellenberger, p. 811; Fritz Stern, *The Politics of Cultural Despair*. Berkeley: University of California Press, 1974, p. 125. No doubt only a full-scale study of the writings of Eberhard Dennert and the minutes of the various branch societies of the Keplerbund, as well as an investigation of the lives of representative members, would truly reveal what the Keplerbund represented in German-speaking countries before World War I.
48. More information is needed about the relevant philosophic and scientific situation in Zurich, but we know that the home of the head of the Berlin Monist Association, Heinrich Koerber, was also the gathering place for various avant-garde artists, writers, and Freudians. See Ellenberger, p. 815.

49. *Freud/Jung Letters*, pp. 101, 471, 481.
50. Ellenberger, pp. 811–814.
51. *Ibid.*, pp. 813–814.
52. *Ibid.*, pp. 811–812.
53. This is a literal translation of the German *Gesellschaft für psychoanalytische Bestrebungen*. A more modern rendering would be “Society for the Promotion of Psychoanalysis.”
54. *The Freud/Jung Letters*, pp. 487, 546.
55. *Psychoanalytic Pioneers*, p. 171.
56. Jones, II, p. 91. As evidence, Jones cites a letter in which Freud gave Ferenczi Riklin’s news. Yet two of Jung’s letters to Freud somewhat contradict this. Just two weeks after the debate ended, Jung reported that “the only result of the great newspaper feud is that A is being endlessly discussed in public. It even appears in the carnival newspapers.” Moreover, there is some question as to the cause and timing of the damaged practices. Two months before, Jung had already written, “At the moment my practice has dwindled to a trickle ... Riklin hasn’t much to do either.” See *The Freud/Jung Letters*, pp. 486, 461.
57. Jones II, p. 141.
58. Jones III, p. 78.
59. *Psychoanalysis and Faith*, pp. 80–81.
60. Jones, II, p. 149.
61. *Psychoanalysis and Faith*, pp. 67–71. These pages contain Freud’s letters to Pfister from April–July 1919. In the very first letter, Freud fretted about whether “the gentlemen [of the society], who are to a large extent novices, [will] show themselves ready to work hard and [will] not waste their energy theorizing and taking sides before being qualified to do so by experience.” He urged Pfister not to admit all comers to membership: “Put a tight rein on your kindness, which makes you want to unite all conflicting elements; otherwise it will all end up again in a Jungian parody.”
62. Christian Müller, “Switzerland: Psychiatry,” in *International Encyclopedia of Psychiatry*, Vol. 11, p. 57. Alexander Moser spells out the complexities of the Swiss situation. See “Switzerland,” in *Psychoanalysis International*, Vol. I, *Europe*, Peter Kutter, ed. Stuttgart-Bad Cannstatt: Frommann-Holzboog, 1992, pp. 278–279.
63. Szondi, formerly of Hungary, based his psychology on the theory that individuals with similar genetic dispositions are attracted to each other.
64. Moser, p. 279.
65. *Psycho-Analytic Dialogue*, pp. 8–9.
66. See, for one example, Abraham’s letter of January 8 and Freud’s immediate answer of January 9, 1908, in *Ibid.*, pp. 15–21.
67. I recount this very early history of psychoanalysis in Germany, which commenced before the turn of the century, in *Freud in Germany: Revolution and Reaction in Science*. New York: International Universities Press, 1977, chapters 3–5. For a summation, see chapter 6 of that book.
68. *Psycho-Analytic Dialogue*, p. 10.
69. Abraham identified Juliusburger as “a senior physician in a private institution [who] is introducing psycho-analysis in spite of his chief’s opposition.” See *Psycho-Analytic Dialogue*, p. 59. The institution Abraham referred to was the private sanatorium at a large municipal hospital, the Lankwitz Kuranstalt. The chief, who eventually moderated his opposition, was Dr. James Fraenkel. Juliusburger was the medical director under Fraenkel. See Jack L. Rubins, *Karen Horney: Gentle Rebel of Psychoanalysis*. New York: Dial Press, 1978, pp. 40–41.
70. Jones, II, pp. 29, 113; Decker, *Freud in Germany*, pp. 148–50.
71. See the *Neurologisches Zentralblatt*, Vol. 27, No. 23, December 1, 1908, pp. 1150–1152, for a summary of the presentation and ensuing discussion.
72. *Psycho-Analytic Dialogue*, pp. 55–56.
73. *Ibid.*, pp. 66, 79 (letters of January 13 and May 16, 1909).
74. Gay (pp. 179–180) implies that Eitingon had trouble getting patients, disregarding Eitingon’s choice not to have heavy patient responsibilities.
75. The chairman, Theodor Ziehen (1862–1950), found extremely irksome his many administrative commitments as chief of psychiatry at the University of Berlin and vented his frustrations in a variety of ways, his intolerance for psychoanalysis being one. See my *Freud in Germany*, pp. 160–163, for an analysis of Ziehen’s behavior.
76. *Psycho-Analytic Dialogue*, pp. 84, 86.
77. Jones mistakenly lists Yaroslaw (Johannes) Marcinowski as a charter member of the Berlin Society, but he did not actually join until 1912. See *Freud/Jung Letters*, pp. 341–342 note; Strohmayer was one of the early German

- followers of Freud whom Jones reproached with not doing “psychoanalysis proper.” For Jung’s more positive judgment, which Freud shared, see *Ibid.*, pp. 127–128. See also *Psycho-Analytic Dialogue*, p. 67; for Warda, see *Freud/Jung Letters*, pp. 98–99.
78. Jones, II, p. 86; *Freud/Jung Letters*, p. 214; for a history of psychoanalysis in Munich see Johannes Grunert, “Zur Geschichte der Psychoanalyse in Munchen,” *Psyche*, 1984, vol. 10–XXXVIII. Jahrgang, pp. 865–904. Most of the article deals with post–World War II developments.
79. *Psycho-Analytic Dialogue*, p. 108.
80. *Ibid.*, p. 113.
81. Rubins, p. 38; *The Adolescent Diaries of Karen Horney*. New York: Basic Books, 1980, pp. 237–271. Joseph Natterson’s article on Karen Horney in *Psychoanalytic Pioneers* is somewhat misleading on the subject of Horney’s two analyses (the second with Hanns Sachs).
82. *Psycho-Analytic Dialogue*, p. 113.
83. *Ibid.*, pp. 120, 138.
84. *Ibid.*, pp. 132, 135, 142, 149, 154. One of the commuting members was Stockmayer, who had left the Zurich Society, although remaining Jung’s personal friend.
A new man on the scene in the winter of 1914 was Dr. Theodor Reik (1888–1969), a lay analyst from Vienna who had been sent by Freud to Abraham for an analysis. Strangely enough, Abraham was unable (or unwilling) to find patients for him to see. *Ibid.*, p. 166; *Psychoanalytic Pioneers*, p. 253.
85. *Psycho-Analytic Dialogue*, pp. 194, 196, 200, 202, 203, 214, 226.
86. For example, Hermann Oppenheim, a neurologist, included Freud’s name among those who had contributed important information on neurasthenia, hysteria, and psychotherapy. Willy Hellpach, a psychiatrist, called Freud one of the classicists of the psychology of hysteria. Albert Moll, a psychiatrist and sexologist, listed Freud as one of a group of prominent hypnotherapists. For the complete lists, see Hermann Oppenheim, “Zur Prognose und Therapie der schweren Neurosen,” in *Sammlung zwangloser Abhandlungen aus dem Gebiete der Nerven- und Geisteskrankheiten*. Halle a. S.: Marhold, 1902, Vol. III, Pt. 8, p. 4; Willy Hellpach, *Grundlinien einer Psychologie der Hysterie*. Leipzig: Engelmann, 1904, p. iv; Albert Moll, *Der Hypnotismus: Mit Einschluss der Hauptpunkte der Psychotherapie und des Okkultismus*, 4th ed. Berlin: Fischer’s Medicinische Buchhandlung, 1907, p. 126.
87. *Psycho-Analytic Dialogue*, pp. 115, 119.
88. *Ibid.*, pp. 140, 181. The topic was the same one that Abraham had treated in his first presentation to the Berlin Psychiatric Society six years earlier.
89. *Ibid.*, p. 196.
90. Paul Schilder and Hermann Weidner, “Zur Kenntnis symbolähnlicher Bildungen im Rahmen der Schizophrenie,” *Zeitschrift für die gesamte Neurologie und Psychiatrie*, 1914, Vol. 26, pp. 201–244.
91. Letter of March 22, 1918, in *Psycho-Analytic Dialogue*, p. 273. On Schilder see Isidore Ziferstein’s chapter in *Psychoanalytic Pioneers*, pp. 457–468.
92. *Psycho-Analytic Dialogue*, pp. 270–271.
93. “Fragment of an Analysis of a Case of Hysteria,” *S.E.*, vol. VII, 1953, pp. 7–122.
94. For a fuller discussion of the meaning of the opposition to Freud’s attention to human sexuality see p. 555–556 above.
95. E. G. Boring, *A History of Experimental Psychology*, 2nd ed. New York: Appleton, 1950, p. 333.
96. Quoted in R. M. Young, *Mind, Brain and Adaptation in the Nineteenth Century: Cerebral Localization and Its Biological Context from Gall to Ferrier*. Oxford: Clarendon Press, 1970, p. 232.
97. Quoted in Walther Riese, “The Neuropsychologic Phase in the History of Psychiatric Thought,” in *Historic Derivations of Modern Psychiatry*, Iago Galdston, ed. New York: McGraw-Hill, 1967, p. 114.
98. Gustav Störing, *Mental Pathology in Its Relation to Normal Psychology*, T. Loveday, trans. London: Sonnenschein, 1907, p. 1.
99. Theophil Becker, *Einführung in die psychiatrische Klinik*, 2nd ed. Leipzig: Thieme, 1899, p. iii.
100. Jaspers began to criticize psychoanalysis before World War I. But for his fully developed argument, see *Man in the Modern Age* (New York: Anchor Books, 1957), published originally as *Die geistige Situation der Zeit* (1931).
101. See, for example, Martin L. Gross’s book, *The Psychological Society* (New York: Random House, 1978), which attacks Freud for having blurred the distinction between mental sickness and mental health by designating neurosis as universal. The views of modern psychiatry are in accordance with Gross’s (See Preface, p. 3).

102. See, for example, Paul Enke, *Casuistische Beiträge zur männlichen Hysterie*. Jena: Frommannsche Hof-Buchdruckerei, 1900, p. 5.
103. Emil Kraepelin, *Psychiatrie: Ein Lehrbuch für Studierende und Aerzte*, 6th ed. Leipzig: Barth, 1899, Vol. II, p. 511; and Gustav Aschaffenburg, "Die Beziehungen des sexuellen Lebens zur Entstehung der Nerven- und Geisteskrankheiten," *Münchener medizinische Wochenschrift*, 1906, Vol. 53, p. 795.
104. Adolf von Strümpell, Review of *Studien über Hysterie* by Breuer and Freud, *Deutsche Zeitschrift für Nervenheilkunde*, 30 December 1895, Vol. 8, No. 5, p. 159.
105. Wilhelm Wundt, *Outlines of Psychology*, 2nd rev. English ed., C. H. Judd, ed. and trans. Leipzig: Engelmann, 1902, p. 228.
106. Oswald Külpe, *Outlines of Psychology: Based upon the Results of Experimental Investigation*, E. B. Titchener, trans. London: Sonnenschein, and New York: Macmillan, 1909, pp. 15–16.
107. *Freud/Jung Letters*, p. 33.
108. *Origins of Psychoanalysis*, pp. 315–316.
109. E. Jentsch, "Traumarbeit," *Neue Rundschau*, July 1905, Vol. 16, No. 7, pp. 875–882.
110. Jones, II, p. 120.
111. *A Psycho-Analytic Dialogue*, pp. 270–272; John S. Peck, "Ernst Simmel," in *Psychoanalytic Pioneers*, pp. 373, 375–376. One might say psychoanalytic knowledge was lying dormant in Simmel, waiting for the right moment to emerge. Simmel had written his doctoral dissertation in 1908 on the etiology of dementia praecox. In his bibliography were early works by Abraham, Freud, and Jung. Simmel had practiced medicine in Berlin before 1914, but he made no contact with Abraham or the Berlin Psychoanalytic Society. See Gerhard Maetze, "Psychoanalyse in Deutschland," in *Die Psychologie des 20. Jahrhunderts*, Vol. II, *Freud und die Folgen*. Zurich, Kindler Verlag, 1976, pp. 1146–1147.
112. *A Psycho-Analytic Dialogue*, pp. 285, 287, 289.
113. *Ibid.*, pp. 292, 298. Also see Gay on psychoanalysis in Berlin in the 1920s, pp. 460–463.
114. *Zehn Jahre Berliner Psychoanalytisches Institut, 1920–1930, Neuherausgegeben vom Berliner Psychoanalytischen Institut der Deutschen Psychoanalytischen Vereinigung*, Meisenheim: Verlag Anton Hain, 1970, p. 16.
115. Jones, III, p. 78; Leupold-Löwenthal, p. 347. Abraham's death at an early age in December 1925 proved to be a setback to organized psychoanalysis in Berlin. As president of the Society, he had exerted a harmonious influence on its members and politics; his absence allowed the eruption of infighting and divisions not uncommon in psychoanalytic societies.
116. *Der Verbrecher und seine Richter*, translated as *The Criminal. the Judge and the Public: A Psychological Analysis*, rev. ed., Gregory Zilboorg, trans. Glencoe, Ill: Free Press, 1956.
117. Short biographies of Franz Alexander, Kate Friedländer, Heinrich Meng, Hans Zulliger, Oskar Pfister, and Siegfried Bernfeld can be found in *Psychoanalytic Pioneers*.
118. See Regine Lockot, *Erinnern und Durcharbeiten: Zur Geschichte der Psychoanalyse und Psychotherapie im Nationalsozialismus*. Frankfurt a. M: Fischer Taschenbuch Verlag, 1985, pp. 71–183, for a very broad interpretation of "self-coordination." Also see J. E. and E. B. Poggin, *Death of a Jewish Science: Psychoanalysis in the Third Reich*, 2001.
119. Geoffrey Cocks, *Psychotherapy in the Third Reich: The Göring Institute*. New York: Oxford University Press, 1985, p. 90. Also see second edition of 1997.
120. Jones, III, p. 187.
121. Leupold-Löwenthal, p. 348.
122. Cocks, p. 16. On the issue of the survival of Freudian thought, it is not clear whether the well-known remarks about psychoanalysis of Max de Crinis (1899–1945), director of the psychiatric clinic at the Charité in Berlin, represented a widespread sentiment within the German psychiatric establishment or were politically motivated by an isolated incident. Writing in 1944, de Crinis declared, "Unfortunately, the Reichs Institute for Psychological Research and Psychotherapy has not abandoned the Jewish orientation of Freudian psychoanalysis, and it will be necessary for German psychiatry to take steps in the immediate future [*in der Nächsten Zeit*] against this degenerate phenomenon which wears a National Socialist cloak." See Lockot, p. 166, for the complete quotation as well as the circumstances of de Crinis's judgment.
123. Peter Kutter, "Germany," in *Psychoanalysis International*, Vol. I, *Europe*. Peter Kutter. Stuttgart-Bad Cannstatt: Frommann-Holzboog, 1992, p. 115.
124. Cocks, p. 244.
125. Kutter, p. 115.

126. In 1982, there were twenty-seven institutes for training and/or continuing education. See the "Mitgliederverzeichnis, 1982/83" of the Deutsche Gesellschaft für Psychotherapie, Psychosomatik und Tiefenpsychologie e.V.
127. Martin A. Miller, *Freud and the Bolsheviks: Psychoanalysis in Imperial Russia and the Soviet Union*. New Haven: Yale University Press, 1998.

Bibliography

Those wishing to explore more deeply the history of psychoanalysis in Central Europe or begin studying parallel developments in England, France, Hungary, Italy, the Netherlands, Scandinavia, and Spain may consult the following books and articles. Note also that the International Association for the History of Psychoanalysis, headquartered in Paris, has a library and a journal with many useful references. Also, searching with a computer today, opens up many doors to the researcher.

General

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Chapter 21

The Psychoanalytic Movement in the United States, 1906–1991

Sanford Gifford

Introduction and Historiography

Until the late 1960s, the history of the psychoanalytic movement was not a popular field of study. Of no interest to the historians of science, analysts themselves may have been inhibited by the tradition of analytic neutrality. Freud's own writings on the movement^{1, 2} were highly selective and prompted by current controversies that required some special knowledge to be fully understood. Siegfried Bernfeld^{3–5} was the first analyst to study Freud's childhood, education, and cultural background in order to understand the development of his theoretical thinking. Ernest Jones incorporated Bernfeld's research in his semiofficial biography of Freud,⁶ which remains, despite its personal limitations and the additions of recent scholarship, remarkably readable and fair-minded.

For a decade Jones's work stood alone, except for specialized studies, like Hendrick's⁷ history of a local institute (Boston) and Lewin and Ross's⁸ survey of analytic training in the United States. Oberndorf's⁹ memoir was the first general history of American analysis, by a pioneer analyst. A collection of short, well-researched biographies of early analysts by Alexander, Eisenstein, and Grotjahn¹⁰ provided invaluable historical data about the first and second generation of analysts, mostly European émigrés.

A new era in the study of analysis by professional historians began with John Burnham's¹¹ monograph on the analytic movement in this country from its beginnings to 1918. This was followed by Hale's *Freud and the Americans*,¹² covering the same period, and his book on the Freud–Putnam correspondence,¹³ with a full biographical sketch of James Jackson Putnam, the first American analyst. As cultural historians, both Burnham and Hale studied the evolution of analysis in this country against the background of nineteenth century American medicine, politics, and popular culture. Both identified some of the odd features that distinguished American analysis from comparable developments elsewhere: (1) the warm initial welcome for analytic ideas in a country that Freud never loved; (2) a propensity for proselytizing and organizing societies and institutes; and (3) a traditional opposition to the analytic training of nonphysicians.

Since the early 1970s, however, the rapidly increasing number of historical studies of analysis, both general and highly specialized, would be impossible to summarize. Definitive editions of Freud's correspondence with Jung,¹⁴ Fliess,¹⁵ Jones,¹⁶ and Ferenczi^{16a} have now been published. Individual memoirs by analysts have appeared: Helene Deutsch,¹⁷ Richard Sterba,¹⁸ and Muriel Gardiner.¹⁹ Many interesting biographies have been written about Wilhelm Reich,²⁰ Smith Ely Jelliffe,²¹ Harry Stack Sullivan,²² and the Menningers.²³ Special studies of Freud's intellectual development, like Klein's²⁴ and McGrath's,²⁵ are among the many other valuable contributions of recent scholarship. Two notable biographies, Peter Gay's life of Freud²⁶ and Elizabeth Young-Bruehl's study of Anna Freud,²⁷ summed up and synthesized many of the special studies and the new scholarship of the previous 20 years. Two major books about Freud in

America have appeared: Saul Rosenzweig's detailed re-examination of Freud's historic visit to Clark University in 1909²⁸ and Nathan Hale's long-awaited second volume, bringing his sweeping history of American analysis from 1917 to 1985.²⁹

The Prehistory of Analysis in America (1895–1909)

According to recent scholarship, Freud's ideas, and some of his writings, reached the United States long before his famous lectures at Clark University in Worcester, Massachusetts, in 1909. The initial American receptiveness to analysis was partly based on a misunderstanding, as if Freud's theories were merely another contribution, among many, to the popular psychotherapies of suggestion that were flourishing at the turn of the century. This was an ebullient period, from Populist socialism of the 1880s to the Armory Show of 1912, sometimes called the "Age of Reform,"³⁰ when the United States was highly receptive to new ideas from abroad in politics and the arts and sciences. New concepts of a dynamic unconscious had already reached these shores in the 1880s and 1890s, derived from hypnosis and the suggestive therapies of Charcot, Bernheim, and Janet, which had also influenced Freud in his collaboration with Breuer.³¹

William James had reviewed Breuer and Freud's *Studies on Hysteria* in 1894, as did Havelock Ellis in 1899, and in 1906 Adolf Meyer had published the first perceptive account of Freud's theories of sexuality. James, in fact, had welcomed all variations of what he called "the mind-cure movement"³² with indiscriminate generosity, sweeping together reports of hypnotic treatment, fugue-states, and multiple personality along with cures by faith-healing and experiments with telepathy. Yet his outlook was not mystical but briskly pragmatic, devoted to scientific method and experimental proof. He hailed these varied popular psychotherapies, in contrast to earlier theories of mental illness as hereditary and untreatable. He extolled their "practical fruits" and "concrete therapeutics" as congenial to the optimistic American temperament, as "perhaps our only decidedly original contribution to the systematic philosophy of life."

Among these early references to Freud was a commonsense comment on his treatment of hysteria, by a Dr. Robert Edes in his Shattuck Lectures on "The New England Invalid."³³ Edes was an internist and part of a sizable group within the "mind-cure" movement who practiced "medical psychotherapy."³⁴ This meant the application of hypnosis and "waking suggestion," derived from Charcot and the other French neurologists, or the "moral re-education" of Dubois in 1907 and Déjerine in 1912, to the treatment of office patients with so-called "functional disorders." Some of these general physicians established small sanitariums for the treatment of neuroses: Edes as director of Dr. Adams' Nervine Asylum in Boston, George Behring at Bethel, Maine, and Austen Riggs at Stockbridge, Massachusetts.³⁵ One typical practitioner of "medical psychotherapy" was Joseph Pratt,³⁶ a Boston internist who created a "class-method" of treating outpatients with tuberculosis, in collaboration with a clergyman, the Rev. Elwood Worcester, who was also a clinical psychologist. From this collaboration, group psychotherapy for the neuroses evolved.

The second group who advocated the psychotherapies of suggestion were clinical psychologists, like William James, Josiah Royce, Hugo Münsterberg, Boris Sidis, and G. Stanley Hall. The third and largest group were the neurologists, like Morton Prince and James Jackson Putnam in Boston and Smith Ely Jelliffe in New York. Their interest, like the medical psychotherapists, arose from their need to treat office and clinic patients with neuroses. Among the psychiatrists of that era who cared for chronic psychotic patients in secluded institutions, there were a few like Adolf Meyer, August Hoch, and William A. White who were interested in more progressive treatment of the psychoses. There were also some exceptional mental hospitals where the interest in psychotherapy was strong, including Manhattan State in New York City, Phipps Clinic at Johns Hopkins, St. Elizabeth's Hospital in Washington, D.C., and McLean Hospital and Worcester State Hospital in the Boston area.

Among these zealots of the new psychotherapy clustered in New York, Boston, and the Baltimore–Washington area, the first Americans to identify themselves as "Freudians" and later as analysts were J. J. Putnam and A. A. Brill. Each was drawn to analytic theories for different reasons but both were somehow guided by Ernest Jones. A Welshman residing in Canada from 1908 to 1913, Jones was

a “temporary American” and, in presenting himself as an indefatigable proselytizer for Freud’s ideas, he had some claim to being the very first American analyst. Freud³⁷ had called Putnam “the first American to interest himself in psychoanalysis,” and Putnam’s report on the treatment of hysteria “according to Freud’s method of psychoanalysis”³⁸ can be considered the first analytic paper in English. Putnam’s approach was still close to the earlier “cathartic method” of Breuer and Freud.³¹ Jones’s visit in early 1909 to one of the regular meetings at Morton Prince’s house to discuss the new psychotherapy of suggestion increased Putnam’s confidence in the analytic methods.

In the summer of that year both Putnam and Jones attended a meeting of the American Therapeutic Society³⁹ organized by Morton Prince, who gave an ebullient opening address on the psychotherapies of suggestion. Putnam spoke enthusiastically about Freud’s new contributions to treatment and the importance of childhood fears in adult neuroses, and of seeking “the hidden element of desire.” Jones gave a fuller account of Freud’s current theories, firmly differentiating “psychoanalysis” from all other forms of psychotherapy. In contrasting its approach to the role of the hypnotist, Jones showed how the analyst’s use of free association was “in almost every respect the reverse of treatment by suggestion.”

This meeting of the American Therapeutic Society marked a high point in the psychotherapy movement and the beginning of its decline. Its importance for psychoanalysis was overshadowed by the better-known Clark Lectures, which took place a few months later, in September 1909. G. Stanley Hall had invited Freud, Ferenczi, and Carl Jung to celebrate the twentieth anniversary of Clark University. The five lectures that Freud gave, to an academic and general audience, edited and published in 1909, was the closest Freud ever came to writing a “popularization” of analysis. From these meetings some important events in the later history of American analysis can be dated:

1. Freud’s meeting with Putnam, who invited the three European analysts to his Adirondack camp and began a correspondence with Freud and Jones that lasted till the end of his life in 1918.
2. The establishment of Ernest Jones and A. A. Brill as leaders of the psychoanalytic movement in the United States after their visit with Freud in the summer of 1908, when both had studied with Jung in Zurich. According to new research by Paskauskas,⁴⁰ Jones had not been so committed to analysis before the Worcester meeting, but there is no doubt that he quickly made himself Freud’s roving emissary in North America. He spoke on behalf of analysis at medical meetings of all kinds and persuaded Putnam, somewhat reluctantly, to accept the presidency of the newly founded American Psychoanalytic Association in 1911. In 1908 Brill had obtained Freud’s permission to translate his papers and books into English, to Jones’s dismay, and he returned to Manhattan State Hospital, already a center of interest in analysis. As a self-proclaimed analyst, Brill founded the New York Psychoanalytic Society in 1911, a few months before the American Psychoanalytic Association was founded.
3. Freud had an abiding distaste for America and a mistrust of Americans. He attributed this, half-whimsically, to the effect of American cooking on his digestion. But his real fears were based on the American propensity for popularization, for the dilution of analysis with the base metal of psychotherapy, and for American opposition to lay analysis.

The Early Decades: 1906–1946

A Tale of Three Cities and a National Association (1909–1925)

The slow growth of analysis after Freud’s only visit to the United States already illustrated features that distinguished American from European analysis. Its development in the United States included the influence of strong, eccentric personalities and regional differences in the extent to which analysis was tied to medicine and clinical psychiatry. There were three pre-existing centers of analytic interest, New York City, Boston, and Baltimore–Washington, D.C., each dominated by a single strong personality, and each with its own local characteristics. There was also the American Psychoanalytic Association, founded in May 1911

at Baltimore. The new association met just after the American Psychopathological Association, founded a year before by leaders of the psychotherapy movement, to which many of the eight founding members of the new analytic association also belonged. The Psychoanalytic Association was intended to provide an annual scientific meeting for analysts and potential analysts who lived outside the three Eastern centers, in both the United States and Canada.

The American Psychoanalytic Association was founded only a year after the Second Psychoanalytic Congress at Nuremberg in 1910, when the International Psychoanalytic Association (IPA) was organized, at Freud's suggestion. In its early decades the American Psychoanalytic Association (or APsA, as it will sometimes be called) included a number of nonphysicians as members, just as many psychologists had practiced psychotherapy during the previous era of suggestion and "moral re-education." G. Stanley Hall, professor of psychology at Clark, for example, was president of the American Psychoanalytic Association in 1917 to 1918.⁴¹

The early history of analysis in Boston was brief. Putnam was 62 when he first met Jones, at Prince's house, in 1909, and he retired as the first professor of psychiatry at Harvard Medical School in 1912. Putnam founded the first Boston Psychoanalytic Society in 1914 as a small group that met every Friday afternoon in his house until his death in 1918. Its exact membership is not known, but it included Isador Coriat, who had first studied with Adolf Meyer at Worcester State Hospital in 1902. Coriat was active in the psychotherapy movement, joined the Rev. Worcester's Emmanuel Movement³⁴ in 1906, and became an analyst in 1911 or 1912.⁴² He was the only Freudian analyst in Boston during the "Dark Ages" after 1918, and he re-established the Boston Psychoanalytic Society in 1924 to 1928. Another early member was L. E. Emerson, a clinical psychologist and pupil of Josiah Royce, whom Putnam had appointed to the department of psychiatry at Massachusetts General Hospital. During his short post-retirement period, Putnam had been remarkably active in promoting psychoanalysis, speaking at neurological and psychiatric meetings, writing over 20 papers on psychoanalysis,³⁷ and conducting a vigorous correspondence with Freud and Jones.¹³ He also struggled to interest Freud, unsuccessfully, in his neo-Hegelian philosophy⁴³ and to persuade them that analysis should include the study of ethics.

Putnam was a shy, guileless man of intense convictions, totally lacking in personal ambition, and Coriat, his direct successor, was also personally reserved and scholarly, without the qualities of a charismatic leader. The history of analysis in Boston, and perhaps in the United States, would have been different if Putnam had succeeded in getting Ernest Jones appointed to the faculty at Harvard Medical School. Jones also failed to get an academic appointment at Johns Hopkins, probably because of Adolf Meyer's distaste for his personality,⁴⁴ and he returned to England in 1913.

The Washington-Baltimore scene actually consisted of two cities and two powerful personalities, Adolf Meyer at Johns Hopkins Medical School in Baltimore and William Alanson White at St. Elizabeth's Hospital in Washington, a federal institution unaffiliated with a medical school. Meyer was a German-speaking Swiss, familiar with Freud's writings from the turn of the century, and a founding member of the American Psychoanalytic Association. He resembled his countrymen, Bleuler and Jung, in his interest in psychoses, especially schizophrenia, and in seeking more dynamic ways of understanding and treating them. Meyer had been at Worcester State Hospital in Massachusetts and at Manhattan State Hospital in New York from 1902 to 1911, when the latter was the center of interest in analysis; and his appointment at Hopkins, to head the new Phipps Clinic, made him an influential figure in American psychiatry. Even in those early years, however, he had inner reservations about analytic theory.⁴⁴ His interest in advancing his own dynamic theories, called "psychobiology," took precedence, and by the 1930s his ambivalence about analysis led him to discourage his residents from analytic training.⁴⁵ Yet his early influence encouraged analysis, as indicated by the many analysts on his staff.

The analytic leader in Washington, D.C., William A. White, was a New Yorker, born near Brooklyn Medical College; his interest in psychiatry and analysis began at Binghamton State Hospital in 1896. There he met Boris Sidis, a protégé of William James and a typical advocate of suggestive psychotherapy but also knowledgeable about analysis. White also met Smith Ely Jelliffe there, who later became an analyst, and was a lifelong friend and collaborator. They were constant correspondents, spent their summer

vacations together at Jelliffe's lodge on Lake George, and quite literally "analyzed" each other over the years.⁴⁶ White became superintendent of St. Elizabeths in 1903, wrote papers on psychoanalysis from 1909 on, and his *Mental Mechanisms*⁴⁷ was "probably ... the first book about analysis by an American." Even more influential was his textbook *Outlines of Psychiatry*,⁴⁸ which contained a section on analysis and was republished in many editions and read by generations of medical students. He emphasized the importance of a nonjudgmental attitude in the psychiatrist, as well as time, "several months, of at least two or three *séances* each week, to reach a final result." (Italics added; *séance* reflects the origins of both psychotherapy and analysis in hypnosis.)

Besides White's writings, he was co-editor with Jelliffe of the well-respected *Journal of Nervous and Mental Disease*, which published an important monograph series that included the first English translations of Freud and other European analysts. In addition to joining the American Psychoanalytic Association in 1912 and defending analysis at neurological meetings, White and Jelliffe founded the *Psychoanalytic Review* in 1914, the first analytic journal in English. Through a misunderstanding, Freud refused to contribute to the first issue, and a paper by Jung was published instead, although Jung's split with Freud was by then complete.

In 1914 White founded the Washington Psychoanalytic Society, most of whose members were on the staff of St. Elizabeth's Hospital, and appointed E. J. Kempf as a full-time research psychiatrist to apply psychoanalytic methods to hospitalized psychotic patients. Kempf was an interesting and unusual man,⁴⁹ who was a pioneer in applying analysis to the treatment of schizophrenia. Kempf was also an innovator in the observation of primate behavior, attempting to validate psychoanalytic hypotheses. He later created a vast synthesis embracing analytic theory, Walter Cannon's homeostatic concepts, and general biology.

The Washington Psychoanalytic Society met once a month, a variety of papers were presented, and its membership included, besides Kempf, several other notable or innovative analysts. Lucile Dooley was their first woman analyst, and Trigant Burrow was an early enthusiast for psychoanalytic group-psychotherapy. G. Lane Taneyhill introduced the use of the couch, which most American analysts had ignored in those early decades.⁵⁰ After 1918, the society ceased to meet, for reasons that are unclear but have been attributed to absences due to military service.

White had served as president of the American Psychoanalytic Association in 1915 to 1916 and again in 1927 to 1928, but at the annual meeting in 1919, according to Oberndorf,⁹ White "gave way to an extraordinary outburst. ... 'The time has come to free American psychiatry from the domination of the Pope at Vienna.'" White proposed that the American Psychoanalytic Association dissolve and merge its functions with the American Psychopathological Association, which shared an overlapping membership with it. When White's proposal was debated again at the 1920 annual meeting, Adolf Meyer put the issue to rest by insisting, despite his later ambivalence, that the interests of analysis required a separate organization.

The third and most important analytic center was, of course, New York City, with the beginnings of analysis at Manhattan State Hospital on Ward's Island. Oberndorf⁹ called Manhattan State, when he arrived in 1909, "the largest program of training in psychoanalytic psychiatry in the world." Oberndorf attributed this analytic enthusiasm to Meyer, who was there from 1902 to 1910. "Though psychoanalysis was cradled in Boston, it was raised and grew up in New York," Oberndorf wrote. While the institutional setting of Manhattan State and the interest in treating psychoses resembled the situations at both Zurich and Washington, D.C., would-be analysts quickly left Manhattan State and set up full-time analytic practices in the city itself. Thus Brill, in 1909, could already show Freud the suite at 97 Central Park West that would be Brill's office for many decades.

By 1913 Oberndorf had established an outpatient psychiatric clinic at Mt. Sinai Hospital, with consultations on the medical wards. This became the model for analysts with general hospital affiliations decades later. "Thus psychoanalysis began ... as an integral part of medical practice, differing radically in this respect from Vienna," Oberndorf concluded. "American psychoanalysts never regarded psychoanalysis as a distinct discipline, but as essentially a branch of psychiatry and medicine. Most of its advocates held teaching positions and appointments at important hospitals, as they continue to do."

Thus the early analytic scene in New York differed from that in Boston and Washington, D.C., under the energetic, gregarious leadership of Brill. A Jewish immigrant from Austrian Galicia, he came alone at 16,

supported himself by chess and mandolin lessons, and worked his way through Columbia Medical School. Throughout his long professional life he preserved a warm-hearted, optimistic disposition that attracted followers. After the founding of the New York Psychoanalytic Society in 1911 with less than a dozen members, there were 27 the following year. The Society met once a month, to hear each others' presentations, continuing their discussions until long after midnight. The membership was so eager to present papers that a system of drawing lots for the privilege was instituted in 1914. During its first decade, meetings were held in each others' apartments, at restaurants like the Café Boulevard, or at the Medical Alliance at 200 East Tenth Street. From the sketchy minutes,⁵¹ administrative matters were not burdensome, entertaining motions for raising the dues from \$3 to \$4 or for expelling members who missed more than three successive meetings.

One notable member, Jelliffe, was elected to membership in the first year, was dropped "due to a misunderstanding," and was reinstated in 1913. These events²¹ reflected Jelliffe's complicated relations with Brill, with Jung, and with a young assistant, Dr. Beatrice Hinkle, who continued to be a Jungian analyst. There was controversy about Jelliffe's use of supervised lay assistants, which he defended, only repudiating it in 1926. Jelliffe was also known as a close friend of White's, who threatened Brill's need to maintain the New York Psychoanalytic Society as the chief center of analysis in this country. Brill had declined Putnam's invitation to be a founding member of the American Psychoanalytic Association in 1911, to keep the New York Society's independent relationship with the International Psychoanalytic Association.

The issue of lay analysis preoccupied the New York Society from its first meeting, which voted that membership be restricted to "physicians actively engaged in psychoanalytic work." This was in contrast to the American Psychoanalytic Association, which had no such restrictions, and the Boston Society, which accepted psychologists like Emerson and E. B. Holt. The New York Society discussed periodic proposals to "investigate" therapists who had misrepresented themselves as analysts. In 1919, for example, four such cases were reported to the New York County Medical Society for "practicing medicine without a license."

The strong antipathy to lay analysis in the New York Psychoanalytic Society was usually attributed to Brill's influence, and Brill, in turn, according to Daniels,⁵² would refer to New York State licensing regulations. Daniels also said that Brill's objections to lay analysis weakened after every European visit he made to Freud and reappeared in reaction to nonmedical applicants for membership who had been analyzed in Europe. Other colleagues who knew Brill in the 1920s contrasted his official attitude, deeply concerned with medical respectability, with a more tolerant personal respect for nonmedical child therapists, many of whom were women and often the wives of analysts.⁵³ Some of these talented women treated the children of Brill's colleagues and were advised by Brill to bill their patients for "lessons" rather than therapy.

A compromise was proposed to the New York Society (Minutes of Society Meeting 29 November 1921), in which the restrictions against membership for nonphysicians were reaffirmed but a special nonvoting category of Associate Member was established for "physicians or other professional persons in related fields." An odd quirk in Brill's attitude toward women was discovered by D'Amore⁴¹ in his research on the earliest women members of the American Psychoanalytic Association (Lucile Dooley and Marion Kenworthy, both admitted in 1926). Brill claimed that the original constitution of the American Psychoanalytic Association, now lost (he wrote to White in 1920), denied membership to women. Brill raised this point in objecting to membership for Louise Brink, who had been an analysand of Jelliffe's and one of his lay assistants. Why Brill made an issue of gender is puzzling because the New York Society had never had any restrictions against women. Beatrice Hinkle had been elected in 1911, Mary Isham soon after, and Marion Kenworthy in 1919. Hinkle was proposed again in 1914 and "rejected with four blackballs," presumably because of her Jungian sympathies, not because she was a woman.⁵¹

Despite the liveliness of the New York Society in scientific presentations, Brill raised the issue of dissolving the society in 1917. This was voted down, but its occurrence remains a mystery, like White's proposal to dissolve the APsA in 1919. Despite the suggestion of anti-German prejudice in White's "outburst," World War I had little impact on the analytic movement in the United States.

Analysis continued to grow in the United States, but Burnham¹¹ and Hale^{12,13} suggested that characteristic features of American analysis were a wide, superficial acceptance but a lack of depth. Burnham

described an eclecticism and popularization resulting in a psychoanalysis that was “accepted empirically and neglected theoretically, loved and distorted.” These distortions included retaining early versions of Freudian theories, such as catharsis, while ignoring Freud’s later revisions. American analysts seemed indifferent to European analytic dissent, to when or why Adler, Jung, and Rank broke with Freud. American analysts, as in the earlier psychotherapy movement, wrote many popular, simplified books about analysis, including Brill, Putnam, Coriat, Peck, and others, unlike European analysts, whose books and articles appeared in scientific journals.

In speculating about the origins of the American prejudice against nonmedical therapists, Hale¹³ suggested that an important element was the chaotic state of earlier American medical education, with its diploma mills and inadequate teaching. The proliferation of substandard “medical colleges” was in marked contrast to the traditional, highly stable university systems of Europe. This lack of scientific standards in medicine was the object of the Flexner Report in 1910, but changes took place slowly.

The Age of Institutes and Analytic Training Abroad (1925–1938)

Until the mid-1920s, there was no real concern with analytic training as such. Except for the M.D. requirement in the New York Society, membership in the APsaA was open to any and all who showed a “sincere interest” in analysis and had some familiarity with the literature. The first generation of analysts, like Putnam, Brill, and Coriat, was entirely self-taught, and they “became analysts” by reading Freud and treating patients to the best of their ability. Although Freud had mentioned the desirability of a personal analysis as early as 1910, Nunberg was the first to propose a didactic or “training” analysis as a requirement, in 1918 at the Budapest International Psychoanalytic Congress. With the founding of the new Berlin Psychoanalytic Institute in 1920, the outlines of a three-part program soon emerged.⁵⁴ The curriculum included the three basic elements of all later training curricula: a personal analysis with a recognized “training analyst,” theoretical and clinical seminars, and the supervised analyses of one’s own patients. The success of the Berlin Psychoanalytic Institute was presented at the Bad Homburg Congress of 1925, and an International Commission on Training was established, with representatives from Vienna, Berlin, Budapest, London, New York, and the APsaA. Oberndorf was the New York representative, and after he described these developments to Brill, an education committee was appointed to create standards for analytic training.

Since the end of World War I, Americans had been traveling abroad for analysis, or for special training in child analysis with Anna Freud. This pattern gained momentum and continued until the Nazis and World War II put an end to analysis on the continent. European travel for advanced studies had been an American custom for generations, with artists, writers, and scientists following each others’ well-worn paths to Paris or Rome. From the late nineteenth century on, German and Austrian universities had a special attraction for physicians, and the University of Vienna had created a minor industry in the training of Americans in various medical specialties. Hence the path to Vienna or Berlin for would-be analysts was a congenial one, for Adolf Stern, H. W. Frink, and Oberndorf in the early 1920s, and for Muriel Gardiner, M. Ralph Kaufman, and others in Vienna before the *Anschluss* in March 1938. Some Americans analyzed by Freud, like Joseph Wortis⁵⁵ and Abram Kardiner,⁵⁶ wrote critical accounts of their analyses.

Since analyses were short in those days, the Viennese analyst Paul Schilder was popular with Americans for his three-month summer format. A few European analysts had come to the United States to lecture, like Sándor Ferenczi, Paul Federn, and Otto Rank, and stayed long enough to analyze Americans seeking to become analysts. Freud had deplored this practice because of its money-making aspects and his aversion to America.

With the need for “institutes” modeled on the Berlin Psychoanalytic Institute, there was a general assumption that a “recognized training analyst,” to fulfill an institute’s training functions, should be a well-known European. The New York Psychoanalytic Society was the first, in 1931, to invite Sandor Rado from the Berlin Institute itself. Boston followed, by inviting Franz Alexander. He had already spent the academic year 1930 to 1931 at the University of Chicago, where he was appointed by Robert Hutchins, a

leader in progressive education. During his year in Boston (1931 to 1932), Alexander held a part-time research post at the Judge Baker Guidance Center (appointed by William Healy, his chief, his analysand, and his collaborator) and conducted six or eight “training analyses.” Alexander then returned to Chicago to found the Chicago Psychoanalytic Institute, set up with an unusually strong board of lay trustees, separate from the Chicago Psychoanalytic Society.

Boston, meanwhile, had invited Hanns Sachs, originally a member of Freud’s early circle in Vienna and the first “training analyst” at the new Berlin Institute in 1920. Sachs’s emigration to Boston had been arranged by Irmarita Putnam, with Freud’s explicit approval. Sachs was not a physician, and he refused to obey the new “committee rule” that candidates must be approved by the Education Committee.

The old Boston Psychoanalytic Society had been re-established by Isador Coriat in 1928, a self-trained Freudian from James Jackson Putnam’s first 1914 society. Coriat had presided over a psychoanalytic study group from 1924 to 1928 in which he was the only “Freudian.” This included three or four analysands of Jung, of whom Irmarita Putnam and Henry A. Murray were later analyzed by Freud, three or four analysands of Otto Rank, who had left the analytic movement in 1924, and some analysands of Paul Schilder in Vienna. These four groups, wrote Hendrick,⁷ “got along much better together than Freudians got on with Freudians, as soon as there was more than one lone Freudian in the Society!” In 1930 the Boston Society had been reorganized with Martin Peck as president, a Rankian who was later analyzed by both Alexander and Sachs. The final reformation that created an institute was carried out by four newly arrived young analysts who had just completed their training in Europe, led by Ives Hendrick of the Berlin Institute. After three years of fierce argument, a new constitution was created, and most of the Rankians and Schilderians were “regularized” by having analyses with Alexander or Sachs. The Boston Psychoanalytic Society and Institute was accepted by the American Psychoanalytic Society in 1933.

Besides the well-known theoretical differences between American and European analysts about non-medical training, there were practical, local problems. The New York Society had brought complaints about nonphysicians who obtained analytic training abroad and expected to be recognized as analysts in the United States. After fierce debate, the threat of forcing European rules on American organizations was narrowly averted by Jones, Anna Freud, and some British and Dutch colleagues. A compromise was worked out at the 1929 IPA congress in Oxford that analytic training in Europe of an American candidate would not be undertaken without permission from the candidate’s local analytic society.

There was continuing bitterness among returning American psychologists, teachers, and social workers who were denied membership after completing their analytic training abroad. Later, these same institutes had admitted nonmedical European analysts, like Erik Erikson, through an unwritten “grandfather clause.” The New York Society had retained its provision for nonphysicians to join as associate members, after three years training “in accordance with the requirements of the International Training Commission.”

The fourth psychoanalytic training center, after New York, Chicago and Boston, was the Washington–Baltimore Psychoanalytic Society, re-established in 1930 and recognized as a constituent society of the American Psychoanalytic Society in 1932. The original 1914 Washington, D.C. society had expired in 1918 and was revived in 1925. There was also a second society, the Washington Psychoanalytic Association, founded in 1924, with William A. White as president. More strenuously opposed to nonmedical members than the Washington Society, this second group was led by Ben Karpman, whose analysis by Stekel was considered questionable.

Ernest Hadley of Washington had initiated the organization of a new Washington–Baltimore Society in negotiations with Brill, then president of the American, and Clara Thompson from Baltimore.⁵⁰ Its history continued to be complex through the 1930s and 1940s because of its close interrelationship with the Washington School of Psychiatry. This organization, created by the William A. White Psychiatric Foundation, was originally called the *Psychoanalytic* Foundation, and changed its name to *Psychiatric* at White’s request. In 1940, when the Washington–Baltimore Institute was founded, the “training of physicians in the therapeutic use of psychoanalysis was conducted by the Washington–Baltimore Society in conjunction with the Washington School of Psychiatry.”^{56a} These unusual features meant that seminars were attended both by analytic candidates of the society and by students of the Washington School, reflecting

White's lingering eclecticism. White died in 1938, but the powerful personality of Harry Stack Sullivan continued to influence the Baltimore–Washington scene.

Sullivan is a difficult figure to portray because of the extreme reactions he evoked. Admired by some as a genius, he was hailed as the most important but least acknowledged influence in American psychiatry. But he was also dismissed as an impossible human being and even as something of an impostor. His staunchest admirers⁵⁷ acknowledged his severe emotional handicaps. Coming from great rural poverty and severe family psychopathology in the “burned-over” districts of upper New York State, he suffered some kind of emotional breakdown in his second year at Cornell. He then passed an unhappy decade supporting himself at menial jobs, working his way through a medical “diploma mill” in Chicago. These deficiencies in education and self-esteem contributed to his prickly, self-aggrandizing behavior and secretive, defensive attitudes. He was shy, socially awkward, and unable to present his ideas in coherent written form. Hence Sullivan's reputation as a great teacher depended on the contending claims of his admiring followers and his detractors. This was also the fate of Lionel Blitzten in Chicago⁵⁸ and other eccentric but gifted teachers whose exceptional qualities were not conveyed in their writings. Sullivan's gifts included an intuitive, highly empathic approach to the treatment of young male schizophrenics. He was an admirer of Ferenczi in the late 1920s when Ferenczi's theories about active intervention and the power of love were diverging from mainstream analysis. Sullivan had encouraged Clara Thompson to undertake an analysis with Ferenczi in Budapest in 1930 to 1931. Later he began his only known analysis with her, his former pupil. When she gave up her analysis of Sullivan, she acknowledged that the obstacle was her awe of her former teacher.⁵⁰

During the early 1930s, the New York Society and its three sister societies were reorganizing themselves to create institutes and provide full analytic training. Meanwhile, the American Psychoanalytic Association was engaged in its own reorganization, to emerge in 1932 as a federation of four analytic training institutions, instead of a scientific society with individual members. These changes in the American Psychoanalytic Association were not recognized by the International Psychoanalytic Association until 1936, at the fourteenth congress at Marienbad, Czechoslovakia, when the Nazis had already come to power in Germany. At the Paris IPA Congress of 1938, the APsA notified the International Psychoanalytic Association that members of foreign analytic societies would not be recognized in the United States. At a time when German-speaking analysts were fleeing from Germany, Austria, and Czechoslovakia, this seemed an insensitive American response toward refugee analysts who were seeking safety in England and America.

This relatively short period in analytic history began in 1925, when the International Training Commission was proposed, and ended in 1938, when it was abolished and most German-speaking analysts had fled the continent. American institutes for training were being established, and the APsA, a centralized national association, now met twice a year for the exchange of scientific ideas. Before 1938 the majority of would-be analysts still went abroad for their analytic training, usually to Berlin or Vienna. But even before Hitler's triumph in 1933, the first European analysts were being invited—Rado in New York (1931), Alexander in Chicago (1930) and Boston (1931 to 1932), and Hanns Sachs in Boston (1933)—as “approved training analysts.” The tripartite structure of training, with a personal analysis, theoretical and clinical seminars, and the supervised analysis of “control” cases, had been established, based on the Berlin Psychoanalytic Institute.

In many ways analysis was still a European specialty, in the same sense that “modern architecture” in the 1920s and 1930s was thought of as European and the German Bauhaus at Dessau as its most advanced exemplar. From the *Tenth Annual Report* of the Berlin Institute (1930) and from the letters and interviews of both European and American candidates, a similar impression emerges of a well-organized but easy-going institution, with a spontaneous avant-garde fervor and considerable freedom from regimentation. This atmosphere seemed far more relaxed than the committee-ridden, rigidly regulated institute that was advocated as an ideal by Ives Hendrick, Bertram Lewin, and other Americans trained in Berlin. Apparently these Americans had advocated a Berlin model that was more rigid and more “German,” in the sense of Prussian regimentation, than the Berlin Institute itself. And the new rules were strongly opposed to lay analysis, which Freud had called our “medical fixation.”⁵⁹

The analytic movement in America had now reached the threshold of a new era, in which European ideas and American institutional forms would undergo a mutual adaptation. This process would eventually have occurred anyhow, perhaps at a slower pace, but the gradual evolution of the analytic movement had been overtaken by historical events. The Nazi occupation of Europe gave an unexpected impetus and some new directions to the development of analysis in the United States.

Immigration and the Europeanization of American Analysis, 1933–1946

In looking back on the years that preceded World War II, there was a strange delay between the horrifying events of those years and their effects. There seemed to be an almost muffled, subdued response to fascism, Nazism, and the Moscow trials among analysts living in countries that had not yet been overrun by the Nazis. This was true not only in the United States, where the minutes of the New York Psychoanalytic Society seemed almost untouched by international events. Even in Austria, painfully vulnerable after its subjugation by the native Austro-Catholic fascism of Dollfuss in 1933 to 1934, there was an impression of business as usual in the scientific activities of the Vienna Society. Freud could write to Jones (7 April 1933) just after the Dollfuss *putsch*,

We are passing over to a dictatorship of the Right, which means the suppression of social democracy. This will not be a pretty state of affairs and will not be pleasant for us Jews, but we think that special laws against the Jews are out of the question in Austria because of the clauses in our [international] peace-treaty. ... Vienna is—despite all the riots, processions, etc. reported in the newspapers—calm and life is undisturbed.⁶⁰

Even in Germany itself, for example, Grotjahn's wife⁶¹ was one among many Jewish physicians who still believed in 1935 that Hitler could never last longer than two years. Helene Deutsch⁶² often said that no one in Vienna encouraged them to leave in 1935 except Robert Waelder. Felix Deutsch, on a U.S. lecture trip in 1933, observed that Americans were more aware of the potential danger of Hitler than his fellow Austrians. In 1936, when the Nazi threat to Austria was even greater, Eissler⁶³ recalled that Anna Freud had advised younger analysts against leaving Vienna.

As the flow of refugees increased, there were three turning points in the Nazi takeover: January 1933 in Germany proper, March 1938 in Austria, and September 1938 in Czechoslovakia, where a small but brilliant circle of refugees, including Otto Fenichel, lingered in Prague.

German and Austrian analysts who reached England were encouraged, by war-time conditions and an ambivalent government policy, to move on to the United States as soon as they could obtain permanent visas. The great variety of individual experiences in leaving Europe and the different paths of escape and sojourns en route created a rich and often tragic tapestry of swiftly moving events. These individual variations influenced the future patterns of analysis in the United States through personal sponsorship and the academic invitations necessary for "affidavits." The cities where the analysts of European analysts lived added another factor in patterns of settlement.

There are many good histories of the great intellectual migration, by Fleming and Bailyn,⁶⁴ Fermi,^{64a} H. Stuart Hughes,⁶⁵ Jackman and Borden,⁶⁶ and Coser.⁶⁷ Some contain interesting accounts of the European analysts, as members of one profession among others, that transformed American cultural life before and during World War II. A specific history of the psychoanalytic diaspora has yet to be written, but among the artists and scientists that Hitler dispersed by expelling the Jews, the small but highly influential group of analysts most closely resembled the European architects and nuclear physicists whose influence exceeded their numbers. In some sense each of these fields was a new specialty, many of whose leaders were Europeans, already in demand here, as in physics, or soon to be, as in the postwar demand for analysis and modern architecture.

How individual European analysts were received in this country depended on when they arrived and the presence or absence of friendly colleagues and analysts. In New York and Boston, for example, the many senior German and Austrian analysts, at the height of their creative powers, seemed to outnumber the native Americans who had just reorganized their local societies on the basis of their training abroad. In 1933, for

example, all ten founding members of the Boston Institute were American-born, seven of them trained abroad; ten years later, when the membership had almost tripled, over half were European. Some European analysts complained about the rigidity of institute rules, the proliferation of committee work, and the prejudice against nonmedical applicants. But by 1942, when the United States had entered the war and immigration was no longer possible, Europeans had become the established leaders of American analysis.

Local developments were also influenced by the eminence of individual émigré analysts. The coming together of certain analytic innovators had made the New York Psychoanalytic Institute the scientific capital of the psychoanalytic world: Hartmann, Kris, and Loewenstein as proponents of the new ego psychology, and René Spitz and a number of gifted child analysts trained by Anna Freud. In the Washington, D.C.–Baltimore area there were proportionately fewer European analysts, but they included influential figures like Edith Weigert, Jenny Waelder-Hall, and, later, Lucie Jessner. Frieda Fromm-Reichmann was a pioneer in the analytic treatment of schizophrenia whose influence was enhanced by the local traditions at St. Elizabeth's and Sheppard-Pratt and by Harry Stack Sullivan's interest in this field. They also took their place among the seven notable women analysts, like Lucile Dooley, who had been influential in Washington since 1914.⁵⁰

As the scientific life of the analytic institutes was undergoing a process of Europeanization, the influence of local American customs and patterns was making itself felt. One American characteristic was the tendency for analysts to hold academic positions in medical schools, hospitals, universities, and schools of social work, where they taught a variety of nonanalytic students, from doctoral candidates to undergraduates. This was in marked contrast to Freud's self-perpetuated isolation from academic medicine, and Boston's émigré analysts, for example,⁶⁸ were surprised to learn that over 90% of them held institutional posts of some kind. There was a strong tradition, as we have seen, of hospital-based psychiatry and psychoanalysis in the Baltimore–Washington, D.C. area. The trend toward institutional affiliations may have been less pronounced in New York, where the greater concentration of analytic émigrés encouraged European patterns of full-time analytic practice.

Another American feature was the existence of well-established institutions for the treatment of children: the Institute for Juvenile Research in Chicago and the Child Study Center at Yale. There were many such clinics in Boston, from the venerable Judge Baker Guidance Center, Douglas Thom's Habit Clinic, and the Home for Little Wanderers, to the new J. J. Putnam Children's Center, founded by his daughter, Marian (Mollie) Putnam, with Mrs. Beata Rank as co-director.

A similar confluence between American and European ideas can be found in another “new” specialty, psychosomatic medicine, which had its roots in the very early papers of Smith Ely Jelliffe²¹ and Flanders Dunbar's⁶⁹ studies of mind–body interrelations. The European pioneers of psychosomatic medicine were Groddeck,⁷⁰ the self-proclaimed “wild analyst” whom Freud defended, and Felix Deutsch,⁷¹ who was the first to use the term “psychosomatic” in its current sense. Although the full flowering of this special field took place in the 1950s and 1960s, the area first obtained widespread recognition during the war years. The journal *Psychosomatic Medicine*, edited by Flanders Dunbar and Carl Binger, was founded in 1939, and Franz Alexander created a center for psychosomatic research at the Chicago Psychoanalytic Institute. Groddeck and Deutsch had not been well known in Europe, and Alexander had not been interested in mind–body problems until Chicago, but his institute became world famous for their psychosomatic research in a way that might never have been possible in Europe.

The “psychosomatic movement,” as it came to be called, naturally drew analysts to hospital and medical school positions, reaching its peak at Mt. Sinai under Kaufman and Margolin in the early 1950s. Another American institution, the Menninger Clinic (later Foundation), played an important role in facilitating the analytic migration throughout this period. Karl Menninger had invited the first two refugee analysts in 1936, Martin Grotjahn and Bernard Kamm, and during the following decade there was a continuous circulation of Europeans through Topeka and Chicago to the cities of the West Coast. While these interactions between native American “innocence” and European “experience” were not free of conflict, Karl Menninger was both hospitable and determined to gain the best of European analytic thought for American analysis.²³ As a largely psychoanalytic hospital like Ernst Simmel's sanitarium Schloss Tegel (outside of Berlin), Menninger's was also a training center for psychiatric residents and developmental

research. It was also an “open” hospital for the treatment of the neuroses, which represented another American tradition, going back to Austen Riggs and Dr. Gehring’s “retreat” at Bethel, Maine.³⁵

In summing up this short but crucial period, from 1938 to 1946, the Europeanization of the four newly reorganized U.S. analytic training institutes was accomplished with relatively little outward conflict. Or, perhaps more accurately, there was little open conflict between American and European analysts because the battles over the reformation of institutes and new standards for analytic training had already been fought in the early thirties and the reformers had all been Americans trained in Europe. As the later émigré analysts arrived, there were some inevitable problems about lay analysis. But most institutes had provisions for “affiliate members” that enabled them to accept Sachs and other eminent Europeans like Erikson, Waelder, and Beata Rank. In New York there were Ernst Kris, Edith Buxbaum, and many important child analysts, in Topeka there was David Rapaport, and on the West Coast there were Siegfried Bernfeld and Anna Maenchen.

As New York became the world center for innovation in psychoanalytic theory, *The Psychoanalytic Study of the Child* became the chief organ of the psychoanalytic avant garde. Founded by child-analysts, the papers of Hartmann and his circle established the ascendancy of ego psychology. Wrongly criticized as a desexualized version of analysis for the American public, the origins of ego psychology are found in Freud’s late papers and Anna Freud’s *Ego and the Mechanisms of Defense*.⁷² Hartmann’s first important paper was presented to the Vienna Society in 1937 and published in the *Zeitschrift* in 1939. Although this major paper, *Ego Psychology and the Problem of Adaptation*,⁷³ was not published in English for some 20 years, translated by David Rapaport, its theories were well known among students of analysis. In it Hartmann foreshadowed many of the later extensions of ego psychology, such as its links with cognitive psychology and the social sciences. The basic developmental concepts of ego psychology, emerging from new discoveries in child analysis, were summed up in Rapaport’s magisterial essay.⁷⁴ Analysis as a general psychology of normal development is an extension of ego psychology, as is Erikson’s application of analytic developmental concepts to the entire life cycle. Even Kohut’s much later self-psychology, with its renewed emphasis on early deficiencies in the mother–infant relationship, can be recognized as an extension from Hartmann and Spitz.

Looking backward, one can also see an older American tradition of interest in childhood that goes back to G. Stanley Hall (1904) and even John Fiske (1842–1901), whose theories about the effect of prolonged infantile helplessness had influenced Freud. In the nonanalytic observations on infants and children by Arnold Gesell and his group in the 1920s, there was a developmental approach and an interest in longitudinal case studies. Margaret Fries had been a student of Gesell before becoming an analyst and a gifted investigator of newborn behavior. With Spitz’s first reports on hospitalism and anaclitic depression and Erikson’s first comparative observations on American Indian children,⁷⁵ the basis for ego psychology and for child analysis was established during the war years.

“The Years that Were Fat”: Postwar Expansion and Institutional Splits, 1946–1968

This period begins with the end of World War II and with a reorganization in the American Psychoanalytic Association. In 1946 the APsAA ceased to be a federation of four institutes (New York, Boston, Washington–Baltimore, and Chicago) and resumed its original structure, an association of individual members. Other important changes had already begun before and during the war years: the arrival of the refugee analysts from Europe and the increased popularity of analysis in military psychiatry.

Military Psychiatry and the Spread of Analysis

The war brought a great demand for psychiatrists of all kinds, first to evaluate mental fitness at induction centers and then to treat the unexpectedly high incidence of psychiatric casualties among the troops.

Medical schools and internships were accelerated, doctors were drafted, and programs in military psychiatry were established. Analysts and would-be analysts quickly appeared to fill these needs, some treating acute traumatic neuroses on the battlefield, like Martin Berezin at Guadalcanal, others as consultants of high military rank, like M. Ralph Kaufman and William Menninger. They returned from overseas to teach military psychiatry, full of enthusiasm for quasi-analytic methods of psychotherapy, and their students were dispersed overseas to spread this enthusiasm. The most influential example was the early work of Roy Grinker and John Spiegel in North Africa. They treated acute combat reactions close to the battlefield with a method that was based on Breuer and Freud's early "cathartic method" of treating hysteria. Using both hypnosis and intravenous barbiturates (the famous "truth serum"), they attempted to "abreact" traumatic experiences and uncover repressed memories of combat. Their aim was to return these young men to their combat units as quickly as possible, in the belief that prolonged hospitalization in the rear encouraged the fixation of neurotic symptomatology. The dramatic results of Grinker and Spiegel were printed in a mimeographed handbook by the Army⁷⁶ and widely distributed throughout the military, at the urging of John Murray,⁷⁷ an analyst who was an Air Force coordinator for the Surgeon General.

In filling the place of psychiatrists, many young medical officers without previous experience found themselves treating psychiatric patients. They became fascinated by how much could be accomplished by common sense and a sympathetic attitude. Others were exposed to journals and books or were sent to schools of military psychiatry, like Lawson General at Atlanta. There was a rapid increase in grants for psychiatric training and research, and after the war federal agencies like the Army Stress Committee and the National Institute of Mental Health continued the expansion. Military and Veterans Administration facilities were enlarged to treat returning servicemen. The Menninger Foundation in Topeka, for example, staffed a 2300-bed Army hospital and eventually was training one hundred psychiatric residents a year, all with a strong psychoanalytic orientation.²³

This expansive wave soon reached the medical schools: by the 1960s one fourth of some graduating classes planned to become psychiatrists. The chairmen of psychiatric departments in teaching hospitals were increasingly chosen from among psychoanalysts. At the peak of psychoanalytic expansion, psychiatric residents came to regard analytic training as the inevitable next step in an ambitious academic career. With a shortage of training-analysts, some gifted early applicants were rejected, while some later candidates were accepted with a high proportion of overachievers driven more by a need for superior qualifications than a genuine interest in analysis itself.

With the reorganization of the American Psychoanalytic Association in 1946, permitting more than one institute in a city, new institutes and study groups proliferated, with a pattern of westward migration that recalled the nineteenth century frontier. From Chicago to Topeka to the West Coast, small groups of analysts set up new training centers, according to the "geographic rule." This meant that each study group was sponsored by a parent institute, pending approval by the Board of Professional Standards of the APsA. This led to unusual travel arrangements for candidates in outlying training centers, as when candidates in Chapel Hill, North Carolina, commuted to Washington, D.C., for seminars and supervision; from Topeka, Kansas, to Chicago; or from New Orleans to Topeka.

Five new institutes were established during the 1940s. This included two internal splits, creating two institutes each in Los Angeles and Philadelphia (both 1950), and in 1946 the Columbia group founded a second institute in New York City. New analytic centers continued to multiply, and in 1966 to 1967 there were 20 affiliate societies and 20 approved institutes, with a total membership of about 1200.

Controversies and Institutional Splitting

The 1946 changes in the APsA facilitated factional divisions within institutes, but the first major split had already occurred in 1941. This dramatic example, when Karen Horney and her four allies walked out of a regular business meeting of the New York Psychoanalytic Institute, merits some re-examination because some documentation is available. The best eye-witness account of this complex event is by Marianne Eckhardt,⁷⁸ who was Horney's daughter and a candidate in the New York Institute at the time. A recent

account⁷⁹ provides valuable detail about the background in the New York Institute, the deeply conservative role of Lawrence Kubie, and the moderation of David Levy.

Before reviewing Eckhardt's observations, however, her theory about the nature of analytic splits must be questioned. She regarded the predisposition to splitting as a special weakness of the analytic movement, "symptomatic of ... a constitutional or genetic factor inherent in the discipline." But the history of religious heresies, philosophic schools of thought, and political parties suggests that the formation of sects and antagonistic factions is characteristic of all groups, religious, political, or cultural. The same phenomena are even found in scientific controversies, in debates over Lamarckism or sociobiology, and in the history of Marxian socialism, with its fierce factional antagonisms.

Dissension and divisions among early analysts had occurred in Europe, but these rifts seemed more like individual defections from Freud. When Jung, Alfred Adler, and Otto Rank made their painful, tortuous breaks with Freud, they were partly protesting theoretical differences and partly carrying out an Oedipal struggle to free themselves from paternal domination. They also made their departure from the analytic movement, while many American dissenters sought to keep their new institutes within the American Psychoanalytic Association. Theoretical differences underlie a few American institutional splits, as in the battles over lay analysis in Los Angeles, but clashes between strong personalities and their allies seem more important causes. Over the years original theoretical differences tend to fade and be forgotten. If there is a general difference between European and American analytic rifts, the latter splits can be said to reflect the need of each citizen to create his or her independent religious sect or splinter political party. The innumerable social and political clubs and fraternal orders in the United States testify both to a predilection for splitting and, at the same time, to the United States being a nation of "joiners."

With regard to Horney's exit from the New York Institute, her withdrawal^{78,79} was preceded by longstanding dissatisfaction with the New York Institute's dogmatism and rigidity. The immediate cause was Horney's being deprived of her status as training-analyst because her teaching was "disturbing to the students." Although Horney's followers denounced the New York Institute for its "religious fervor" and called it a "hotbed of political intrigue," the differences between its and Horney's emphasis on social factors in character formation played a minor role in the split. As a participant, Eckhardt experienced these events as "an outcome of personal rivalries and clashes" and later agreed that "the so-called [theoretical] issues were red herrings."

Led by Horney, a new Association for the Advancement of Psychoanalysis was formed, with its corresponding training facility, the American Institute of Psychoanalysis. Horney had been a prominent teacher and theoretician in the Berlin Psychoanalytic Institute. She first emigrated to Chicago, where she had a falling out with her old Berlin colleague Franz Alexander. In New York her closest followers were Clara Thompson, Bernard Robbins, and William Silverberg. Harry Stack Sullivan joined the group, although he had moved back to Washington, D.C., in 1939, after eight years in New York. He believed the new association should have national representation by having a branch in New York that came to be called the "Washington School." In 1942 there were 34 members, 8 of whom lived outside of New York.

Both Horney and Sullivan shared an interest in social and cultural issues, along with Erich Fromm, a prominent member of the Frankfurt School, and the American linguist Edward Sapir. All taught at the Washington School, along with several anthropologists who were sympathetic to analysis, such as Ralph Linton and Ruth Benedict. Both Horney and Sullivan were influential in the spread of analysis. Horney was the author of a series of popular books^{80,81} that criticized Freud for underestimating social and cultural factors in psychic conflict. Sullivan was editor of *Psychiatry*, the so-called "yellow journal," which welcomed both analysts and social scientists. First known at Sheppard-Pratt for his intuitive psychotherapy with young male schizophrenics, Sullivan became a leader in the William A. White Foundation. This was another tangled institutional web, linked to dissensions within the Baltimore-Washington Psychoanalytic Society.⁵⁰

Sullivan was also eccentric, inarticulate, and at times uncertain about whether he was an analyst.^{57,22} He and Horney seemed an ill-matched couple, but the new Washington School in New York flourished under their leadership. Classrooms for their seminars were provided by the New York Medical College and by the New School for Social Research, which had always been hospitable to unorthodox émigré analysts, beginning with Jung and Ferenczi.

Despite this initial harmony, a second split took place in 1943, when 12 members resigned, including Clara Thompson, Sullivan, and Erich Fromm. Again the manifest dispute concerned the withdrawal of training privileges, this time from Fromm, ostensibly because he was not a physician. Again this seemed insufficient cause, when the new association's commitment to medical analysis was well known and Fromm could have been accepted through a grandfather clause, like many other eminent lay analysts from abroad. According to Judd Marmor,⁷⁸ one of the underlying issues may have been Horney's jealousy of Erich Fromm's growing popularity after his *Escape from Freedom*⁸² became a bestseller. According to Janet Rioch, Sullivan welcomed the split because the defectors extended the Washington School to New York. A third split occurred later the same year, over affiliation with New York Medical College, which was opposed by Horney and supported by her early allies, Silverberg, Robbins, and Marmor. They resigned, along with three others, and created a new analytic training center, reorganized in 1947 as the Society of Medical Psychoanalysts (previously known as "Flower and Fifth"), with William Silverberg as president.

The Horney split-offs from the New York Psychoanalytic Society, who started the Association for the Advancement of Psychoanalysis and its allied Institute, left the American Psychoanalytic Association as well. Another split was underway at the same time, but this group preferred to remain within the APsAA. This was the Columbia group, led by John A. P. Millet, George Daniels, and Carl Binger, and joined by Abram Kardiner and Sandor Rado. Daniels and Binger were known for their early psychosomatic research; Daniels had been associated with Flanders Dunbar at Columbia Medical School, and Binger, in 1939, had founded *Psychosomatic Medicine*. Kardiner and Rado had initially been sympathetic to Horney's group, but their informal association of 1942 declared its intention of remaining within the American Psychoanalytic Association. Recognition for an accredited training institute was obtained in 1945, pending the necessary constitutional changes. The new institute was called the Columbia University Psychoanalytic Clinic, where its teaching took place, recalling the polyclinic at the Berlin Psychoanalytic Institute, from which Rado came. As the first analytic institute associated with a medical school, this pattern was later replicated, with NYU Medical School at King's County Hospital (later called "Downstate"), at Chapel Hill, North Carolina, at Western Reserve in Cleveland, and elsewhere.

During the 1940s and 1950s the Columbia group, eventually called the Columbia University Center for Psychoanalytic Training and Research, was still known for its interest in the social sciences, beginning with Kardiner's collaboration with Ralph Linton.⁸³ Rado later evolved an iconoclastic revision of instinct theory, and Millet's history⁸⁴ suggested some antagonism between young American analysts and their émigré teachers. But with the passage of time there are no obvious theoretical differences between the Columbia Institute and the original New York Institute. Few members of either group, unless they were personally involved in the 1942 to 1945 struggles over the formation of the Columbia Institute, can now recall what the struggles were all about.

Another analytic organization established outside the American Psychoanalytic Association was the Academy of Psychoanalysis, founded in 1956 by John Millet, Silverberg, Rado, Franz Alexander, Clara Thompson, and Judd Marmor. These included many of the old dissidents from the Horneyite split and the Washington School, but the Academy served a different purpose, as a national scientific society, without teaching or training functions. Any intention of creating a rival organization to the American Psychoanalytic Association was explicitly disclaimed, except for the petty defiance of holding their national meetings at the same time and place as the latter organization. Membership requirements were loosely defined, nonmedical analysts and scientists in related fields were welcomed, and a *Bulletin* of the Academy was published.

Besides these organizational splits in New York, another divisive issue in the mid-1950s was the protracted controversy over "certification in analysis." This was a different issue from recent certification debates: a proposal by the American Psychoanalytic Association that the American Psychiatric Association (APA) create a specialty board in psychoanalysis. Defining analysis as a subspecialty of clinical psychiatry was a drastic step toward the increasing "medicalization" of American analysis. Fierce opposition was evoked from many analysts, both Europeans and Americans who adhered to Freud's view of analysis as an independent profession, not "a mere housemaid to psychiatry." The proposal was vigorously supported by native analysts like Ives Hendrick and Bertram Lewin, who defended American "medical orthodoxy" and

opposed the clinical training of nonphysicians. The specialty-board proposal was eventually defeated after heated debates within each institute, but this now-forgotten episode had its place in the endless lay-analysis controversy.

The various institutional divisions within the New York analytic community have been examined in some detail to serve as examples of the phenomenon. Other well-known splits of the period have been touched on lightly, partly for lack of documentation, but mainly because the complex details, so difficult to extract from unpublished sources, are also difficult to bring back to life. Ancient controversies have been drained of blood, and the intense emotions and quirky personalities involved cannot be reconstructed without ample detail.

The complicated interrelations among the Baltimore and Washington Psychoanalytic Societies and the William A. White Foundation, already described, have been detailed by Noble and Burnham.⁵⁰ The 1950 split in the first Philadelphia Psychoanalytic Society of 1937 gave rise to the second Philadelphia Association for Psychoanalysis, but no account has been published. The strong personalities of Leon Saul, Spurgeon English, and Sidney Biddle were involved, but there is no indication that basic theoretical differences caused the split.

The Los Angeles split, which resulted in the Los Angeles Psychoanalytic Society and Institute of 1946 and the Southern California Psychoanalytic Society of 1950, arose from disagreements about lay analysis and the acceptance of prominent nonmedical refugees. In this instance the seceding (Southern California) group opposed lay analysis and initially called itself the Society for *Medical* Psychoanalysis. But over the years its original position was reversed, and the Southern California Psychoanalytic Society and Institute became known for its sympathetic attitude toward nonphysicians and its close association with the University of Southern California. Its Institute became the first to accept non-M.D.s for full clinical training, before the constitutional changes in the American Psychoanalytic Association had been completed. Some accounts of the Los Angeles split, and, in contrast, the peaceful resolution of the lay-analysis problem in the San Francisco Psychoanalytic Institute, were presented by Ralph Greenson, Sigmund Gabe, and Emmanuel Windholz⁸⁵ at the May 1975 oral history workshop of the American Psychoanalytic Association. Other aspects of California analytic history can be found in the newsletters and anniversary addresses of the respective society-institutes.

In concluding this review of institutional splits, one common feature must be noted: the great distress experienced by their participants, an intensity of pain and hurt feelings that now seems out of proportion to the doctrinal disagreements. There was a sense of injustice, righteous indignation, and betrayal between colleagues and even close friends that lingered for decades, long after the ostensible cause of the split had been forgotten. The persistence of these resentments was always an obstacle to the study of analytic history, as in the comment of an early Boston analyst, John Taylor.⁷ Asked about the stormy years of the 1930s, he declined to recall “those personal squabbles and hurt feelings” because it would “only be digging up old bones, some of which might prove to be insufficiently decayed.” These painful memories suggest the aftermath of fratricidal strife, of civil wars, as if the splits reflected unresolved conflicts among peers and siblings. This is in contrast to the generational struggles between parents and children, as Freud had interpreted the Oedipal defections of Jung and Adler. This impression is supported by some local splits, in which the conflict rarely involved American pupils rebelling against their European teachers. In Boston, for example, factional disputes occurred among peers: rivalrous groups of young Americans or personal antagonisms among the émigré analysts.

Postwar Expansion in Retrospect

This review of institutional splits may have given a misleading impression of endless strife, when in fact this long period of analytic expansion was relatively free of doctrinal conflicts. The outstanding feature of this period was its remarkably confident and optimistic outlook. There was an unquestioned belief in the continuing expansion of analysis that recalled the optimism of the prewar Berlin Institute. Analysts foresaw an unlimited horizon, gaining new members and finding new applications for analysis in every field of human

endeavor. The three major characteristics of American psychoanalysis, already described, in the prewar era continued in this era: (1) a high level of agreement about the basic theories of Freud; in retrospect, the theoretical dissents of Horney and Sullivan seem of minor importance; (2) the continued expansion of certain analytic specialties, including child analysis, psychosomatic medicine, general hospital psychiatry, and the analytic treatment of the psychoses; and (3) the widespread interchange between psychoanalysis and other fields, from the social sciences and literature to sleep physiology and animal behavior.

The rapid growth of ego psychology began during the war years, in the New York circle around Hartmann, Kris, and Loewenstein, and continued in an interchange among child analysts and infant observers all over the United States. Ego psychology had opened relations between analysis, academic psychology, and both social and experimental sciences from which Freud had kept aloof. This contributed to the intoxicating intellectual atmosphere of the 1950s and 1960s, a heady sense of innovation and exploration. Analysts turned from a research film by René Spitz, for example, to a lecture by Konrad Lorenz on animal behavior and books about Darwin's observations on child behavior and emotional expression in animals. Some analysts themselves became observers of animal behavior, like Charles Kaufman and Gerald Stechler, or researchers in the new physiology of sleep and dreaming, like Charles Fischer and Ernest Hartmann.

Analytic interest in anthropology had an ancient history, going back to Alfred Kroeber, who became the first analyst in San Francisco.⁸⁶ But the new interchanges were more systematic, as in the collaboration between Kardiner and Linton, or between Kroeber and Erikson. Ruth and Theodore Lidz and Sydney Margolin did anthropological fieldwork, and some prominent anthropologists, like Margaret Mead and Clyde and Florence Kluckhohn, were sympathetic to analysis.⁸⁷ A leading sociologist of the time, Talcott Parsons, undertook analytic training and became an affiliate member of the Boston Psychoanalytic Society.

As we have seen, analysts were leaders in the psychosomatic movement, which played an important role in American psychiatry during the 1950s and 1960s. Another analytic specialty, closely related to psychosomatic medicine, was so-called "general hospital psychiatry" or "consultation-liaison psychiatry," which had entirely American origins. The first in-patient psychiatry department in a general hospital was established in 1936 by Stanley Cobb,⁸⁸ an early member of the Boston Psychoanalytic Society. He invited Felix Deutsch, Erik Erikson, and other émigré analysts to lecture and teach at Massachusetts General Hospital. Similar psychiatry units in general hospitals arose elsewhere, with Dunbar and Daniels at Columbia, M. Ralph Kaufman and Margolin at Mt. Sinai in New York, and Roy Grinker at Michael Reese in Chicago. A very influential training center for psychosomatic research, at the Rochester (New York) Medical School, was created by John Romano and George Engel, where Engel was chief of both medicine and psychiatry.

American child psychiatry had evolved in part from European child analysis: Anna Freud's seminars in the mid-1920s, Melanie Klein's play technique, and Spitz's direct infant observations. As we have seen, it found a fertile soil in traditional American institutions, like the Judge Baker Guidance Center in Boston and the Institute for Juvenile Research in Chicago. The vast expansion in both developmental research and child therapy facilities during the 1950s and 1960s seemed to thrive on the American "team research" format, with extensive collaboration among analysts, clinical psychologists, social workers, and other trained observers. The year 1950 was declared "The Year of the Child," and a series of multidisciplinary research meetings, published by the Josiah Macy Foundation, were eagerly read by analysts who were not child therapists. New child clinics and research centers proliferated widely, with Ernst and Marianne Kris at Yale, John Benjamin and René Spitz in Denver, Ruth and Gardner Murphy at the Menninger Clinic, and Sibylle Escalona at New York's Albert Einstein school of medicine.

Two other specialties can be briefly mentioned: (1) the treatment of psychoses, especially chronic schizophrenia, by psychoanalytic psychotherapy, and (2) psychoanalytic methods of group therapy. The American passion for applying analysis to the treatment of psychoses began with W. A. White and Kempf at St. Elizabeth's and continued with Sullivan at Sheppard Pratt. But its most sustained application evolved after the war at Chestnut Lodge, Maryland, with Frieda Fromm-Reichmann.

Group therapy may also be an American contribution to analysis, from its unlikely beginnings in 1906³⁴ in a collaboration among a Boston internist, a minister trained in clinical psychology, and a psychiatrist,

Isador Coriat, in treating tuberculosis by the “class method.” Coriat was then a typical advocate of the psychotherapy of suggestion, but in 1911 he became the second analyst in Boston. Influential group therapists like S. R. Slavson⁸⁹ later proposed analytic forms of group therapy. During and after the war years, Paul Schilder, Fritz Redl, Elvin Semrad, and others became enthusiastic about its uses. Semrad⁹⁰ conveyed the excitement with which military casualties were treated by group methods, and Martin Grotjahn⁶¹ evolved analytic approaches to groups that he considered superior to traditional psychoanalysis.

In summing up the era of postwar expansion, another feature of the American medical scene must be re-emphasized. This was the increasing support of both private and federal funds for both psychiatry and psychoanalysis. The Commonwealth Fund had supported analytic training in Europe for young psychiatrists in the 1920s and 1930s, and the new psychiatric unit of Stanley Cobb at Massachusetts General Hospital, which became an entirely analytic department, was funded by the Rockefeller Foundation. The postwar years brought large-scale government support to all kinds of psychiatric research and training. From the military services and the Veterans Administration, the National Institute of Mental Health (NIMH) gradually took over, as a vast and unique enterprise that became increasingly sympathetic to psychoanalysis. As analysis played a larger and larger role in research and training, some leaders at NIMH were themselves analysts, like Robert A. Cohen, William Pollen, and Lyman Wynne. The U.S. armed forces continue to award psychoanalytic training fellowships to select military psychiatrists.

The Lean Years, 1968 to the Present

The fat years of continuous psychoanalytic expansion lasted almost two decades, from the end of the war to the late 1960s. Exactly when the tide began to ebb is difficult to define. The first changes were scarcely perceived by the analysts themselves, although Millet⁸⁴ noted a leveling off in the expected number of new applicants for analytic training. Later statistics of the APsAA continued to show steady growth: 20 approved institutes and 26 affiliate societies in 1966 to 1967, and ten years later 26 institutes, 31 societies, and 4 approved study groups. Knight’s presidential address of 1953 had predicted 2000 members 20 years later, and in 1974 to 1975 there were 2758 members.⁹¹

By the mid-1970s there was a perceptible scarcity of suitable patients for candidates, who required three supervised cases for graduation. With some local variations this shortage has steadily increased, despite vigorous efforts to stimulate interest in reduced-fee institute analyses. As a result there are substantial delays in completing analytic training, and new applicants are aware of a different tempo in reaching graduation. As future analysts, they realize they cannot expect to have full analytic practices, but this knowledge has had surprisingly little effect in reducing the number of new applicants. Some institutes have responded by reducing the size of their entering classes, but most maintain their customary admission criteria.

Under these conditions, recent candidates have shown greater variety, come from more unusual backgrounds, and have more theoretical and research interests. The proportion of women has increased, and there has been a modest but not overwhelming increase in nonmedical candidates being accepted. Perhaps these changes reflect fewer aggressively careerist clinicians, now that analysis no longer promises a lucrative practice or academic prestige. These new candidates seem more intellectually curious and original, interested in analysis for its own sake or as the best method of learning psychotherapy. If these trends continue, as predicted some years ago,^{91a} “analysis may yet return to Freud’s 1926 ideal, as a smaller but completely independent profession, open to sincere students from any and all disciplines, no longer a ‘mere housemaid to psychiatry.’ ” As an optimistic prediction, a silver lining for a new Silver Age, the outcome may be a smaller, livelier student body and a more stimulating intellectual atmosphere.

These last 20 years in American analysis are more difficult to sum up compared to earlier periods because the movement itself has changed relatively little, while its context (in clinical psychiatry, means of research support, the very practice of medicine) has changed a great deal. The temptation to lament these changes as a decline from a past Golden Age must be resisted, but some understanding of the context is necessary to explain the declining popularity of analysis *as a method of treatment*. At the same time

the demand for training has remained fairly constant, and popular interest in the history of analysis, including its more specialized and arcane by-ways, has enormously increased.

In describing what has happened *within* psychoanalysis, several topics call for discussion: (1) progress in resolving the ancient lay-analysis battle, with an approaching full clinical training for nonphysicians, (2) diminishing support for psychoanalytic research, both private and federal, and (3) minor controversies in analytic theory in an international scene in which the United States is no longer the fountainhead of analytic innovation. Finally, some speculations will be offered about possible causes of the diminishing demand for analysis in the United States when the interest and demand for analysis has vastly increased all over the world, including Eastern Europe.

Despite the traditional opposition of the American psychoanalytic establishment to lay analysts, there had always been constitutional provisions for admitting specially gifted nonphysicians. Originally they were accepted for training in “theoretical” seminars, to graduate as “affiliate members,” with an agreement not to practice analysis. There were also special exemptions enabling eminent European lay analysts like Erik Erikson and David Rapaport to be accepted as training-analysts. In time, another class of exceptions was accepted through a system of “waivers,” or petitions to the American Psychoanalytic Association, requesting full clinical training because of the individual’s research needs. Many of these applicants were well-known child therapists or academics engaged in developmental studies. Whether some of these nonmedical analysts later practiced analysis was never questioned, and many became training-analysts and prominent teachers in their local institutes.

The waiver system was a practical way of circumventing the old rules against lay analysis, but the numbers admitted in this way remained rather small. In 1974 to 1975, for example, there were 110 non-M.D.s out of 2726 members of the American Psychoanalytic Association. There were several drawbacks, however, besides the cumbersome and disingenuous nature of the waiver procedure itself. One was the unfair demand that non-M.D. applicants should submit evidence of exceptional scholarship or creativity, while for ordinary medical applicants psychological aptitude and good character were sufficient. There was also a gross inequity in the incomes of M.D. psychiatrists and Ph.D. academicians that made the pursuit of full training more difficult for nonphysician candidates. And the system worked only so long as no one questioned its unfair features.

In the early 1970s there were indications that the tide was beginning to turn and the restrictions against nonmedical analysis might be loosened. One of these signs of change was the so-called “Chicago Plan,” proposed by George Pollock of the Chicago Psychoanalytic Institute, that would accept applicants from any background and eventually grant a Ph.D. in Psychoanalysis. This program echoed the ideal education for prospective analysts that Freud and Ferenczi had discussed in 1924 to 1926 and a later proposal by Franz Alexander⁹² for incorporating analytic training in a medical school curriculum. The Chicago proposal was defeated at the 1975 annual meeting of the American Psychoanalytic Association, but the discussions in local societies revealed a surprising groundswell of approval for greater acceptance of nonmedical applicants. A later proposal by Robert Wallerstein of Mt. Zion Hospital, San Francisco, was successful in creating a graduate school to educate nonphysicians in analytic psychotherapy, with a doctorate in mental health. The Mt. Zion program lasted 13 years, and some of its graduates later became analysts.

Although these events, amid other intangible signs, seemed to foreshadow a change in the official attitude of the American Psychoanalytic Association, there were powerful factions within the Association strongly opposed to any compromise with lay analysis. A succession of committees appointed by leaders of the Association scrupulously reported on the shifting winds of change, but the final recommendation by the Board of Professional Standards was always for delay or the appointment of another committee.

In December 1984 an ad hoc committee chaired by Herbert Gaskill of Denver finally reversed this pattern, and the acceptance of the Gaskill Proposal the following May marked a dramatic breakthrough. An astonishing majority in the APsaA favored full clinical training for nonphysicians, and the *intent* of the Gaskill Proposal was approved by 68% of the membership at the May 1986 annual meeting.

The content of the Gaskill Report was less dramatic than the vote, and bore the marks of its prolonged and difficult labor in its self-righteous tone and its attempts to mollify the enemies of lay analysis. In placating

both sides, the report claimed that “analytic training for selected, highly qualified non-medical people ... would broaden our perspective,” while reassuring members of the Association that the “essentially medical nature of our organization” must be maintained. Nonmedical applicants were to be judged by exactly the same criteria as physicians, but the number of new applicants was expected to be small and not disturb the current ratio of medical to nonmedical candidates. While the Gaskill Proposal was hailed as “the fruition of a long history of attempts ... to deal with the significant issue of lay analysis,” the existing system of waivers was not changed. Thus “no by-laws change regarding medical training as a prerequisite is required, thereby retaining the ... Association’s essential attachment to both medicine and psychiatry.” There was also no need for a constitutional amendment, which required a two-thirds majority.

These quotations and comments about the Gaskill Proposal from the Association newsletter⁹³ clearly reflect ambivalence about change. But change had been thrust on the Association by intervening events. The APsaA newsletter of the following year warned that its report had been edited and portions deleted on advice of legal counsel. This was the result of an antitrust suit filed in March 1985 by four psychologists, three of them candidates in institutes affiliated with the APsaA, against the New York Psychoanalytic Institute, the Columbia University Center for Psychoanalytic Training and Research, the American Psychoanalytic Association, and the International Psychoanalytic Association. The suit was based on antidiscrimination and antitrust statutes, and accused the four analytic organizations of operating “in restraint of trade” by not admitting psychologists on the same basis as physicians. The Gaskill Committee insisted that their deliberations had not been influenced by the threat of legal action, which entailed huge expenses and endless delays. Three and a half years later the antidiscrimination suit was finally settled out of court.

Apart from the merits of the case against the American Psychoanalytic Association, the inclusion of the International Psychoanalytic Association as a co-defendant had complex and far-reaching effects. The IPA was outraged by the accusation that they had discriminated against nonmedical applicants, when they had always disagreed with the American group’s exclusionary policy. One third, and in some institutes one half, of European and South American societies had always been nonphysicians, and now, because the APsaA belonged to the IPA, members of the IPA were being asked to contribute their dues to legal expenses incurred by the American group!

In discussing the background of this crisis, Robert Wallerstein⁹⁴ recalled a forgotten episode in early IPA history. This had occurred in 1938 in Paris, at the last European IPA Congress before the war, when the American delegation came with a proposal to abolish the International Training Commission of the IPA. Again this was a parochial American response to the fatal summer of 1938, when the Nazis had already put an end to analysis in Germany and Austria and would soon complete the process in Eastern Europe. Before 1933, American analysts had made up only 16% of the IPA membership, but by the end of the great migration of European analysts, the ratio was reversed and two thirds of IPA members were living in the United States.^{94a}

Although lay analysis had always been a divisive issue between Europeans and Americans, the Americans, in 1938, were demanding exclusive control over all analytic training within the United States, including émigrés with IPA membership. The Europeans had rejected this, or postponed it to the next 1940 IPA Congress, but the war supervened and the next IPA meeting did not occur until 1949. At that time, with American analysts forming the majority in the IPA, “everyone acted as if it [the demand for exclusive control of U.S. training] had been accepted. Nobody questioned it and in fact it was written into the IPA by-laws as if it had actually been formally voted” (Wallerstein, quoted by Shane⁹⁴). The other result of the Paris IPA Congress was the 1938 Regional Association Agreement (or the “1938 Rule”), which substantiated the grandfather clause that allowed the APsaA to accept eminent nonmedical refugees like Waelder and Rapaport if their analytic training predated 1938.

To return to the suit against the IPA in March 1985, the British Society was especially incensed, and proposed that the APsaA either extricate the IPA from the suit or agree to pay all the IPA’s legal expenses. This demand was to be presented at the 1987 IPA Congress in Montreal, but by skillful, last-minute diplomacy under Wallerstein, then president of the IPA, a peaceful settlement was reached. Omitting many complex details, the outcome was based on the APsaA’s post-Gaskill reversal of their exclusionary policy,

acceptance of IPA training and membership outside the APsaA, and the APsaA's agreement to pay 60% of the IPA's legal costs.

Finally, in May 1990, the president of the American Psychoanalytic Association, George Allison, appointed a committee, chaired by Homer Curtis, to draft a constitutional amendment that would accept nonmedical applicants for full clinical training, *without requiring a waiver*. They were required to have the highest professional degree in their field, a Ph.D. for psychologists and other social scientists, and a doctoral degree for social workers and Doctors of Mental Health. There was some debate about social workers with masters degrees, Doctors of Education (Ed.D.s), and nurse-practitioners with masters degrees. The waiver system was retained for other nondoctoral applicants who would still be eligible for training. Meanwhile, in the spring of 1989, the antitrust suit against the APsaA and the IPA had been settled out of court. At last, in July 1991, the amendment proposed by Curtis's committee was approved by over 80% of the APsaA, 17 years after the first attempts to increase eligibility for non-M.D. training.

The Battle over Certification

One recent constitutional struggle within the American Psychoanalytic Association must be mentioned briefly because its outcome affects what kind of analysts will shape the future profession. This has been another long, drawn-out battle over "certification," an additional requirement imposed by the American Psychoanalytic Association on graduates of accredited institutes representing further professional qualification as an analyst. Before 1954, graduation from an approved institute conferred full recognition as an analyst, as well as automatic membership in the APsaA. Since then, membership has required individual applications describing the applicant's training, reports on clinical cases, and letters of recommendation. Over the years these credentials became more elaborate and time-consuming, and a larger and larger number of graduates chose not to become members. Without this they could teach and hold office in their local institutes and attend the scientific meetings of the APsaA; they were only excluded from voting on APsaA issues and holding national office. A constitutional amendment was proposed that would restore the pre-1954 procedure and extend membership to all graduates of accredited institutes without requiring certification. Existing certification procedures would continue for analysts seeking office in the APsaA. Unexpectedly, after favorable signs and active campaigning for the so-called "delinkage" amendment, the proposal was defeated in May 1991. Although 60% of the 1039 voting members were in favor of delinkage, this fell 72 votes short of the two-thirds majority required.

Although the battle for certification is not over, its advocates, like the opponents of lay analysis, seem driven by self-destructive forces. In the name of upholding the highest standards of training, the campaign for certification can only discourage more prospective members from applying to the American Psychoanalytic Association, widening the gap in an already two-tier membership.

Shrinking Support for Analytic Research

The start of the lean years may be dated from the late 1960s, a few years before or after 1968, when federal grants for psychoanalytic research and training were beginning to be cut. At first this affected only a few analysts, who were medical school professors or department chiefs in teaching hospitals. Many leaders in academic psychiatry were analysts, with substantial research and teaching programs supported by government funds, mainly the National Institute of Mental Health. The first cuts seemed to result from the mounting costs of the Vietnam War, but the reductions in both public and private support continued. Sixty percent of psychiatric research projects were supported by NIMH in 1970, but only 24% in 1991. Other far-reaching consequences were inseparable from changes in the nature of analytic practice, clinical psychiatry, and the profession of medicine itself.

A transient effect of the Vietnam War years, along with student enthusiasm for poverty programs and primary care medicine, was an unfair disparagement of analysis as elite and authoritarian. This was ironic, when the young were prostrating themselves at the feet of omnipotent gurus and antiscientific health faddists.

But they were correct in seeing analysis as a property of the Establishment, of middle- and upper-class prosperity, no longer the revolutionary movement that older analysts had been drawn to.

Meanwhile psychiatry itself was changing, with increasing emphasis on psychopharmacology and a return to nineteenth century theories of the major psychoses as hereditary disorders. Although schizophrenia and psychotic types of depression were rarely seen in analytic practice, except in research or special settings like Chestnut Lodge, the loss of a dynamic viewpoint made psychiatry less attractive to the kind of medical students who had once become analysts. More gradually, the medical profession was also changing, with rapid technological advances in treatment and diagnostic procedure. The university hospital became an expensive, high-speed, intensely competitive machine geared to treating patients efficiently and discharging them as quickly as possible.

At the same time all physicians were becoming mired in bureaucratic red tape, from computerized billing forms and malpractice insurance to CME (Continuing Medical Education) credits in order to keep one's license and "recredentialing" to keep one's hospital appointment. The physician caught up in the machine was overworked, competing for time and space, and forced to earn money for his or her department. The physician-analyst who once enjoyed teaching medical students how to listen to their patients found even the most humane and psychologically sensitive interns too busy to take a leisurely history. The psychiatrist, in fact, had become the "hired ear," along with nurses and social workers, who still had time to listen.

Changes in Analytic Psychotherapy

As restrictions against the analytic training of nonphysicians were reduced, medical analysts were welcoming in their lay colleagues when the cupboard was bare, or at least less attractive than before. Some of the long-term change in psychotherapy was the work of analysts themselves, who studied the curative elements in psychoanalysis, evolved more-refined criteria for the selection of patients, and created more versatile forms of "psychoanalytic psychotherapy." Analysis came to be considered for patients who were, paradoxically, sick enough to undertake the time and expense required, and at the same time healthy enough to withstand its austerities and deprivations.

During the same period, an enormous variety of nonmedical therapies was evolving, from methods resembling classical analysis to more indulgent and debased forms of treatment. Many were reductive versions of analytic theories, derived from a single facet like "catharsis," or encouraging strong affective expression and transference manipulations. Whatever their merits, all varieties were now practiced by analysts, psychologists and social workers, and "family counselors" alike, offering both patients and would-be therapists a wide spectrum.

Within the last decade, nonmedical therapists have been developing their own training institutions instead of waiting indefinitely for the American Psychoanalytic Association to open its doors. Some of these have been well organized, making use of analysts in nearby institutes as consultants and faculty. With the changes in the rules of the APsAA, individual members trained outside it may apply or become analysts through membership in the IPA. Division 39 of the American Psychological Association has established training centers in several major cities in collaboration with the corresponding local analytic institute and has grown considerably in membership. In short, as the medical profession became less attractive to the aspiring analyst, new possibilities for the analytic training of nonphysicians arose. Future analytic institutes may come to resemble the institutes of Europe and South America, which, with a few exceptions like Argentina under the dictatorship, have always contained a one-third to one-half nonmedical membership.

Changes in Psychoanalytic Theory

Changes in analytic theory since the ascendancy of ego psychology in the United States have been remarkably modest compared to the rest of the world. In the exhilarating years after World War II, as refugees settled in the United States, New York and Chicago seemed the world centers of avant-garde analytic theory. All analysts devoured the latest theories of Hartmann, Kris, and Loewenstein, of René Spitz and Margaret

Mahler in child development, and of Franz Alexander in psychosomatic medicine. Erikson and Rapaport became the great synthesizers, establishing the basic concept of psychoanalysis as a theory of normal growth and development.

In the United States these basic concepts have undergone relatively little change, although some elements, like the primary importance of the early mother–infant relationship, have been rediscovered by later child-analysts and followers of Kohut’s self-psychology. Kohut’s work, in fact, has been one of the few theoretical innovations, with some claim to have superseded the conflict and drive theories of Freud. But Kohut’s concept of narcissistic character disorder remains within the mainstream of psychoanalysis and its chief innovations are in analytic technique. There has been an intense interest in borderline character, as in the brilliant writings of Otto F. Kernberg, incorporating elements derived from Melanie Klein, Winnicott and Bowlby, and the British object-relations school. But the differences are ones of clinical refinement, not major departures from the main corpus of analytic theory established in the 1950s.

Thus, American analysis has remained relatively conservative, unruffled by the fierce antagonisms between Anna Freud and Melanie Klein that split the British analytic community into three factions with separate training facilities. Compared to the violent theoretical innovations of Jacques Lacan, with its many autonomous sects, American analysis has been quite stable, even stagnant (in the eyes, for example, of a French analyst), and certainly a bit old-fashioned.

In short, the United States is no longer the fountainhead of theoretical innovation, as it was in the halcyon fifties, when Freud’s disparaging remarks about American analysis would have been vigorously protested. Before World War I, in 1914 Freud³ was already deploring the popularity of American analysis, which he attributed to the native “absence of any deep-rooted scientific tradition.” He predicted then that “precisely for this reason the ancient centers of culture, where the greatest resistance has been displayed, must be the scene of the decisive struggle over psychoanalysis.” Today, when analysis is flourishing in Germany and Scandinavia, in the recently liberated countries of Central Europe and even in France, formerly the most resistant, Freud’s early prediction may be coming true at last.

Concluding Remarks

More than one hundred years after Breuer and Freud’s 1895 *Studies on Hysteria*, the course of psychoanalysis in the United States seems almost to have come full circle, from modest beginnings, through an enormously expansive postwar phase, to its present, much diminished role. Both analysts and their critics have speculated about the decline in popularity of analysis in the United States compared to the analytic movement in Latin America and Western Europe, which continues in an expansive phase. As of 1990, the decline in American analysis was mainly in the availability of new patients, while the psychoanalytic establishment, with its national association and its component institutes, remained intact and its scientific activities continued unchanged. New applicants for analytic training maintained their previous levels, and in some institutes even increased, as the ancient American conflict over lay analysis neared resolution and nonmedical candidates were accepted for training both within and outside the APsA.

Since 1968, changes in both psychoanalytic practice and clinical psychiatry have reduced the number of patients seeking analytic treatment and available for the training of candidates. Changes in clinical psychiatry have also reduced the number of medical students undertaking psychiatric training who had earlier been attracted to analysis. No single factor explains all these phenomena, but some changes are obvious, several already discussed: (1) the greatly increased cost of analysis without support by health insurance or government stipends, (2) the wider uses and effectiveness of psychoanalytic psychotherapy, originally created and practiced by analysts themselves, and (3) the loss of dynamism in medical psychiatry, with its increasing emphasis on drugs, the results of heredity, and the complex coding of diagnoses.

One of the first explorations in depth of the second factor, the effectiveness of psychotherapy, is Wallerstein’s⁹⁵ meticulous study of 42 patients in either analysis or psychotherapy. In this unique longitudinal study, patients originally treated at the Menninger Clinic in 1952 were carefully followed

for 30 years, with a 100% response rate. Both the patients in analysis and those in long-term psychotherapy were receiving the very best treatment available at their time. Thus the two groups were closely comparable, in a way that no other “outcome study” has ever equaled. (These unusual conditions help to explain why no “control group” can ever be quite comparable to a treated group when the criteria for improvement depend primarily on the patient’s judgment and a partly mutual agreement between patient and therapist, both highly subjective.)

Wallerstein’s findings are remarkable for their boldness and their simplicity (summarized by Shane⁹⁴): many patients in the analyzed group showed less improvement than expected, and some in psychotherapy improved more. Some of the best long-term therapy results were comparable to the best insight-oriented results of analysis. These findings suggested that extra-analytic curative factors, which Freud had called “didactic” or “suggestive” elements, may be present in the most “classic” psychoanalysis. And in some cases the best long-term analytic psychotherapy could achieve basic personality changes usually expected only from analysis.

These findings do not contradict the unique value of psychoanalysis as the ideal method of treatment for certain patients, and this can be corroborated by most analysts who practice both analysis and psychotherapy. Today, analytic psychotherapy is more available and effective than in 1952, when Wallerstein began his study. Many patients with moderately severe problems begin with therapy and continue for as long as they are satisfied; they turn to analysis when they have reached an impasse or become convinced that more-specialized treatment is required. Psychiatrists, psychologists, and social workers interested in becoming therapists are more likely to begin with a personal analysis, as are other professionals with a special interest in analytic research.

Returning to the first factor, the high cost of analysis, we have seen that economic factors have been important in the history of psychoanalysis from the beginning. In the 1920s and 1930s, postwar European poverty favored American students when inflation in Germany and Austria enabled foreigners to be analyzed and live inexpensively there. Some were supported by fellowships, like the Commonwealth Fund, for study abroad. After World War II, the “GI Bill” provided government funds for the analytic training of many veterans whose interest in analysis had been aroused by military experience. In 1948, for example, analysis was interpreted as professional training rather than treatment (although it was both), and the fees for training-analysts were \$10 per session, later increased to \$15. Government stipends, both for training-analyses and psychiatric residencies, augmented the popularity of analysis during the postwar affluence in the United States. In a similar way, the current expansive phase in Germany and Scandinavia may be sustained because analysis is supported by national health insurance.

An earlier hypothesis about the waning of American analysis⁹¹ suggested that the post-World War II expansion of analysis in the United States was the anomaly, not the lean years that followed 1968. Both phases were viewed in terms of Thomas Kuhn’s⁹⁶ paradigm of scientific revolutions: the postwar period of growth was interpreted as the phase of scientific discovery and the period of decline as a return to the pre-existing phase of “normal scientific activity.” According to this hypothesis, the decline in psychoanalytic innovation after 1968 would be a normal phenomenon, a natural ebbing of the high tide of new discoveries, just as other scientific fields had their peak years of theoretical innovation and a later return to baseline levels of normal productivity.

A final speculation begins with the assumption that Freud would have found some satisfaction in a psychoanalytic movement more modest in size, less fixed in its “medical identity,” and more open to non-medical members. Freud would certainly have welcomed a closer interchange between analysis and the humanities and social sciences because he had always enjoyed the applications of analysis to other fields as much as or more than its therapeutic uses. Freud valued analysis above all as an instrument for intellectual exploration, for speculating, sometimes wildly, on the prehistory of human societies and religions, even the origins of life itself. He cautioned against excesses of therapeutic zeal, and his skepticism about the limitations of analysis as a method of treatment was an element in his mistrust of American analysts as overly optimistic and too concerned with therapeutic results and financial rewards.⁹⁷

The waning influence of analysis in psychiatry and medicine has paralleled the ebbing of the European migration, with the deaths of its great leaders and innovators. The postwar development of analysis in the

United States, in contrast to European analysis, has been seen as a mutual interpenetration of European and native elements. This was an unequal interchange, however, in which nearly all theoretical discoveries came from Europe or from the émigré analysts in the United States. The American contribution included some important native institutions, like child-guidance centers and receptive university departments, and above all a boundless energy for organizational activity. This drive to organize was present from the first generation of American analysts, in their incessant lecturing, proselytizing, and writing popular handbooks, in creating societies and institutes, and in colonizing a vast westward migration. Ironically, Freud wrote in 1934, “America may be overrich in energy.”

Besides original work in America, from Phyllis Greenacre’s studies of creativity to major advances in child-development research, many leaders of analysis devoted inordinate amounts of time and energy to administrative and educational activities. They created committees and wrote constitutions, defending their by-laws in local institutes and waging factional battles within the committees of the APsA and the IPA. The best-known American analysts of the 1950s and 1960s were often educators like Bertram Lewin and Robert P. Knight, or brilliant clinicians writing on technique, while theoretical innovations still came from Europeans like Hartmann, Rapaport, and Erikson. These great European figures have not been replaced, perhaps because the heady days of analytic discovery have come to their natural end.

To conclude with a rash generalization, American analysts may be compared to the ancient Romans, pouring their energies into building a vast empire, represented by the mighty edifice of the American Psychoanalytic Association, but they remained dependent on refugees for their theoretical nourishment. Thus the Roman (and Byzantine) genius for organization and technology preserved Greek art, literature, and philosophy through dark and violent times. In this sense, perhaps, American (and British) psychoanalysis can be seen as having preserved European analysis through both Nazi and Soviet periods of repression. But now American analysis, in its post-expansionist phase, must cope with a new “time of troubles,” an era of increased medical bureaucracy and an emphasis on psychopharmacology and hereditary mental illness that echoes nineteenth century organicist psychiatry. The essence of psychoanalysis may yet reclaim its birthright as an independent profession, however, smaller in scale, more varied in membership, and closer to Freud’s ideals of 1926. To borrow from our Bauhaus colleagues, in American psychoanalysis *less may yet be more*.

Epilogue

These gloomy conclusions were reached four or five years ago, when the major threats to American psychoanalysis seemed to be its high cost and lack of support from public or private insurance compared to some European countries with more humane standards of government responsibility for medical care. At that time few analysts could foresee the rapid advance of bureaucratic insurance agencies, exemplified by “managed care,” that threaten the age-old traditions of long-term psychotherapy itself. For a time the popularity of analytic training, despite a dwindling supply of patients, was sustained by the search for training in psychotherapy, as medical schools and psychiatric residencies ceased to teach it. And the candidates that continued to apply were of high quality, more interested in analytic theory and research, and well aware that they would never have a full analytic practice.

In a very short time, however, the increasing restrictions of HMOs and insurance companies on office practice, along with political threats of ruthless cuts in health care and social welfare funding, have combined to make medicine itself a deeply unattractive profession. Henceforth potential analysts may be drawn more often from psychology and social work, where long-term psychotherapy and even some analysis can be practiced, untroubled by writing prescriptions or making neo-Kraepelinian diagnoses. This is already a different world from the one imagined by the medical analysts of the 1950s, when analysts could practice analysis selectively and support themselves by psychotherapy. Psychoanalysis will continue, but perhaps as a didactic specialty for potential fellow-analysts, most of them non-M.D.s, who will seek their training either within or outside the present institutes of the American Psychoanalytic Association and International Psychoanalytic Association.

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Chapter 22

The Development of Clinical Psychology, Social Work, and Psychiatric Nursing: 1900–1980s

Nancy Tomes

Prologue

Of all the health care specialties, the field of mental health is among the most interdisciplinary, both in intellectual and professional terms. The complex nature of mental disease, encompassing as it does biological, psychological, and social factors, necessarily invites a variety of etiological and therapeutic approaches. Moreover, the range of mental disorders now believed to benefit by treatment is extremely broad, ranging from the most severe psychoses to the less debilitating “problems of living.” To meet these diverse mental health needs, there has grown up a complex system of treatment, ranging from private practice to acute care hospitals, staffed by professional workers from varied disciplines. By the mid-1980s, there were almost 170,000 mental health professionals in the United States, 22% of whom were psychiatrists, 20% psychologists, 22% were psychiatric nurses, and 36% clinical social workers. By the late 1990s, available statistics suggest that of an estimated 245,000 professionals, 16% were psychiatrists, 32% were clinical psychologists, 13% were mental health nurses, and 39% were clinical social workers.¹

A century ago, such a profusion of mental health facilities and practitioners would have been completely unimaginable to American psychiatrists. As of 1900, physicians were virtually the only professional group treating mental disease, either in private practice or in institutional settings. In the nation’s vast network of mental institutions, psychiatrists reigned supreme, neither requiring nor desiring the contributions of other professional groups.

The forces that brought an end to the psychiatric monopoly on mental health care were many and complex. The rise of social psychiatry, particularly the growing influence of both psychoanalysis and the social sciences; the expansion of community-based treatment centers; and the increasing involvement of philanthropic foundations and the federal government in the delivery of mental health care, all contributed to the diversification of professional care givers in the mental health field by the 1970s. Even before the mounting economic pressures of the managed care era, these trends had helped to establish the “mental health team” concept as a fundamentally different approach to treatment. Thus the history of the team concept helps illustrate the profound changes that have transformed American psychiatry in the last century.

These changes have ushered in not only new forms of interdisciplinary collaboration but conflict as well. Since the inception of the mental health team concept in the 1910s, the boundaries of professional responsibility for diagnosis, treatment, and research have been constantly redrawn. Reversing the trend toward greater specialization that has characterized other forms of health care, the professional division of labor in the mental health field has become less specialized over time. The relatively clear-cut roles envisioned for different members of the mental health team in the 1910s have given way to a much more

complex diffusion of therapeutic responsibilities. Other professional groups have challenged psychiatry's status as the "first among equals" on the mental health team, ushering in what Bertram Brown, then Director of the National Institute of Mental Health, described in 1977 as a "period of intense competition and role confusion within and among the mental health professions," which persists to this day.²

The following chapter attempts to put the tumultuous history of the last 30 years in historical perspective. It focuses on the interrelationships among the four "core disciplines" that comprise the specialty sector of mental health care: psychiatry, psychology, psychiatric social work, and psychiatric nursing.³ My aim here is not to recount their separate histories, a task beyond the scope of one chapter, but rather to sketch an overview of their mutual relations within the changing mental health care system. The chapter examines the mental health team concept from its inception in the early 1900s through the community mental health movement of the 1960s and 1970s. It stops short of any attempt to survey developments of the post-1980 period, which require a book in and of themselves. But it is my hope to provide a starting point for a more interprofessional history of the mental health field.⁴

Origins of the Mental Health Team Concept

The mental health team concept originated as part of a Progressive-era effort to make institutional psychiatry less isolated from both general medicine and the larger society. As recounted elsewhere in this volume, late nineteenth-century psychiatry was a specialty devoted chiefly to treating severely ill patients in mental hospitals. Not only did the increasingly custodial work of institutional psychiatry offer little incentive for interprofessional collaborations, but also asylum superintendents fiercely defended the principle of their "one man rule" in the mental hospital.⁵ Psychiatry only became more interdisciplinary as it secured new, more treatable clienteles outside the mental hospital, and became more receptive to intellectual trends outside medicine.

These prerequisites were met by the new "dynamic psychiatry" advocated by leaders such as Adolf Meyer, Elmer E. Southard, and William Alanson White at the turn of the century. In place of the extreme somaticism and rigid diagnostic categories popular in the late nineteenth century, these psychiatric reformers argued for the interaction of biological, social, and psychological factors in the etiology of mental illness. Stressing the importance of prevention and early intervention, they advocated new community-based treatment facilities for incipient or recent cases of mental distress. These new extramural treatment facilities, including psychopathic hospitals, child guidance centers, and outpatient clinics, led the way in developing a more interdisciplinary approach to mental health care.⁶

The growth of university-based departments of sociology and psychology, along with their applied branches of social work and mental testing, generated new ways of thinking about mental disease that proved extremely useful to the new psychiatry.⁷ The social sciences and psychiatry converged at a point in time when scientists from many disciplines were hotly debating whether nature or nurture was the most important determinant of human behavior. The new disciplines of sociology and psychology offered psychiatrists new insights into whether mental disease was the result of poor child-rearing techniques, social environment, or hereditary mental defect.⁸ Not only did psychiatric theory incorporate the varied strands of research that social scientists were doing in university centers; psychiatrists also actively recruited practitioners of applied sociology and psychology into the mental health field. In an era of unprecedented cooperation between psychiatry and the social sciences, the concept of the interdisciplinary mental health team was born.

The first non-medical workers recruited into the mental health field were social workers. Sociology and social work developed out of late nineteenth-century efforts to rationalize welfare and correctional services in the face of massive immigration and rapid urban growth. Breaking with older, religiously-inspired forms of assistance, Progressive era sociologists and social workers sought a more scientific, systematic, and morally neutral approach to social problems and their solutions. The extent of urban poverty and crime, as well as the failure of traditional institutions to eliminate them, deepened reformers'

appreciation of the environmental causes of individual misfortune and misbehavior; poverty and urban blight translated into overwork, anxiety, and lack of recreational outlets that increased the likelihood of producing mentally “maladjusted” individuals.⁹

Social workers first came into mental hospitals to plan aftercare programs for recently discharged patients. Prodded by ex-patients such as Clifford Beers, the founder of the National Committee on Mental Hygiene movement, psychiatrists became convinced that social workers could help patients readjust to society and thus lessen the likelihood of their return. Between 1905 and 1915, innovative institutions such as the Massachusetts General Hospital, Bellevue, and the Phipps Clinic of the Johns Hopkins Hospital began hiring social workers to help take individual histories and make post-discharge plans for patients. In 1906, the New York State Charities Aid Association and the Commission on Lunacy agreed to hire a social worker to plan a system of aftercare for state hospital patients. Thus by the eve of World War I, a small but highly visible number of social workers had found employment in hospitals and clinics in large Eastern cities.¹⁰

At first, these social workers thought of themselves only as applying traditional casework methods to psychiatric patients. They identified the background factors such as poverty, poor home environment, and physical illness that contributed to the patient’s condition, and then arranged for appropriate social services to correct those problems. But within a very short time, case workers in psychiatric facilities began to feel the need to acquire more specialized knowledge, so as “to fit them to collect social data necessary to psychiatric diagnosis, to understand the significance of the physician’s diagnosis, and to afford social care that will contribute to medical treatment,” in the words of Mary Jarrett, who coined the term “psychiatric social worker” in 1918 to convey the distinctiveness of the new work.¹¹

Jarrett not only gave the field its name, but also acted as its intellectual theorist and professional midwife. Already an experienced social worker at the time Elmer Southard hired her in 1913 to head the social services division of the new Boston Psychopathic Hospital, Jarrett expertly adapted traditional social work methods to psychiatric concerns. At Boston Psychopathic, she developed a special eight month training program for social workers in psychiatric settings that became the model for the burgeoning specialty. With Southard, she wrote *The Kingdom of Evils* (1922), a compendium of cases illustrating the psychiatric dimensions of many social problems, including poverty, crime, and juvenile delinquency. In practice and in print, the Jarrett-Southard collaboration was the most influential example of the new uses of social work in psychiatry.¹²

Psychology and its applied branch of mental testing offered a different set of skills to assist the dynamic psychiatrist. First introduced in American universities during the 1870s and 1880s, experimental psychology at first had little relevance to psychiatry. Then in the 1890s, academic psychologists specializing in child study began to make significant contributions to developmental theories of personality and mental function. Other psychologists, inspired by Francis Galton’s work on the heritability of human intelligence, devised new and more precise ways of measuring individual mental traits. First used extensively to estimate the educability of retarded children, intelligence testing soon found many other applications. More so than the field of sociology, psychology developed strong ties with the eugenics movement, which advocated measures such as immigration restriction and sterilization to halt the alleged increase of mental defectives in American society.¹³

The psychopathic hospital provided psychologists their first entree into psychiatric practice. In expanding the purview of their expertise, dynamic psychiatrists became particularly interested in the “psychopathic” personality, a term applied to individuals of high intelligence and often considerable personal charm who nonetheless showed significant areas of “maladjustment” in everyday life. E.E. Southard quickly recognized that the new field of mental testing could aid physicians in recognizing the psychopathic personality. In 1912, he hired Robert Yerkes, a member of the Harvard University psychology faculty, to be a part-time consultant at the Boston Psychopathic Hospital. There Yerkes began to develop intelligence tests that would aid psychiatrists in making more accurate diagnoses.¹⁴

Before World War I, both social workers and psychologists found new opportunities in child guidance, another expanding area of psychiatric interest. Child guidance centers originated as adjuncts of the new

juvenile court system that many American cities adopted between 1900 and 1920.¹⁵ The first such clinic, the Juvenile Psychopathic Institute, was set up in Chicago in 1909 by a psychiatrist, William Healy. In 1913, Healy hired Augusta Bronner, a Ph.D. in psychology from Columbia, to assist him: in 1917, the two moved to Boston to the Judge Baker Foundation. Healy and Bronner developed a lifelong collaboration in the study of juvenile delinquency that would make them one of the best known interdisciplinary teams in the mental health field.¹⁶

At the Judge Baker Foundation, Healy and Bronner added a psychiatric social worker to their staff and developed a protocol for collaboration among the three disciplines that became the model for most psychiatric institutions in the interwar period. The social worker interviewed family members and welfare agents to collect data on the patient's social history; the psychologist administered a set of mental tests to determine the patient's general intelligence; and the psychiatrist interviewed the child to get his or her "own story," and identify the psychodynamics underlying the problem behavior. The three then met to pool their insights and develop a treatment plan.¹⁷

As the early history of the psychopathic hospital and child guidance clinic suggests, interdisciplinary collaborations flourished first and most extensively in areas of psychiatric practice devoted to a more "nearly normal" clientele. Compared to the psychotic, chronically ill patients filling most state mental hospitals, the psychopath and the juvenile delinquent presented much more challenging, hopeful therapeutic prospects. Their diagnosis involved making fine distinctions between normal and abnormal intelligence and personality traits; their restoration to society required careful "adjustment" to their social milieu. With their systematic methods of taking case histories and administering mental tests, social workers and psychologists had much to offer psychiatrists treating these new and interesting groups of patients.¹⁸

While most quickly adopted in the new flagship institutions of dynamic psychiatry, the psychopathic hospital and child guidance clinic, the team approach also made some inroads into the traditional psychiatric domain of the mental hospital before World War I. The most progressive psychiatric institutions began to hire social workers and psychologists, albeit in small numbers. By the eve of World War I, the notion that social workers and psychologists had a legitimate role to play in mental institutions was accepted among many elite psychiatrists.¹⁹

America's entry into World War I gave both social workers and psychologists new opportunities to solidify their pre-war gains. Under the auspices of the National Committee on Mental Hygiene, Mary Jarrett organized a war-time course in psychiatric social work that became the nucleus for the Smith College School of Social Work. Impressed by the social workers' skills, the United States Public Health Service asked the American Red Cross, which had coordinated social work services during the war, to organize permanent social service departments in federal hospitals, including those providing psychiatric services, a program that the Veteran's Bureau took over in 1926.²⁰

Likewise, psychologists seized upon the wartime crisis as a chance to prove their discipline's usefulness. Within days of the United States' entry into the war, a committee of the American Psychological Association met to discuss how best to advance their specialty's standing; a committee headed by Robert Yerkes was formed to convince the military to use intelligence testing to improve the army's efficiency. But psychologists' quickly disagreed over the proper aims and methods of military testing. The hastily devised group intelligence tests, known familiarly as Army Alpha and Beta (for literate and non-literate recruits respectively), administered to almost 1.8 million recruits, were controversial from the start, and even more so when the test results found that the average recruit had a mental age of 13.5. Another widely used test was the "Psychoneurotic Inventory," (innocuously titled "Personal Data Sheet" when presented to the recruits), developed by psychologist Robert Woodworth to screen recruits for mental abnormalities.

Despite their problems, psychologists interested in expanding the clinical applications of their work were heartened by Yerkes's success in convincing the military's medical leadership to recognize the field as an important adjunct to psychiatry. Yerkes founded a School of Military Psychology to train psychologists, and got himself a commission in the Sanitary Corps, a rank formerly limited to physicians. For all the internal controversy, wartime service left psychologists filled with new confidence.²¹

Whereas psychiatrists did not begrudge social workers their wartime gains, they felt distinctly threatened by the new prominence of the “mental testers.” Even before the war, some psychiatrists had expressed displeasure over the psychologists’ growing role in diagnosing mental incompetence, a determination formerly reserved for physicians. The war-time testing program only exacerbated their fears that psychologists wanted to set themselves up as autonomous rivals.²²

The psychologists’ higher level of education no doubt contributed to the psychiatrists’ perception of their competitive potential. Although many practicing psychologists did not have doctorates, enough did to qualify the field’s claim to a high level of scientific expertise. Moreover, by the 1920s, academic psychology had a secure place in the world of university research that psychiatrists had cause to envy. In contrast, social workers rarely had more than a college degree, and their professional education remained primarily vocational in nature. In a famous address given to the National Conference of Charities and Correction in 1915, the influential educator Abraham Flexner wondered aloud. “Is Social Work a Profession?” and answered the question in the negative.²³

Gender also played a critical role in shaping psychiatry’s differing reaction to the two fields. Although early psychology had some very prominent female practitioners, it was still a male-dominated discipline at the university level, and therefore less easily dismissed as a contender for professional authority. A group skilled at self-promotion, psychology’s male leadership projected an expansive, ambitious future for the discipline. In contrast, psychiatric social workers were all women, and given the male biases of Progressive-era professionalism, more easily relegated to the status of a professional “handmaid.” Psychiatrists found the feminized language and theory of social work less threatening than the more masculinist scientific culture of psychology. Thus in the evolving division of professional labor, psychiatrists felt more confident of their ability to control social workers than they did psychologists.²⁴

Conspicuously absent from these emergent interdisciplinary relationships was nursing, another important profession of the early twentieth century. Nursing’s absence from the new mental health team reflected the problematic status of mental hospital nurses both in the nursing and psychiatric fields. The rise of professional nursing accompanied the rapid growth of the general hospital system in the late nineteenth century. As the new “scientific medicine” transformed the practice of hospital medicine, physicians welcomed the services of trained female assistants who could provide expert nursing care and ward administration. Nursing schools attached to hospitals fulfilled the goal of training young women while guaranteeing the institution an inexpensive labor supply. Less than 10 years after the first training school in the United States opened at Bellevue Hospital in 1873, MacLean Asylum opened the first school attached in 1882; by 1891, 35 more mental hospitals had such schools in operation. Although the better mental hospital training schools used “affiliations,” that is, brief services in general hospitals, to broaden their students’ education, the two training school systems still produced nurses with markedly dissimilar professional preparations and orientations.²⁵

The early nursing leadership, all of them graduates of general hospital schools, regarded nurses trained in the great majority of mental hospitals, particularly state institutions, as “sub-standard” and ill-prepared. In New York State, the professional nurses’ organization actively tried to exclude state hospital nurses from the first registration or nurse practice acts designed to upgrade the field’s standards. Only after protests from the asylum superintendents, who had a vested interest in maintaining an inexpensive labor supply, did the nursing leaders grudgingly accept responsibility for certifying state hospital schools and accepting their graduates as registered nurses. As the general nursing field gained some measure of autonomy from medicine, nurses in psychiatric hospitals remained firmly under the control of psychiatry. As a result, psychiatric nurses remained unwelcome step-children of the general nursing field.²⁶

The new psychopathic hospitals proved only slightly more promising as fields of opportunity. Euphemia Taylor, the Director of Nursing at the Phipps Clinic at Johns Hopkins University from 1913 to 1919, was the most prominent nurse in the psychiatric field; in the 1920s and 1930s, she became an influential advocate of psychiatric training in general nursing. But generally nurses found their professional aspirations blocked even in the more innovative institutions. While nurses played an important role in patient care, psychiatrists tended to see social workers as more suitable female *partners* for the mental health team. May McDonald, an early psychiatric nurse who became a social worker, explained this

preference by noting that most psychiatrists trained in state hospitals, where they rarely had “the personal experience of cooperating with a highly trained and intellectually responsive nurse who is capable of making a real contribution to the treatment of the case,” and therefore could not be made to “believe in the possible existence of such a person.” Psychiatric social workers were quick to exploit this perception, stating frequently that nurses lacked the training to think independently, and thus could not serve psychiatrists as effectively as social workers. As did May, ambitious nurses who wanted to work in the new extramural psychiatric institutions often shifted into the field of psychiatric social work.²⁷

The Mental Health Team in the Interwar Period

Between 1920 and 1940, two important trends began to transform the system of mental health care in the United States. First, the interwar period saw a slow but steady movement of psychiatrists from institutional to private practice. By the 1930s, an estimated one-third to one-half of all psychiatrists worked in private offices, doing psychotherapy as well as other forms of individual treatment.²⁸ Second, due in large part to the support of private philanthropic foundations, new institutional opportunities for non-physician professionals opened up in an expanding network of outpatient psychiatric facilities. The number of such clinics grew from 12 in 1910 to 642 in 1936, with child guidance centers alone accounting for almost a third of the increase.²⁹ To a lesser extent, the team concept also spread in the institutional sector of mental health care.³⁰ Thus by 1940, patterns of institutional care and professional staffing in psychiatric facilities had become far more complex than they were in 1910.

As the locus of innovation shifted steadily from the mental hospital to the private office and outpatient clinic, the system of professional labor in the mental health field evolved as well. The ability to lay claim to what psychiatry, psychology, and social work all considered the most desirable sectors of mental health practice—namely private practice and outpatient clinic work—depended largely on their status relative to each other.³¹ Psychiatrists remained the most powerful group by virtue of their medical training. In the interwar period, they dominated the new private practice sector, which combined the virtues of professional autonomy and attractive clientele. As the “first among equals” on the mental health team, they also retained the top administrative and clinical positions in both hospital and outpatient facilities.

In comparison, with few exceptions, psychiatric social workers and psychologists did not move into private practice; yet their graduate training made them strong contenders for positions in outpatient clinics, which offered a more responsive clientele and a more egalitarian professional atmosphere than the traditional mental hospital. Nursing, the weakest professional presence in the mental health field, remained limited exclusively to caring for severely ill mental patients in largely custodial state mental hospitals.

But these institutional and professional patterns were by no means immutable; continuing changes both within each profession, as well as the mental health care system as a whole, led to a constant process of boundary renegotiation among the four core disciplines. Two related trends in the interwar period had a particularly unsettling effect: the growing interest in psychotherapy, and the difficulty of maintaining distinct role responsibilities among the members of the mental health team.

In the interwar period, psychiatry developed an increasingly pronounced split between somatic and psychological orientations toward etiology and treatment. On the one hand, many institutional psychiatrists wanted to strengthen their identification with the general medicine of the time. Many hospital psychiatrists worried that the achievements of early twentieth-century medicine, particularly the transformation of the general hospital into a research and teaching institution and the reform of medical education, had passed them by. They attempted to realign the specialty with mainstream medicine through a variety of strategies, including developing new aggressive somatic measures, such as the shock therapies and psychosurgery, expanding psychiatry’s place in the medical school curriculum, and forming a specialty board to certify psychiatrists and neurologists.³²

One objective of this rapprochement with general medicine was strengthening psychiatrists’ control over other professionals. By emphasizing those aspects of the psychiatrist’s training that non-physicians

could not duplicate, such as prescribing drugs and performing surgical procedures, the somatically-oriented wing of the specialty hoped to preserve the dominant position of the psychiatrist within the increasingly complex professional terrain of the mental health field.³³

Yet at the same time, the growing appeal of psychotherapy and psychoanalysis among many psychiatrists worked against the specialty's rapprochement with general medicine. The advantages of private practice lured ambitious young psychiatrists away from institutional psychiatry and its new links with the general hospital and the medical school. Burgeoning interest in psychotherapy and psychoanalysis, techniques regarded as thoroughly unscientific by many physicians, moved psychiatry away from mainstream medicine. The influx of European analysts fleeing Nazi persecution in the 1930s made psychoanalysis an even stronger and more contested focus within American psychiatry as a whole.³⁴

Not only did the growing enthusiasm for psychotherapy run counter to the somatic agenda of psychiatric leaders in the interwar period, it also made the boundaries between medical and nonmedical personnel more difficult to maintain. From the earliest days of the American psychoanalytic movement, as recounted elsewhere in this book, psychiatrists had been wary of the dangers of the lay analyst; departing from Sigmund Freud's acceptance of lay practitioners, his American followers insisted that analysts have an M.D. and prohibited non-physicians from full membership in their psychoanalytic societies, a stance that reflected their sense of vulnerability to competition.³⁵ Psychiatrists' concerns only intensified as psychoanalysis and other forms of psychotherapy became more popular in the interwar decades. Whereas a psychiatrist might safely assert that radical medical interventions such as lobotomies or shock treatments should be administered solely under a physician's direction, he had a more difficult task in defining psychotherapy as a medical modality. The techniques used to help patients resolve emotional problems involved no dramatic somatic interventions. To the extent that psychotherapy required specialized knowledge of psychological development and social relationships, non-physicians could claim to have the skills to practice it as well as any physician, if not better. The growing popularity of psychotherapy blurred the comfortably distinct roles for social workers and psychologists envisioned by the first generation of dynamic psychiatrists, and accelerated the evolution toward a more diffuse division of therapeutic labor.

Emerging from World War I with high morale, the disciplines of social work and psychology were ready to take advantage of the intellectual and institutional openings created by these changes within psychiatry. In so doing, they found powerful allies in an important new player on the mental health scene: the charitable foundations. Starting in the 1910s, the National Committee on Mental Hygiene, a group of lay and medical reformers dedicated to the ideals of dynamic psychiatry, convinced the Rockefeller Foundation to lend support to new methods of prevention and treatment. After World War I, the pace of charitable giving increased dramatically, particularly in the area of child guidance. The Commonwealth Fund, founded in 1918, played an especially important role in providing seed money for starting child guidance clinics and training personnel. Foundation-funded "demonstration clinics" became centers for developing new methods of interdisciplinary treatment, which soon spread to other clinics and hospitals. Thus foundation support made possible the rapid professional evolution of both social work and psychology in the interwar period.³⁶

Soon after the war's end, psychiatric social workers took important steps toward strengthening their professional identity. In 1920, a group of Boston social workers formed a club "to maintain the standard of psychiatric social work throughout the country," which became a section of the American Association of Hospital Social Workers in 1922. Four years later, the section broke off to form a separate organization, the American Association of Psychiatric Social Workers. Led by the A.A.P.S.W., psychiatric social workers became among the best educated, most elite specialists in the field of social work.³⁷

Psychiatric social workers also developed a more distinctive theoretical approach to their work in the 1920s. Faced with recurrent difficulties in accomplishing the social "adjustment" of their clients, they began to rethink their role in the treatment process. Caseworkers all too quickly learned that until the patients' emotional problems and distorted thinking had been dealt with, no amount of good advice about finding a job or improving health habits would be effective. Psychiatric social workers also became increasingly aware of the role family members often played in blocking constructive change. Time after time, seemingly cooperative and well-intentioned relatives unwittingly reinforced the patient's self-destructive

attitudes and behaviors. In the words of Lois French, a prominent practitioner of the interwar period, psychiatric social workers realized “that modification of environment and treatment of emotional problems are inextricably bound together and cannot be separated, except in terms of emphasis.”³⁸

Psychiatric social workers in child guidance clinics were the first to experience the need for more sophisticated casework theory. In the prevailing team approach, the psychiatrist focused on the child, while the social worker dealt with the parents, most often the mother. As a result, social workers constantly had to confront the parents’ role in creating and sustaining the child’s disruptive behavior patterns, which were often a reflection of the adults’ emotional and marital difficulties. The conventional history-taking session, during which the social worker interviewed the mother to gather information on the child, often turned into a therapeutic session. Gradually in the late 1920s and early 1930s, psychiatric social workers began to develop new and distinctive interviewing methods that stressed the relationship between attitude and behavior change. Various called “attitude therapy,” “relationship therapy,” and “passive technique,” this new style of casework soon spread beyond child guidance clinics to other fields of psychiatric social work.³⁹

In transforming the casework interview into casework “treatment,” psychiatric social workers borrowed heavily from psychoanalytic methods. They adopted the latter’s emphasis on the therapist’s stance as a neutral observer, the value of emotional catharsis, and the role of defenses in patterning habitual behavior. So involved were social workers in psychoanalytic theory that a lively debate developed in the 1930s between the more Freudian “diagnostic” school and the Rankian “functional” school, who differed over a variety of therapeutic issues, such as the value of formal psychiatric diagnosis and the proper length of psychotherapy.⁴⁰

In many ways, then, psychiatric social workers in the interwar period usurped some of the traditional prerogatives of the psychiatrist; they developed a more autonomous sense of professional self, and appropriated aspects of psychoanalytic theory for social work practice. Psychiatrists might well have been threatened by these developments, yet for the most part, relations between the two professions remained peaceful.⁴¹

To be sure, tensions usually existed wherever social workers and psychiatrists practiced closely together. Social workers often complained about psychiatrists’ restrictions on their judgment, while the latter belittled their therapeutic pretensions in return. Yet in spite of such sniping, the professional collaboration between psychiatry and social work proceeded according to a relatively harmonious division of therapeutic labor. Psychiatric social workers did not threaten psychiatry’s monopoly on private practice, the sphere of work the latter most valued; and in clinic and hospital settings, psychiatrists retained the ultimate administrative and clinical control over their social worker colleagues.⁴² The gender identity of the two professional groups played an important role in maintaining this hierarchical division of labor. As a profession still predominantly female in composition, social workers in general struggled to combine male-identified standards of professional expertise with traditional feminine attributes, which included deferring to male authority.⁴³

In psychiatric social work, this pattern was apparent in the “graded” conception of psychoanalysis adopted by the specialty. Psychiatric social workers ceded to the psychiatrist the exploration and resolution of deep-seated psychological conflicts, and focused instead on areas in which psychiatrists had little interest: the patients’ “practical reality needs,” including the family’s involvement in treatment. Social workers also acknowledged the psychiatrists’ right to exercise ultimate authority over their work. In 1939, Katharine Wickman, the A.A.P.S.W. President, expressed the limits on the specialty’s autonomy: “The psychiatric social worker does not assume that she knows what will be the best method of social case work in a given case,” she declared, but rather submitted her professional judgements to the psychiatrist’s confirmation. Most social workers willingly accepted a separate and unequal sphere of professional activity, based on a conception of psychotherapy as an activity involving different grades of expertise. Those who chafed at psychiatrists’ clinical authority left the mental health field and went into more general social work practice, where no physicians existed to thwart their authority. Partly as a result of this exodus, casework “treatment” theories soon spread to other fields of social work in the 1930s and 1940s.⁴⁴

The division of labor between psychiatrists and psychologists also grew more unclear during the interwar decades. Although the vast majority of clinical psychologists continued to work as mental testers in

child guidance clinics, some began to develop new diagnostic and therapeutic interests. Unlike the social workers' forays, the psychologists' bids for independence caused alarm among many psychiatrists, and tensions between the two disciplines became increasingly pronounced in the 1930s.

Just as social workers found the traditional form of taking the case history too confining, psychologists grew frustrated with their allotted tasks of mental testing and remedial education. As psychologist Simon Tulchin noted in 1930, "The individual's behavior cannot always be so controlled that he reacts on one level in the test room and saves all his emotional problems for the next room," that is, the psychiatrist's office. Again, this problem was first evident in child guidance clinics, where during lengthy testing procedures, psychologists learned far more about the child's personality than simply his or her level of intelligence.⁴⁵ Indeed, child psychiatry grew up with the team approach—and was more generally more receptive to it.

One response to psychologists' frustrations was the development of more sophisticated forms of mental testing. In the interwar years, psychologists dramatically expanded testing from simple measures of intelligence to comprehensive surveys of normal and abnormal personality functioning. In the 1920s, two testing instruments, the Babcock Deterioration Test and the Wechsler-Bellevue Intelligence Scale, became widely used in mental hospitals to distinguish among the different kinds and degrees of mental impairment associated with specific psychoses.⁴⁶ In the 1930s, some psychologists became interested in so called "projective tests," such as the Rorschach and Thematic Appreciation Tests. Unlike conventional mental tests, projective techniques gave the psychologist much more scope for interpretation, which contributed to their popularity. The Rorschach had special appeal for the psychoanalytically-inclined, since the patient's associations gave the tester access to unconscious material.⁴⁷

The plethora of new diagnostic tests led to confusion and tension between psychologists and psychiatrists. Unlike conventional laboratory tests, which most physicians could learn to interpret themselves, psychological tests required considerable interpretation from the tester. Moreover, as the testing instruments grew ever more elaborate, psychiatrists found it increasingly difficult to know which tests to order, much less to appreciate the detailed inferences psychologists were willing to make from their results.⁴⁸ In his widely used manual, *Mental Tests in Clinical Practice* (1927), Frederick Lyman Wells acknowledged the growing confusion over the psychologists' role in diagnosis. To keep the peace, he advised psychiatrists to let their psychometric assistants decide which tests to run and how to interpret them, while giving psychologists detailed instructions on how to avoid overstepping their bounds as diagnosticians.⁴⁹

Psychologists continued to do experimental research that had implications for and sometimes even challenged the clinical expertise of psychiatrists. In the interwar period, perhaps the most important contribution from the psychologists' research domain was the school referred to as "behaviorism," which emerged in the 1910s. Its best-known advocate was John B. Watson, a University of Chicago-trained psychologist whose experimental research on habit-formation in animals and humans led him to criticize traditional theories of instinct and emotion. Although Watson's reductionistic views of consciousness were too extreme even for most psychologists, his and his students' research led to a new emphasis on habit formation and external reinforcement of problem behavior, especially in the area of child guidance.⁵⁰

Finally, and most importantly, psychologists' growing interest in psychotherapy provoked psychiatrists' animosity. As had social workers, psychologists first became interested in psychotherapy within the context of their original team assignment, the testing and remedial education of children. The more testing they did, the more psychologists became convinced of the link between learning problems and emotional difficulties; in order to address the former, they had to delve into the latter. This recognition led to increasing interest in psychoanalysis, particularly the work of Alfred Adler and Sigmund Freud. In the 1930s, more and more practitioners working with children became interested in psychoanalysis, play therapy, and group therapy. But as psychologists contemplated the move from tester to therapist, they implicitly challenged the old division of labor on the mental health team, in which therapy with the child-patient had been the psychiatrist's sole preserve.⁵¹

In general, psychiatrists were far more suspicious of psychology's post-war pursuits than they were of the social workers' contemporaneous bids for greater independence. Their concerns manifested

themselves less at the individual level, where psychiatrists and psychologists often worked together quite productively, than at the collective level of professional consciousness. The new assertiveness of psychology seemed threatening to psychiatry for several reasons. The enormous success in the 1920s of popular psychology, including self-help books and therapeutic regimens advocated by psychological “experts,” made the field seem a serious competitor for public favor. Psychologists far excelled psychiatrists in developing strong ties with the corporate business world, both in the fields of advertising and personnel management.⁵²

As economic conditions worsened during the Great Depression, psychiatrists worried that psychologists would prove more successful in “commercializing” their expertise. In 1931, in a letter to Adolf Meyer, neurologist T.N. Weisenburg summed up a common view among physicians: “From my experience with psychologists especially in the war, I feel certain that the only thing they have done has been to try and sell themselves not only to the medical public but to the layman.” He concluded ruefully, “As propagandists we neuropsychiatrists are not at all in their class.”⁵³

Still, for all the psychiatrists’ apprehensions, psychologists achieved only limited professional gains during the interwar period. Very few psychologists became solo practitioners in the 1930s, averting the worst fears of the psychiatrists that they would challenge them for private patients. While some psychologists expanded their roles to include “therapeutic interviews” with mildly disturbed patients, the great majority still worked primarily as mental testers. Psychologists also continued to work primarily in institutional settings where psychiatrists maintained the administrative power to direct and restrain their professional aspirations, just as they did social workers. Moreover, in comparison to other fields of psychology, clinical work attracted a disproportionate number of women; in 1932, a survey found 61% of all clinical psychologists were female. Thus the largely male psychiatric profession retained a gender advantage in maintaining its disciplinary advantage over clinical psychologists.⁵⁴

These limitations were compounded by the clinical psychologists’ precarious status within the larger field of psychology. In contrast to the social work field, where psychiatric specialists became the social work elite, clinical psychologists were treated as a low-status specialty within psychology. Mainstream academic psychology provided virtually no assistance to clinical psychologists in their attempts to expand their professional authority in relation to psychiatrists.

Standards of professional education are a case in point. In the 1920s and 1930s, graduate education in psychology emphasized experimental work. Those interested in clinical psychology had to acquire what specialized training they could from a “hodge podge of poorly integrated university courses, clinical internships, private study of special techniques and unsupervised practice,” in the words of one psychologist. For years, clinical psychologists struggled unsuccessfully to get the American Psychological Association to take some role in setting professional standards in their field. In 1917, a group of clinical psychologists dissatisfied with the A.P.A.’s inaction formed a brief-lived American Association of Clinical Psychologists. In the 1920s and 1930s, the A.P.A.’s Section on Clinical Psychology issued a series of recommendations concerning training and certification programs that were never enacted.⁵⁵

Finally, in 1937 the breach between academic and clinical psychologists grew so bad that the latter once again withdrew from the American Psychological Association, and along with other practitioners in applied fields, founded a separate organization, the American Association of Applied Psychologists. But without the backing of the university-affiliated academic psychologists, clinical psychologists remained unable to impose more stringent professional standards on their field.⁵⁶

Compared to the other non-physician professions in the mental health field, nursing experienced the smallest gains during the 1920s and 1930s. To be sure, there were small signs of progress. The National League of Nursing Education took an interest in improving psychiatric education in both general and psychiatric hospital training schools. Under the joint auspices of the N.L.N.E. and the American Psychiatric Association, in 1936 Harriet Bailey, the nurse—author of one of the first textbooks on mental nursing, conducted a survey of psychiatric nursing schools, and made a number of suggestions for their improvement. But overall, nursing in mental hospitals remained a low prestige field plagued by high rates of turnover.⁵⁷

World War II and the Growth of Federal Involvement in Mental Health Care

Once again, America's entry into war precipitated a major realignment in the relations among the mental health professions. During World War II, military needs for mental health services, from screening recruits to treating combat casualties, gave all the members of the interwar "team" new opportunities to prove their usefulness. The number of recruits rejected for psychiatric reasons proved to be very high, approximately 23% of the total recruits, which confirmed the interwar emphasis on prevention and early intervention. As the war intensified, combat created many psychiatric casualties who needed intensive care. Psychiatrists, social workers, and psychologists enjoyed great success in treating wartime psychiatric casualties with the new—psychoanalytically-derived—methods they had evolved in the interwar period. Thus wartime service brought new prestige to all three disciplines.⁵⁸

But at war's end, it was also clear that the need for expanded mental health services had just begun. Of the soldiers given medical discharges, 40% had mental disabilities, and 60% of the men still hospitalized in April 1946—some 44,000 soldiers—were psychiatric patients. Moreover, the nation was now committed to providing lifetime medical care for 16 million new veterans, many of whom could be expected to develop a mental illness that would require care at the federal government's expense.⁵⁹ As a result, World War II ushered in a new era of federal involvement in the provision of mental health personnel that dramatically altered the interwar pattern of professional relations. Out of the war emerged a conviction among government officials that the nation's system of training mental health care professionals needed a radical overhaul.

The federal government's new role in professional training began during the war itself, with the recognition of what came to be called the "psychiatric crisis." At the time the United States entered the war, only about 3500 psychiatrists were available for service, far too few to meet the military's needs for psychiatric personnel. Reserving psychiatrists for the more demanding clinical and administrative responsibilities, the military authorities pressed psychologists into screening and diagnostic testing as well as therapy with milder cases, and asked social workers to do counseling and group work as well as casework. This extensive clinical experience with adults created new self-confidence for both professions, and laid the foundation for post-war practice in new areas of treatment.⁶⁰

Foreseeing a rapid expansion in hospital and outpatient services for veterans, in the late 1940s the Veterans Administration instituted personnel policies that had even more far-reaching and long-lasting consequences. V.A. policy planners realized that psychiatrists required too lengthy and expensive a medical training to fill its need for professional services. Moreover, the post-war medical leadership was unwilling to increase medical school admissions solely to meet hospital needs for medical services. So instead the V.A. turned to psychologists and social workers, who during the war had shown their ability to perform the psychiatrists' less specialized tasks, and whose professional leaders were more willing to adjust the supply of workers to meet institutional demands.⁶¹

Thus immediately after war's end, the V.A. began to subsidize non-medical professional training and to staff its facilities with psychologists and social workers. More importantly, in determining an institutional division of labor, the V.A. policy makers decided that the ability to perform specific skills, not membership in a particular profession, would determine a practitioner's therapeutic responsibilities. As Daniel Blain, the Chief Neuropsychiatrist of the V.A., wrote in 1947. "The delegation of duties in respect of the various needs of the patient shall not rest on professional status, but rather on the preparation of any individual to direct or to perform any of the functions."⁶²

In practice, the V.A.'s personnel policy heavily favored clinical psychologists. From the V.A.'s perspective, they were ideally suited to provide high-quality professional services in the rapidly expanding network of government facilities. Clinical psychologists required roughly half the time and expense to train and could perform many of the tasks traditionally done by psychiatrists. Moreover, in areas such as diagnostic testing and clinical research, the psychologists' university training arguably gave them skills superior to those of most psychiatrists. Because of their thorough grounding in normal personality

development, psychologists seemed better prepared to treat the mental maladies of veterans, many of whom were healthy adults who had broken down under the extreme stress of combat.⁶³

Hoping to reduce the long-term costs of mental illness for both the individual and the state, the V.A. also committed itself to funding basic research on mental illness, another area where psychologists could excel. As psychiatrists themselves admitted, the research tradition in most medical schools was still very weak in the 1940s and early 1950s; physicians in general and psychiatrists in particular did not get extensive training in basic research as part of their professional education. In contrast, graduate education in psychology placed heavy emphasis on research design and methodology. As psychologist Samuel Kutash commented in 1947, "psychologists are usually the best trained, of the clinic personnel, in rigid, scientific research methods and techniques."⁶⁴

Convinced that psychologists could be used in varied capacities, the V.A. used federal funds to bring about the program of professional uplift that clinical psychologists had long desired. By providing the financial resources to build clinical programs in university departments of psychology, the V.A. ensured the provision of systematic clinical training for the first time. Its provision of well-funded individual traineeships and high-paying jobs in its facilities attracted good candidates into the new clinical programs.⁶⁵

Perhaps the V.A.'s most important policy was its requirement that staff psychologists possess both a Ph.D. and specialized clinical training. By adopting the highest educational standards for its staff psychologists, the V.A. virtually decreed that the doctorate would become a requirement for professional advancement throughout psychology. In justifying the government's insistence on hiring only Ph.D.s, the Chief Psychologist of the V.A., James Miller, explicitly acknowledged the need to give psychologists an advanced degree equivalent to the M.D. In his words, "Clinical psychologists are receiving comparable responsibilities with psychiatrists, and if they are to retain the respect of their professional colleagues, they must maintain comparably high standards."⁶⁶

The V.A.'s patronage greatly strengthened the clinicians' position within the larger psychological profession. With the post-war boom in the clinical field, the American Psychological Association finally accepted responsibility for certifying professional psychologists, paving the way for a merger with the American Association of Applied Psychologists in 1945. Under their combined auspices, the American Board of Examiners in Professional Psychology was established in 1947 to provide board certification of clinical psychologists similar to that given psychiatrists and other medical specialists. Post-war leaders in clinical psychology were careful to retain a strong research component in the new graduate programs, thereby preserving their experimentalist credentials. After years of internecine conflict, academic and clinical psychology at long last reached a workable accord, giving the latter a much stronger professional base.⁶⁷

The V.A.'s post-war promotion of clinical psychology anticipated the goals and programs adopted by the National Institute of Mental Health, which began operation in April, 1949. Concerned over the large number of draftees either rejected for service or discharged from the military for psychiatric reasons, Congress in 1946 passed the National Mental Health Act, which allocated federal funds to establish community mental hygiene clinics and professional training programs, and set up a national institute to coordinate the nation's mental health policy. Following the V.A. precedent, the N.I.M.H. adopted an interdisciplinary policy in both research and training, allocating funds according to an informal ratio of 40% for psychiatry and 20% each for psychology, social work, and nursing.⁶⁸

In designating it as one of the core disciplines, the N.I.M.H. dramatically elevated the nurses' place on the mental health team. Recognizing that nurses were the most numerous but least organized and utilized professional group in the mental health field, federal policy makers determined to help the specialty develop. Nursing leaders had long argued that the field's problems lay in its association with the mental hospital training schools. In 1943, federal funds were made available to establish three university centers in psychiatric nursing. Starting in 1948, the N.I.M.H. began funding training programs in psychiatric nursing designed to establish it as a graduate specialty within a collegiate-based system of nursing education. For the first time, psychiatric nursing was put on an equal basis with the older and better established disciplines of clinical psychology and psychiatric social work.⁶⁹

The federal government's post-war policy patronage of non-physician personnel was not founded in any hostility to psychiatry. By developing the other core disciplines, neither the V.A. nor the N.I.M.H. intended to diminish psychiatry's dominance in the field. On the contrary, psychiatry's wartime service, combined with increased public awareness of the prevalence of mental disease, gave it very high prestige in the post-war period. Psychiatry still received the majority of federal funding, and with N.I.M.H. training funds, the number of psychiatric residencies increased dramatically and attracted first-rate students. Government policy makers assumed physician-specialists would retain their position as the "first among equals." The decision to recruit non-physician professionals reflected a desire to provide the psychiatrists with more numerous and less expensive professional adjuncts.⁷⁰

The federal government's conception of clinical psychology's relationship to psychiatry is a case in point. For all their new favor, psychologists were still seen as adjuncts to, rather than replacements for, psychiatrists. In the new division of professional labor, policy makers expected psychologists to concentrate on mental disorders that involved learning problems rather than disease processes. Psychoanalysis and other forms of intensive psychotherapy remained defined as medical procedures that required specialized training and supervision. Psychologists might practice individual psychotherapy, but only under a psychiatrist's direct supervision. Thus even clinical psychologists, the most favored of the non-medical practitioners, were still relegated to the role of junior partner on the mental health team.⁷¹

Post–World War II Trends

But during the 1950s and 1960s, psychiatry's undisputed dominance as head of the mental health team began to weaken. The federal government's decision to expand professional training programs with a minimum of regulation unwittingly created a new and seemingly endless psychiatric "crisis." Out of the post-war turmoil came a more rebellious stance toward psychiatry, manifest first among clinical psychologists in the 1950s, and spreading to the other disciplines, as well as policy makers and the general public, in the 1960s and 1970s.

The underlying cause of the chronic psychiatric crisis was a persistent maldistribution of physician care givers. After World War II, psychiatrists continued to move out of institutional service into private practice. Federal funding for psychiatric training programs did little to reverse these trends; young psychiatrists simply used taxpayer-supplied training funds to prepare themselves for lucrative private practices in urban areas. The new centrality of psychoanalysis to post-war American psychiatry only exacerbated the shift to private practice. At precisely the time when institutional needs for professional services peaked, a large percentage of psychiatrists specialized in the most costly and intensive form of psychotherapy.⁷²

Flush with their new federal funds, the other mental health professions were more than willing to take up the institutional and intellectual opportunities that psychiatry abandoned in the 1950s. In the case of social work and nursing, the direction of change did not immediately disturb their relations with psychiatry, whereas the expansion of clinical psychology led to a rapid escalation of hostilities between the two disciplines.

In the 1950s, psychiatric social workers expanded their involvement in therapy and research along lines that did not necessitate open conflict with psychiatrists. Of the various psychoanalytic approaches popular in the 1950s, social workers drew most heavily on ego psychology, which emphasized the patient's overall pattern of psychic functioning. Still following the graded concept of psychoanalysis, casework treatment shied away from systematic analysis of the unconscious and depth work aimed at fundamental personality change.⁷³ Social workers also took a particular interest in shorter, more cost-effective forms of group therapy. During World War II, the A.A.P.S.W. newsletter had noted that social workers might meet the need for approaches that "promise to expedite therapeutic work with large numbers by [a] relatively limited number of therapeutic agents," and social workers in the military began to experiment with a variety of group forms. In addition to pursuing these therapeutic interests after the war, social workers also used federal research funds to investigate the "social aspects of mental and emotional illness, particularly

with a view to correcting community conditions which make for instability and tension,” in the words of Luther Woodward, Chair of the Social Action Committee of the A.A.P.S.W.⁷⁴

By emphasizing the social aspects of mental health care, psychiatric social workers in the 1950s reaffirmed their links with the larger social work profession. The merger of the A.A.P.S.W. with other social work specialty groups to form the National Association of Social Workers in 1955 signified psychiatric social workers’ identification with the general field of social work. Focusing on the social aspects of mental illness allowed psychiatric social workers to maintain a relatively peaceful division of labor with psychiatrists, who had little interest in either group therapy or community-oriented interventions.⁷⁵

A different pattern of accommodation characterized psychiatric nursing in the 1950s. Psychiatric nurses found their greatest opportunities in the practice area least attractive to the other core disciplines, namely the mental hospital system. In the 1950s, the newly emergent specialty of psychiatric nursing showed the most consistent interest in hospital issues. The post-WW II popularity of milieu therapy accorded nurses an important role in the “therapeutic community” of the ward; as Hildegard Peplau, one of the early leaders of psychiatric nursing wrote in 1959, nurses found their niche as “mother surrogate, socializing agent, and psychotherapeutic agent.” Psychiatric nurses also assumed new responsibility for supervising the increasing number of non-professional workers on hospital wards, becoming the “model, instructor, supervisor and consultant for other less qualified nursing personnel.”⁷⁶

Still, the greater prominence of post-war psychiatric nursing in the mental hospital did not end the profession’s lowly status on the mental health team. Neither innovations in chronic care nor the supervision of non-professional staff were rewarded with the same degree of recognition as advances in research or psychotherapy. Moreover, nurses found relatively few openings for work outside the mental hospital, which remained a kind of institutional ghetto for them. The nurses’ best route to advancement was in administration rather than clinical work. So in spite of its new level of federal support, psychiatric nursing still found its professional development blocked during the 1950s.⁷⁷

The post-war reconstruction of clinical psychology brought about the most open and bitter ruptures with psychiatry. In the 1940s and 1950s, psychologists made important advances in the diagnosis, epidemiology, and treatment of mental disease. The growing sophistication and assertiveness of clinical psychology challenged the intellectual dominance of psychiatry in much more direct ways than did social work and nursing. Psychologists began to move into terrains that psychiatrists had long considered their exclusive domains, such as clinical diagnosis and psychotherapy.⁷⁸

Conflict was not inevitable, for in non-clinical settings, psychiatrists and psychologists often worked together very productively in the 1940s and 1950s. For example, psychologists collaborated with psychiatrists and other disciplines in conducting the first community-wide surveys of mental illness, including the Midtown Manhattan project and the Stirling County, Canada studies. The burgeoning field of psychiatric epidemiology provided an opportunity for psychologists to adapt their research skills to the uses of social psychiatry.⁷⁹

But in clinical settings, working out the boundaries between the two professions proved to be much more difficult. The post-war history of the Menninger Clinic is a case in point. The V.A. chose the Menninger, one of the most innovative psychiatric facilities of the interwar period, as a demonstration site for its new training programs. The federally-funded Menninger School of Psychiatry (1945) and School of Clinical Psychology (1946) quickly became leading institutions in both fields. But the expansive agendas of Karl Menninger, one of the clinic’s psychiatrist-chiefs, and his psychologist-counterpart, David Rapaport, soon came into conflict.

Rapaport, a Hungarian emigre psychologist, was hired to head the new M.S.C.P. Gathering around him; a brilliant group of psychoanalytically oriented psychologists. He brought a new level of theoretical sophistication and clinical interest to the traditional tester’s role. The “Rapaport Group” believed that by integrating psychometric techniques and personality theory, psychologists could make a much more important contribution to clinical diagnosis and treatment. With his colleagues, M.D. Merton Gill and Ph.D. Roy Schafer, Rapaport published *Diagnostic Psychological Testing* (1946), which outlined this new ambitious clinical agenda for psychology.

Initially, the Menninger brothers, Karl and Will, were supportive of Rapaport's project. His idea of using personality testing to place psychoanalytic theory on a sounder scientific basis had considerable appeal to them. But other psychiatrists on the staff objected to the increasing prominence given clinical testing and by implication the psychologists' clinical role on the mental health team. Rapaport's success in building an independent research program also threatened the institutional dominance the Menningers had long enjoyed. In 1948, Rapaport and his closest research associates left the Menninger for the Austin Riggs Center; in later years, Rapaport became almost exclusively interested in metapsychology and psychoanalytic theory.⁸⁰

In general, psychologists' expansion into new areas of psychotherapy precipitated an era of open conflict with psychiatry. After World War II, psychologists began to challenge psychiatry's monopoly on private practice, not only with children but adults as well. Beginning in the mid-1940s, psychologists successfully campaigned for state certification laws that allowed them to practice more independently, so long as they maintained collaboration with a psychiatrist. Between 1949 and 1959, the number of American Psychological Association members in private practice grew from 2.3% to 17%. A 1959 survey suggested that psychologists were finding their clientele among the mildly to moderately disturbed, or what was often referred to as the "worried well," in contrast to psychiatrists, who treated a more severely disabled clientele of neurotic and psychotic patients.⁸¹ Although many psychiatrists resented psychologists' entry into private practice, they could do little to halt it, given the continued shortage of physicians. Throughout the 1950s and 1960s, limits on the number of students admitted to medical school and residency programs kept the number of available psychiatrists very low. Psychiatrists also tended to practice in large cities, leaving the rest of the population underserved. The two professions came into conflict not so much over the psychologists' right to provide supplemental psychotherapeutic services, but rather on the proper degree of collaboration with psychiatrists they had to maintain while doing so. Psychologists interpreted collaboration to mean consultation between professional equals, while psychiatrists thought of it as a more hierarchical form of supervision with ultimate authority vested in themselves.

The most heated arguments of the 1950s centered around the definition of psychotherapy as a medical procedure. Psychiatrists argued that they must retain control over all therapeutic encounters because only physicians could discriminate between serious organic disorders and milder, purely psychological ailments. Without a psychiatrist's supervision, warned the Group for the Advancement of Psychiatry in 1949, the psychologist's lack of medical training "might lead to diagnostic error, the failure to detect serious psychiatric conditions in their early stages, or failure to recognize physical disorder which may be the basis of the maladjustment." Second, psychiatrists claimed that they alone were qualified to handle the intense transference and counter-transference necessary for any depth therapy, and particularly psychoanalysis, because of their longer, more specialized training.⁸²

Most clinical psychologists accepted the psychiatrists' strictures concerning supervision. But at the 1955 Stanford Conference on clinical psychology, some leaders in the field wondered in private whether, as one recalled, "the rather limited conception of operation within a clinical framework, with the psychologist serving as a [respectable] handmaiden to the medical profession, while desirable during our adolescence, may [have] become a trap." A small and vocal minority went even further, and began to challenge the definition of psychotherapy as a medical procedure and the need for medical training to handle the intensity of transference.⁸³

The best known of the early psychologist-critics of the medical model was Carl Rogers. Conducting research on the effectiveness of psychotherapy in the late 1940s, he became convinced that therapists' personal qualities contributed more to successful patient outcomes than did their disciplinary background. From these findings, Rogers evolved a "client-centered" therapy that deemphasized the medical conception of emotional distress as well as the patient's dependence on the therapist. Psychotherapy was not a medical procedure, Rogers insisted, but a "learning or relearning situation." Although as of 1959, only 5% of American psychologists identified themselves as Rogerians, his critique of the medical model of mental disorders profoundly affected the whole field of psychology.⁸⁴

The clinical psychologists' interest in private practice and signs of intellectual rebelliousness contributed to the marked deterioration of their formal relations with psychiatry in the 1950s. Starting at the end of World War II, a series of joint committees from the American Psychological Association, the American Psychiatric Association, and the American Medical Association unsuccessfully tried to negotiate mutually acceptable role boundaries between the two fields. In 1954, all three parties agreed to a statement that psychotherapy was a medical therapy, but that psychologists might be certified to practice it so long as they remained under a psychiatrist's supervision. But in 1957, the American Psychiatric Association rescinded its approval of the resolution, on the grounds that the new certification had given psychologists too much freedom. In the wake of this decision, the conflict between the two professions became increasingly public and acrimonious, amounting virtually to a state of war. Concerned that the publicity surrounding their quarrels was damaging both psychology and psychiatry, the two A.P.A.s reached a rapprochement in 1962, reaffirming the 1954 agreement but stressing the need for collaboration, as opposed to supervision, as the basis for future relations between the two professions.⁸⁵

Community Mental Health, Deinstitutionalization, and the Anti-Psychiatry Movement

Clinical psychology's rebelliousness in the 1950s heralded a growing mood of dissatisfaction with the mental health care establishment in general. Beginning with Albert Deutsch's *Shame of the States* (1948), a series of both popular and academic studies documented the therapeutic failures of state mental hospitals. In 1955, Congress passed the Mental Health Study Act in 1955, which authorized the N.I.M.H. to appoint a Joint Commission on Mental Illness and Health to study the mental health system. In the late 1950s and early 1960s, the Joint Commission published a series of important studies advocating a shift from institutional to community-based psychiatry. The Commission's work ultimately culminated in the passage of the Community Mental Health Acts of 1963 and 1965, which allocated federal funds for the construction and staffing of community mental health centers throughout the country.⁸⁶

As had the V.A. and the N.I.M.H. before them, the Joint Commission endorsed an interdisciplinary approach to staffing, asserting that individual qualifications, not professional affiliations, should determine the assignment of therapeutic responsibilities. Acknowledging the professional battles of the 1950s, the Commission recommended that psychologists with special aptitude be allowed to do "depth psychotherapy," and that all members of the mental health team be allowed to practice short-term therapy, which they defined as "treating persons by objective, permissive, non-directive techniques."⁸⁷

The community mental health movement of the 1960s greatly accelerated the trend toward role diffusion and interprofessional competition in mental health care. In the new mental health clinics, the administrative heads no longer had to be psychiatrists; not surprisingly, non-physician administrators tended to be more sympathetic to the professional aspirations of social workers and psychologists. Community mental health clinics also experimented with short-term, non-traditional psychotherapies. One such new approach was behavior modification, a therapeutic school that drew its inspiration from Watson's behaviorism. These non-traditional therapies played to the strengths of social workers and psychologists, so long prohibited from doing classical psychoanalysis.⁸⁸ Eventually, a combination of psychoanalysis and behavioural therapy—"cognitive behavior therapy"—was developed by a M.D. psychoanalyst and a clinical psychologist.

The community health movement presaged another major trend of great importance for professional relations in mental health: the so-called "deinstitutionalization" movement. Between 1955 and 1975, the number of psychiatric patient care episodes treated in hospitals declined dramatically, from 77% to 27%, while the proportion of outpatient care rose from 23% to 70%. The shift from inpatient to outpatient care took place in an intellectual and policy climate increasingly hostile to psychiatry; despite the fact that many of these discharges were due to important innovations in psychopharmacology. The doubts about the medical model expressed by Carl Rogers and other critics in the 1950s were taken up by much more strident voices in the early 1960s, chief among them M.D.'s Thomas Szasz and R. D. Laing.⁸⁹

The anti-psychiatry movement combined with deinstitutionalization to create a highly volatile situation for mental health professionals in the 1970s. The questioning of psychiatric authority that had once characterized only psychology spread to social work and nursing as well. To varying degrees, all three non-medical professions attempted to secure greater independence from both psychiatrists and the medical model of mental illness. The end result was a host of new professional controversies over professional certification and eligibility for third-party reimbursement.⁹⁰

The rapid expansion of both private and public health insurance plans in the 1960s and 1970s brought the issue of professional parity to a head. As more Americans sought psychotherapy, insurance companies became more generous in their coverage of treatment. Nonmedical practitioners pressed for legislation that would allow them more freedom to practice without psychiatric supervision, and fought to secure third party reimbursement for their fees. Psychologists led the way in agitating for patients' "freedom of choice." By reimbursing only physicians for psychotherapy, they argued, health insurers were denying patients the right to select freely the treatment they preferred. As policy makers and politicians debated national health insurance in the 1970s, the contest for third party coverage became even more intense.⁹¹

Because insurers were concerned over rising medical costs, many decided to expand coverage to include some non-medical providers, who as a rule charged much less than psychiatrists. But they still required that patients be screened by a physician first, and that non-physician therapists practice under the supervision of a psychiatrist. In this fashion, the medical sociologist David Mechanic notes, "the third parties avoid[ed] the quagmire of attempting to define insurable illness and [left] this to clinical judgment." Thus both private and public medical insurers continued to defer to psychiatric authority while simultaneously broadening coverage for non-physicians.⁹²

As long as federal policy makers continued to recognize them as "first among equals" on the mental health team, psychiatrists retained an edge in these inter-professional conflicts. But in the late 1960s, cost-conscious policy makers began to reassess the federal government's historically preferential treatment of psychiatry. As Brown noted in 1977, budget cuts were fueled by a negative perception that "the field was not meeting its social responsibilities, that Federal funds were being used to train practitioners who would use that expertise to make large sums of money in the private sphere." Psychiatry's long-term commitment to psychoanalysis, the most expensive and labor-intensive form of therapy, did not do much to counteract this perception. The cutbacks in federal funding for research and training also affected the other core disciplines as well, so the immediate consequences of psychiatry's loss of favor were muted.⁹³

But psychiatry's dominance in the mental health care system as a whole eroded in the 1970s. As N.I.M.H. director Bertram Brown told his fellow psychiatrists in 1977, developments both within and outside their discipline had destroyed the "once sacrosanct and inviolable role of the psychiatrists within the mental health family." In part, psychiatry's problems reflected the continued division between its "two worlds" of biological and psychodynamic medicine. At the same time, Brown noted, "Much of the current confusion over psychiatry's role, may be seen as a function of the growth in size and sophistication of psychology, psychiatric social work, and psychiatric nursing, as well as the evolution of the mental health service delivery system."⁹⁴

Conclusion

Since 1980, continued reductions in government spending on health and the pressure to control health care costs have buffeted all the mental health care professions. The battles over certification, insurance reimbursement, and government funding begun in the 1970s have grown fiercer with each passing year. Perhaps the most dramatic moment in the "therapy wars," as one journalist dubbed them, came in 1985, when a group of psychologists filed an anti-trust suit against the American Psychoanalytic Association and three other psychoanalytic organizations, for their refusal to admit psychologists on an equal basis with physicians.⁹⁵

As more non-physicians have begun to practice psychotherapy, what makes the practice of psychiatry most distinctive is the physician's exclusive control over medication. The advent of new drugs, particularly for the treatment of depression, has made this an important privilege. Since the 1980s, the biological and psychodynamic wings of the discipline have grown closer together.⁹⁶ But in many lay people's minds, psychiatry remains identified with serious mental illness of the sort that requires heavy medication and even hospitalization. In contrast, the "worried well" often regard seeking help from a non-medical professional as less stigmatizing, as well as less expensive.

As might have been predicted from this historical account, psychologists have been most successful in taking advantage of the psychotherapy boom. The expansion of graduate programs awarding a specialized doctorate in clinical psychology, known as a Psy.D., have made psychologists the most highly trained of the non-physician professionals. The Psy.D programs tend to be more clinically-oriented, as well as more psychoanalytic; than their Ph.D. Counterparts. Moreover doctoral-level psychologists and social workers have been increasingly admitted to training in psychoanalysis (recall Gifford's prior chapter). Clinical psychologists now dominate the American Psychological Association, and have enjoyed considerable success in establishing autonomy from psychiatry, moving into private practice, and securing third party reimbursement.⁹⁷

In recent years, "clinical social workers," as they now prefer to be called, have also made impressive gains. As psychologists have moved into private practice, social workers have come to perform the bulk of psychotherapy in mental hospitals and outpatient clinics. Clinical social workers have also begun to move into private practice. While they have had more difficulty in gaining insurance coverage, social workers charge lower hourly fees, which allows them to compete with the more expensive psychologists.⁹⁸

To a lesser extent, nurses have made gains since the 1970s. M.S.N. Psychiatric Nurse Specialists have developed more independent styles of practice, including private psychotherapy. But they have had more difficulty establishing a distinct role for themselves, in either psychotherapy or more traditional areas of nursing practice.⁹⁹ Meanwhile, the tendency of upwardly mobile professional groups to follow psychiatry's lead into private practice assures chronic personnel shortages in institutional settings, which nurses and other occupational groups continue to fill.¹⁰⁰

The current unsettled state of the nation's mental health care policy promises to usher in another epoch in the history of the mental health team concept. The impact of cost-cutting imperatives on the current *status quo* in the "therapy wars" is by no means certain. The trends toward managed care and reduced government support for research and education make the future look grim for all four disciplines. In a shrinking health-care marketplace, it seems unlikely that there will be a peaceful resolution of the domestic conflicts that have plagued the mental health team in recent decades. A hundred years from now, historians will no doubt see the 1980s and 1990s as a critical episode in the history of the mental health professions. But from the vantage point of today, the outcome of the current upheavals is still impossible to discern.¹⁰¹

At the same time, it is important to recognize that the long-term trend toward interdisciplinary collaboration in mental health care has brought many benefits. The recruitment of non-physician professional groups assisted psychiatry in moving beyond the limitations of its nineteenth-century heritage. While severely mentally ill patients have often been neglected in the rush to treat the "worried well," the evolution of extramural mental health services has diversified the services available to average Americans. In comparison to 1900, the contemporary profusion of treatment approaches and practitioners offers many more routes to better mental health. Without the long history of collaboration among the mental health professions, these gains would have been impossible.

Acknowledgments

This chapter was originally written in the late 1980s and updated recently. Still, the developments of the past turbulent decade are too much with us to adopt a properly historical perspective. I would like to thank Gerald Grob for his generous sharing with me of sources and insights as I wrote this chapter.

Notes and References

1. The 1980 statistics on psychiatrists, psychologists, and social workers come from Daniel Goleman, "Social Workers Vault into a Leading Role in Psychotherapy," *New York Times* 30 April 1985, Section III, p. 1. Data on nurses come from *National Data Book 1980*, Publication No. ADM 80-938 (Washington, DC: Government Printing Office, 1980), pp. 71-72. The 1999 data on psychiatry, clinical psychology, and psychiatric social work come from R.M. Scheffler and P.B. Kirby, "The Occupational Transformation of the Mental health System." *Health Affairs* 22:5 (2003): 177-188. SAMHSA, *Mental Health 2000 Appendix D* gives an estimate of 32,648 mental health nurse specialists.
2. Bertram S. Brown, "The Federal Government and Psychiatric Education." *New Dimensions in Mental Health*, Publication No. ADM 77-511 (Washington, DC: Government Printing Office, 1977), p. 6.
3. In order to keep this chapter to a manageable size, I have chosen to focus only on the four core disciplines recognized by the N.I.M.H. when it began aggressively funding professional training programs in the late 1940s. Yet I recognize that there are other important providers of mental health care today. Recent studies document that primary care physicians treat many more people suffering from mental disorders than do specialists in mental health care. In addition, since World War II, the pastoral care movement has greatly increased the clergy's involvement in counseling and therapy. In mental hospitals, occupational therapists play an important role in treatment. Last but not least, nonprofessionals now hold a majority of staff positions in mental health clinics and hospitals. See Darrel A. Regier, *et al.*, "The De Facto U.S. Mental Health Services System," *Archives of General Psychiatry* 35(1978): 685-693; John C. Burnham, "Psychology and Counseling: Convergence into a Profession," in *The Professions in American History*, ed. Nathan O. Hatch (Notre Dame, Indiana: Notre Dame Press, 1988), 181-198, esp. pp. 184-185; and Michael Gershon and Henry B. Biller, *The Other Helpers: Paraprofessional and Nonprofessionals in Mental Health* (Lexington, MA: D.C. Heath and Co., 1977).
4. My approach in this chapter is heavily indebted to the work of sociologist Andrew Abbott, especially his book, *The System of Professions: An Essay on the Division of Expert Labor* (Chicago: University of Chicago Press, 1988). When I first wrote this chapter ten years ago, there were surprisingly few historical accounts of the mental health team concept. Since then, a number of articles and books have addressed various aspects of the interprofessional relations between psychiatry and social work and psychiatry and psychology, which I have used to revise my argument, and acknowledge in the notes that follow.
5. For an overview of nineteenth-century psychiatry, see Gerald Grob', *Mental Institutions In America* (New York: The Free Press, 1973). The phrase "one man rule" is explained in Nancy Tomes. *A Generous Confidence: Thomas Story Kirkbride and the Art of Asylum-Keeping. 1840-1883* (New York: Cambridge University Press, 1984), esp. pp. 146-148.
6. For overviews of dynamic psychiatry and its interdisciplinary tendencies, see Gerald Grob, *Mental Illness and American Society 1875-1940* (Princeton: Princeton University Press, 1983); John Burnham, "Psychiatry, Psychology, and the Progressive Movement," *American Quarterly* 12 (1960): 457-465; Norman Dain, *Clifford Beers* (Pittsburgh, PA: University of Pittsburgh Press, 1980); Jacques Quen, "Asylum Psychiatry, Neurology, Social Work, and Mental Hygiene," *Journal of the History of Behavioral Sciences* 13 (1977): 3-11; and Barbara Sicherman, "The Quest for Mental Health in America, 1880-1917," unpublished Ph.D. dissertation, Columbia University, 1967.
For three excellent studies of the institutions born of the "new" psychiatry, see Lawrence Friedman, *Menninger: The Family and the Clinic* (New York: Knopf, 1990); Margo Horn, *Before It's Too Late: The Child Guidance Movement in the United States, 1922-1945* (Philadelphia: Temple University Press, 1989); Elizabeth Lunbeck, *The Psychiatric Persuasion: Knowledge, Gender and Power in Modern America* (Princeton, NJ: Princeton University Press, 1994); and Kathleen W. Jones, *Taming the Troublesome Child: American Families. Child Guidance, and the Limits of Psychiatric Authority* (Cambridge, MA: Harvard University Press, 1999).
7. For overviews of the emergence of the professional social sciences, see Mary O. Furner, *Advocacy and Objectivity* (Lexington, KY: University of Kentucky Press, 1975); Thomas Haskell, *Emergence of Professional Social Science* (Chicago: University of Illinois Press, 1977); and Dorothy Ross, *The Origins of American Social Science* (New York: Cambridge University Press, 1991).
8. For overviews of the nature/nurture debate, see Hamilton Cravens, *The Triumph of Evolution* (Univ. of PA Press, 1978) and Carl N. Degler, *In Search of Human Nature* (New York: Oxford University Press, 1991). See also the works on eugenics cited in the previous footnote.
9. For a general overview of the early history of social work, the best single volume remains Roy Lubove, *The Professional Altruist* (New York: Atheneum, 1973 [reprint of 1965 ed.]).

10. Lois French, *Psychiatric Social Work* (New York: The Commonwealth Fund/ Oxford University Press, 1940), pp. 32–45.
11. Mary Jarrett, “Psychiatric Social Work,” *Mental Hygiene* 2 (1918): 289.
12. Mary Jarrett and Elmer E. Southard, *The Kingdom of Evils* (New York: Macmillan, 1922); French, *Psychiatric Social Work*, pp. 246–247. For two recent historical assessments of Jarrett’s career, see Penina Glazer and Miriam Slater, *Unequal Colleagues: The Entrance of Women into the Professions, 1890–1940* (New Brunswick, NJ: Rutgers University Press, 1987), esp. chapter five; and Lunbeck, *The Psychiatric Persuasion*, esp. pp. 39–42.
13. The literature on the early history of psychology is immense. In preparing this chapter, I found the following books most useful: Edwin G. Boring, *A History of Experimental Psychology*, second ed. (New York: Appleton-Century Crofts, 1950), esp. pp. 505–583; Hamilton Cravens, *The Triumph of Evolution* (Philadelphia: University of Pennsylvania Press, 1978); Dorothy Ross, *G. Stanley Hall: The Psychologist as Prophet* (Chicago: University of Chicago Press, 1972); John M. Reisman, *A History of Clinical Psychology* second ed. (New York: Hemisphere Publishing Corp., 1991). On the history of mental testing, see Michael M. Sokol, ed. *Psychological Testing and American Society, 1880–1930* (New Brunswick, NJ: Rutgers University Press, 1987). On the eugenics movement, see Mark Haller, *Eugenics: Hereditarian Attitudes in American Thought* (New Brunswick, NJ: Rutgers University Press, 1984); and Daniel Kevles, *In the Name of Eugenics* (Berkeley, CA: University of California Press, 1985).
14. On Yerkes’s work at the Boston psychopathic, see Lunbeck, *The Psychiatric Persuasion*, esp. pp. 33–34; James Reed, “Robert Yerkes and the Mental Testing Movement,” in Sokol, *Psychological Testing and American Society*, pp. 75–94; and Richard T. Von Mayrhauser, “Manager, Medic, and Mediator,” *ibid.*, pp. 128–157.
15. Herbert H. Lou, *Juvenile Courts in the United States* (New York: Arno Press, 1972 reprint of 1927 ed.).
16. William Healy and Augusta Bronner, “The Child Guidance Center: Birth and Growth of an Idea,” in *Orthopsychiatry 1923–1948*, ed. Lawson Lowrey and Victoria Sloan (Menasha WI: The American Orthopsychiatry Association, 1948), pp. 14–49; George Gardner, “William Healy, 1869–1963,” *Journal of the American Academy of Child Psychiatry* 11 (1972), 1–20; John Burnham, “Augusta Bronner,” in *Notable American Women*, ed. Barbara Sicherman and Carol H. Green (Cambridge, MA: Harvard University Press, 1980), pp. 108–110.
17. For a sense of how the team’s protocol worked, see the Judge Baker Foundation, *Case Studies 1–15* (Boston: The Judge Baker Foundation, 1922–1923.) Other clinics developed similar working styles, but the Judge Baker reports were probably the most widely known exemplar of the team method in the 1910s and 1920s. See Jones, *Taming the Troublesome Child*, for an excellent history of the Judge Baker clinic.
18. See Lunbeck, *The Psychiatric Persuasion*, for an insightful discussion of the new “metric” approach to diagnosis.
19. John Burnham, “The Struggle Between Physicians and Paramedical Personnel in American Psychiatry, 1917–1941,” *Journal of the History of Medicine* 29 (1974): 93–106, esp. pp. 100–101; Grob, *Mental Illness and American Society*, p. 250.
20. French, *Psychiatric Social Work*. pp. 51–56. 246–340; Daniel O’Keefe, “Psychiatric Social Work,” *The Social Work Yearbook* 14 (1960): 451–452.
21. Recent work on the World War I testing experiments has revised the traditional view that it represented a great triumph of a newly united profession. As Richard T. Von Mayrhauser has shown, the group of psychologists led by Robert Yerkes preferred working more closely with medicine and psychiatry, and devising tests to eliminate the mentally unfit. Another group, led by Walter Dill Scott, an academic psychologist with strong ties to business and advertising, wanted to focus more on leadership and aptitude testing. Von Mayrhauser shows that the military actually used both kinds of tests, and found those developed by Scott to be more useful. However, from the standpoint of the future development of clinical psychology, Yerkes’s conception of the psychologist/psychiatrist collaboration was the more prescient. See Richard T. Von Mayrhauser, “Manager, Medic, and Mediator,” in Sokol, *Psychological Testing and American Society*, pp. 128–157. See also Reed’s chapter in the same volume, esp. pp. 75–76. 83–85. Reisman, *A History of Clinical Psychology*, pp. 96–98, discusses Woodworth’s Psychoneurotic Inventory.
22. Thomas Camfield, “Psychologists at War: The History of American Psychology and the First World War,” Ph.D. dissertation, University of Texas at Austin, 1969; Daniel Kevles, “Testing the Army’s Intelligence,” *Journal of American History* 55 (1968), 565–581. See also articles cited in the previous note.
23. Grob, *Mental Illness and American Society*, pp. 251–258; Alice Bryan and E.G. Boring. “Women in American Psychology: Prolegomenon,” *Psychological Bulletin* 41 (1944), 447–454.
24. For a particularly insightful discussion of the gender issue as it concerned psychiatry and social work, see Lunbeck, *The Psychiatric Persuasion*, esp. pp. 25–45.
25. On the general history of nursing, see Susan Reverby, *Ordered to Care* (New York: Cambridge University Press, 1987). On the early history of psychiatric nursing, see Olga M. Church, “Emergence of Training Programs for

- Asylum Nursing at the Turn of the Century,” in *Nursing History*, ed. Peggy Chin [*Advances in Nursing science* 7:2 (January 1985), 35–46.] To my knowledge, the only full-length study of the history of psychiatric nursing is Olga Church, “That Noble Reform: The Emergence of Psychiatric Nursing in the United States, 1882–1963,” unpublished doctoral dissertation, University of Illinois - Chicago, 1982. Statistics on the number of nursing schools come from Hildegard E. Peplau, “Some Reflections on Earlier Days in Psychiatric Nursing,” *Journal of Psychosocial Nursing and Mental Health Services* (August 1982), 20 (8): 17. See also her paper, “Historical Development of Psychiatric Nursing: A Preliminary Statement of Some Facts and Trends,” in *A Collection of Classics in Psychiatric Nursing Literature*, ed. Shirley A. Smoyak and Sheila Rouslin, (Thorofare, NJ: Charles B. Slack, Inc., 1982), pp. 10–46. This is a useful compilation of papers illustrating the evolution of the field.
26. Leonard V. Stevens and Doyle O. Henrie, “A History of Psychiatric Nursing,” *Bulletin of the Menninger Clinic* 30 (1966), 32–38; Nancy Tomes, “The Silent Battle: Nurse Registration in New York State, 1903–1920,” in *Nursing History: New Perspectives, New Possibilities*, ed. Ellen Condliffe Lagemann (New York: Teachers College Press, 1983), pp. 114–115.
 27. V. May McDonald, “Psychiatry for Nurses,” *American Journal of Nursing* 20 (1920): 827. On Taylor’s career, see Kathleen C. Buckwalter and Olga M. Church, “Euphemia Jane Taylor: An Uncommon Psychiatric Nurse,” *Perspectives in Psychiatric Care* 17 (3) (1979): 125–131. On the superintendents’ reservations about trained nurses, see also Samuel Hamilton, “The History of American Mental Hospitals,” in *One Hundred Years of American Psychiatry*, ed. J.K. Hall (New York: Columbia University Press, 1944), p. 130. For a good example of the social workers’ prejudices toward nurses, see Jessie Taft, “Qualifications of the Psychiatric Social Worker,” *National Conference of Social Work Proceedings* 46 (1919): 594–599. The fact that several of the most prominent exponents of dynamic psychiatry, including Adolf Meyer and Harry Solomon, were married to psychiatric social workers surely contributed to the preference of social worker over nurse. See Dain, *Clifford Beers*, p. 112; and Lunbeck, *The Psychiatric Persuasion*, p. 44. An exchange of letters between Effie Taylor and Adolf Meyer in April and May of 1920 makes clear the constraints nurses experienced in the psychopathic hospital; among other problems, Taylor complained bitterly about the physicians’ refusal to allow nurses to look at the patient’s records, a privilege evidently extended more freely to social workers. The letters are preserved in the Adolf Meyer Papers, Series 1, Johns Hopkins University. See also Grob, *Mental Illness and American Society*, pp. 244–245.
 28. Andrew Abbott estimates that by 1930, at least 31% of all American psychiatrists were in private practice. See “The Evolution of American Psychiatry, 1880–1930,” unpublished Ph.D. dissertation, University of Chicago, 1982, p. 148. In a private correspondence with the author, Abbott also points out that the 48% in hospital practice included many young physicians there to acquire a few years of experience before setting up a private practice. Burnham, “The Struggle Between Physicians and Paramedical Personnel,” p. 94, states that by 1930 almost half of all psychiatrists were in private practice. For an interesting discussion of early eclectic psychotherapy in private practice, see George Gifford, “George Arthur Waterman, 1872–1960, and Office Psychiatry,” in *Psychoanalysis, Psychotherapy, and the New England Medical Scene, 1894–1944*, pp. 227–241.
 29. Statistics on the number of clinics are taken from French, *Psychiatric Social Work*, pp. 60, 111. On the role of foundations in the interwar period, see Margo Horn, *Before It’s Too Late*.
 30. In 1927, Maida Solomon stated that roughly half of all social workers were in hospital work, including private, public, and V.A. institutions. That percentage declined rapidly over the next decade as clinic facilities expanded. Among A.A.P.S.W. members, who represented the most elite psychiatric social workers. Lois French found a decline of numbers engaged in hospital work from 76% in 1920 to 21% in 1937. Maida Solomon. “Annual Address.” *Journal of Abnormal and Social Psychology* 21 (1927): 422. French. *Psychiatric Social Work*, p. 81.
- I have found no comparable data for psychologists in the interwar period, but as of 1949, the Group of the Advancement of Psychiatry, reported that only 3% of the American Psychological Association’s membership worked in city or state mental hospitals. Prior to the 1950s, psychologists employed by mental hospitals appear to have worked primarily as diagnosticians and researchers. See G.A.P., “Statistics Pertinent to Psychiatry in the United States,” *Report No. 7* (March 1949), p. 6.
31. This characterization of private practice and clinic work as more “desirable” does not represent my own judgment, but rather how they were viewed by professional groups at the time. Social workers’ preferences for nonpsychotic, noninstitutionalized patients are clearly spelled out in Margaret Hagan, “Psychiatric Social Work in Mental Hospitals.” *Education for Social Work* [Proceedings of the Dartmouth Conference of the AAPSW] (New York: A.A.P.S.W., 1950). pp. 29–30. Gerald Grob makes a similar observation about both psychiatry and social work in *Mental Illness and American Society*, pp. 143, 257.

32. Burnham, "The Struggle Between Physicians and Paramedical Personnel," p. 102; Grob, *Mental Illness and American Society*, pp. 266–316; Jack Pressman, *Last Resort: Psychosurgery and the Problem of Mental Disorder, 1935–1955*, forthcoming, Cambridge University Press.
33. Burnham, "The Struggle Between Physicians and Paramedical Personnel," esp. pp. 104–105; Grob, *Mental Illness and American Society*, esp. pp. 266–287.
34. John C. Burnham, "The Influence of Psychoanalysis on American Culture," in *American Psychoanalysis: Origins and Development*, ed. Jacques Quen and Eric T. Carlson (New York: Brunner/Mazel, 1973), pp. 52–72.
35. On the controversy over lay analysts, see Clarence Obendorf, *A History of Psychoanalysis in America* (New York: Grune and Stratton, 1953), pp. 174–176, 182.
36. On the Rockefeller Foundation's early relations with the N.C.M.H., see Grob, esp. pp. 146–147, 158–159. For a good discussion of the Commonwealth Fund's influence, see Margo Horn, *Before It's Too Late*.
37. French, *Psychiatric Social Work*, pp. 45–46. As of 1933, 50% of the A.A.P.S.W membership had advanced degrees, mostly the M.A.; only 7% of psychiatric social workers had no college training at all. See French, p. 99. On the general history of social work in this period, see John Ehrenreich, *The Altruistic Imagination: A History of Social Work and Social Policy in the United States* (Ithaca: Cornell University Press, 1985), and Daniel Walkowitz, *Working With Class: Social Workers and the Politics of Middle-Class Identity* (Chapel Hill: University of North Carolina Press, 1999).
38. *Ibid.*, p. 210. For a good summary of trends in psychiatric social work, see Horn, *Before It's Too Late*, esp. pp. 100–104.
39. *Ibid.* pp. 202–241, provides a good overview of the changing conception of case work. For a more detailed discussion of the new techniques, see "A Symposium on Attitude Therapy," *Newsletter of the A.A.P.S.W* 5(1935), 1–14. For an insightful discussion of the mother/social worker identification, see Jones, *Taming the Troublesome Child*.
40. Lubove, *The Professional Altruist*, pp. 113–117; Ehrenreich, *The Altruistic Imagination*, pp. 123–138.
41. Grob, *Mental Illness and American Society*, pp. 254–256. As Grob points out, the psychiatric social workers longed for a closer relationship with psychiatrists, but the latter showed little interest in collaboration.
42. Lois French observed that so long as they held the supervisory role, psychiatrists essentially controlled how far the social workers could expand their therapeutic responsibilities. See French, *Psychiatric Social Workers*, pp. 132–134. On psychiatry's overall attitude toward interwar social work, see Grob, *Mental Illness and American Society*, pp. 254–256. On the frictions between social workers and psychiatrists, see Lunbeck, *The Psychiatric Persuasion*, esp. pp. 39, 158–159; Burnham, "The Influence of Psychoanalysis," p. 202. One major source of conflict was the mental hospital superintendents' refusal to support higher educational standards for psychiatric social workers in hospital practice. A small number of psychiatric social workers did go into private practice, but only in conjunction with a psychiatrist, for whom they performed the traditional services. See Solomon, "Annual Address," p. 422; French, *Psychiatric Social Work*, pp. 73–74.
43. In an insightful article on social work in the 1920s, Daniel Walkowitz concluded, "female social workers created a variant of the male professional: the Professional Woman, a practitioner who adopted the 'male' ethos of the professional worker, even while continuing, with evident discomfort, to defer to her male colleagues and bosses." See Daniel J. Walkowitz, "The Making of a Professional Identity: Social Workers in the 1920s," *American Historical Review* 95 (4) (October 1990): 1051–1075. Quote is on p. 1075. On the gender issue, see also Grob, *Mental Illness and American Society*, pp. 254–256; and Lunbeck, *The Psychiatric Persuasion*, esp. pp. 35–45.
44. Katharine M. Wickman. "Psychiatric Social Work and Clinical Psychiatry," *Newsletter of the A.A.P.S.W* 9(1939), 4. On the diffusion of casework treatment, see French, *Psychiatric Social Work*, pp. 80, 82. On the growing popularity of psychiatric perspectives in social work generally, see Lubove, *The Professional Altruist*, pp. 85–117; Ehrenreich, *The Altruistic Imagination*, pp. 71–77, 123–138.
45. Simon H. Tulchin. "Behavior and Personality Problems in Children: The Psychologist," *American Journal of Orthopsychiatry* 1 (1930): 46. On clinical psychologists in child guidance clinics, see Horn, *Before It's Too Late*, esp. pp. 104–105.
46. Reisman, *History of Clinical Psychology*, pp. 178–180; Helen D. Sargent and Martin Mayman. "Clinical Psychology," in *American Handbook of Psychiatry*, ed. Silvano Arieti, 3 vols. (New York: Basic Books, 1959), II: 1714. Psychologists working in mental hospitals, chief among them Harriet Babcock at Bellevue, Frederick Lyman Wells at the Boston Psychopathic, and Grace Kent at Worcester, pioneered the adaptation of traditional mental tests for the clinical evaluation of psychotic adult patients.
47. Reisman, *History of Clinical Psychology*, pp. 139–142, 183–186; Julian Rotter, "A Historical and Theoretical Analysis of Some Broad Trends in Clinical Psychology," in *The Clinical Psychologist*, ed. Bernard Lubin and

- Eugene E. Leavitt (Chicago: Aldine Publishing Co., 1967), pp. 23–52; Robert Watson, “A Brief History of Clinical Psychology,” *Psychological Bulletin* 50 (1953): 334–335.
48. William C. Menninger, “The Relationship of Clinical Psychology and Psychiatry,” *American Psychologist* 5 (1950): 7.
 49. Frederick Lyman Wells, *Mental Tests in Clinical Practice* (New York: World Book Co., 1927), p. 300.
 50. Horn, *Before It's Too Late*, pp. 136–139. For a good account of Watson's career and the origins of behaviorism, see John O'Donnell, *The Origins of Behaviorism: American Psychology 1870–1920* (New York: New York University Press, 1985). The interest in habit formation came from many directions, (including adds meyer); and not solely experimental psychology; my point here is that the new psychology invoked *laboratory research*, in addition to *clinical* experience, as a guide to treatment strategies. Since psychiatrists rarely did laboratory research during this period; the authority of the experimental tradition belonged solely to psychologists then.
 51. Reisman, *History of Clinical Psychology*, pp. 202–207; Rotter, “A Historical and Theoretical Analysis,” pp. 39–40. In her study of the Commonwealth Fund clinics, Horn suggests that the tester to therapist transition remained more a potential than actual threat to child psychiatry in the 1930s. See Horn, *Before It's Too Late*, pp. 104–105.
 52. For an excellent discussion of psychology in the 1920s, see John C. Burnham, “The New Psychology,” in *Change and Continuity in Twentieth Century America: the 1920s*, ed. John Braeman, Robert Bremner, and David Brody (Columbus, Ohio: Ohio State University Press, 1968), pp. 351–398.
 53. T.N. Weisenberg to Adolf Meyer, May 12, 1931, reprinted in *The Inner World of American Psychiatry: Selected Correspondence*, ed. Gerald Grob (New Brunswick, NJ: Rutgers University Press, 1985), p. 243. The same year Louis Casamajor made a similar complaint to Meyer about the “vigorous propaganda” of clinical psychologists; see *Ibid*, p. 241. On the role of the Great Depression in eroding psychiatry's tolerance for psychology, see Burnham, “The Struggle Between Physicians and Paramedical Personnel,” pp. 102–103.
 54. Psychologist H. Meltzer noted that when he went into private practice in 1934, after six years in a child guidance clinic, he knew of only one other Ph.D. in psychology who was in private practice. Of course, many individuals with little or nor formal training called themselves psychologists in this period and cultivated a paying clientele. H. Meltzer, “The Place of Private Practice in Professional Psychology,” in *The Clinical Psychologist*, ed. Lubin and Leavitt, p. 214. The statistics on women in clinical work are given in Donald S. Napoli, *Architects of Adjustment* (Port Washington, NY: Kennikat Press, 1981), p. 56.
 55. James G. Miller, “Clinical Psychology in the Veterans Administration,” *American Psychologist* 1 (1946): 181. For an overview of clinical psychology's struggles with the larger profession, see Robert Watson, “A Brief History of Clinical Psychology,” *Psychological Bulletin* 50 (1953): 334–335; and Reisman, *History of Clinical Psychology*, pp. 116, 160–161.
 56. Reisman, *History of Clinical Psychology* pp. 210–212.
 57. Olga M. Church and Kathleen C. Buckwalter, “Harriet Bailey, Psychiatric Nurse Pioneer,” *Perspectives in Psychiatric Care* 18 (2) (1980): 62–66. Bailey's text, *Nursing Mental Diseases*, was published in 1920, had four revisions before 1939, and finally went out of print in 1954. On turnover and staffing problems, see Grob, *From Asylum to Community*, p. 118. For interwar conditions, see also Peplau, “Some Reflections,” esp. p. 19. The Menninger Clinic seems to be the exception to the rule that dynamic psychiatrists favored social workers over nurses in the new psychiatric institutions of the interwar period. Anticipating the 1950s interest in milieu therapy. Will Menninger took a special interest in milieu therapy, and cultivated nurses as important agents in its execution during the 1930s. The fact that he had a lengthy affair with the hospital's Superintendent of Nursing, Isabel Erickson, may have contributed to his patronage of the discipline. See Friedman, *Menninger*, pp. 61–62, 70–71, 75–76, 83.
 58. For a good overview of World War II developments, see Gerald Grob, *From Asylum to Community: Mental Health Policy in Modern America*, (Princeton, NJ: Princeton University Press, 1991), pp. 5–23. Statistics on the percentage of recruits rejected on psychiatric grounds come from Jeanne L. Brand, “The National Mental Health Act of 1946: A Retrospect,” *Bulletin of the History of Medicine* 39 (1965): 236. On the importance of WW2 to psychology, see James Capshew, *Psychologists on the March: Science, Practice and Professional Identity in America, 1929–1969* (New York: Cambridge University Press, 1999.)
 59. Brand, “The National Mental Health Act,” p. 236; Reisman, *History of Clinical Psychology*, p. 249.
 60. Brand, “The National Mental Health Act of 1946,” p. 236; Reisman, *A History of Clinical Psychology*, pp. 225–226, 247–249; Napoli, *Architects of Adjustment*, pp. 86–106; Saul Hofstein, “Differences in Military Psychiatric Case Work Practice,” *Newsletter of the A.A.P.S.W* 16 (1946/47), 3; Daniel O'Keefe, “Psychiatric Social Work,” *Social Work Yearbook* 14 (1960): 452.

61. Miller, "Clinical Psychology in the V.A.," p. 182. For the larger context of post-W.W. II developments, see Paul Starr, *The Social Transformation of American Medicine* (New York: Basic Books, 1982), p. 360.
62. Daniel Blain, "The Psychiatrist and the Psychologist," *Journal of Clinical Psychology* 3 (1947): 8–9.
63. Miller, "Clinical Psychology in the V.A.," p. 181. For a good overview of the V.A.'s impact on clinical psychology, see E. Lowell Kelly, "Clinical Psychology: The Post-War Decade," in *Current Trends on Psychological Theory*, ed. Wayne Dennis et al. (Pittsburgh: University of Pittsburgh Press, 1961).
64. Samuel Kutash, "The Psychologist's Role in Clinical Practice," *Journal of Clinical Psychology* 3 (1947): 327. See also Urie Bronfenbrenner, "Research Planning in Neuropsychiatry and Clinical Psychology in the Veterans Administration." *Ibid.*, 33–38.
65. Kelly, "Clinical Psychology," pp. 34–35; see also Reisman, *History of Clinical Psychology*, pp. 249–251.
66. Miller, "Clinical Psychology," p. 185.
67. Dael Wolfe. "The Reorganized American Psychological Association," *American Psychologist* 1 (1946): 3–6; Noble H. Kelly et al., "The Meaning of the A.B.E.P.P. Diploma," in *The Clinical Psychologist*, ed. Lubin and Leavitt, p. 340; and Reisman, *History of Clinical Psychology*, pp. 247–253. Note that in drawing up their "Recommended Graduate Training Program in Clinical Psychology," better known as the Shakow Report, in 1947, the American Psychological Association's committee on clinical training was careful to insist on maintaining a strong research component.
68. Brand, "The National Mental Health Act," 236–244; The informal funding ratio is discussed in Brown. "The Federal Government and Psychiatric Education," pp. 2–3. Grob provides an insightful account of the early N.I.M.H. and the reasons's for Felix's receptivity to interdisciplinary perspectives in *From Asylum to Community*, pp. 44–69.
69. Hildegard E. Peplau, "Principles of Psychiatric Nursing," in *American Handbook of Psychiatry* 11: 1841–1842; Stevens and Henrie, "History of Psychiatric Nursing," p. 34. Note that as of 1949, a literature review turned up not a single reference to a nurse as part of the mental health team. See Dorothy McLaughlin, "The Contribution of the Psychiatric Nurse to the Clinical Team," in *Education for Psychiatric Social Work*, p. 55.
70. Brown, "The Federal Government and Psychiatric Education," p. 2; Burnham, "The Influence of Psychoanalysis," pp. 57–62. For statistics on residencies, see Grob, *From Asylum to Community*, p. 98.
71. This division of labor is clearly articulated in Miller, "Clinical Psychology," pp. 182, 184. See also Kutash, "The Psychologist's Role," p. 326.
72. Menninger, "The Relationship," p. 13; George Albee, *Mental Health Manpower Trends* [Joint Commission on Mental Illness and Mental Health, Monograph Series No. 3] (New York: Basic Books, 1959) pp. 57–61, 79–84, 92–99; Brown, "The Federal Government and Psychiatric Education," pp. 5, 11–12; Henry Davidson, "The Double Life of American Psychiatry," in *New Aspects of the Mental Health Services*, ed. Hugh Freeman and James Farndale (New York: Pergamon Press, 1967), pp. 340–341. By 1950, approximately 60% of all psychiatrists had office-based practices; in 1956, a survey found only 17% of the American Psychiatric Association's membership practiced in V.A. or state mental hospitals. For an excellent overview of psychiatry's evolution in the post-W.W. II period, see Grob, *From Asylum to Community*.
73. See, for example, Virginia Bellsmith. "Social Work," *American Handbook of Psychiatry*, II: 1870, 1873. See also G.A.P., "The Psychiatric Social Worker in the Psychiatric Hospital," *Report No. 2* (January, 1948), p. 10. For a fuller account of these trends, see Grob, *From Asylum to Community*, pp. 115–117.
74. Editorial, *Newsletter of the A.A.P.S.W.* 13 (1943/44), 1; Luther Woodward, "Psychiatric Social Work in the National Mental Health Program," *Ibid.*, 15 (1945/46), 70. Of course, group therapy was not the sole province of social workers. Both psychiatrists and psychologists experimented with group therapy. See Reisman, *A History of Clinical Psychology*, pp. 203–204, 240.
75. Helen Perlman, "Social Work in Psychiatric Settings," *American Handbook of Psychiatry*, ed. Silvano Arieti, 2nd ed., 6 vols. (New York: Basic Books, 1975), V: 676–677. See also the interesting discussions in Ruth Smalley, "Psychiatric Social Worker or Psychotherapist?" *Newsletter of the A.A.P.S.W.* 16 (1947), 107–110; and Joseph J. Michaels and Eleanor Gay, "Psychiatric Casework and Its Relationship to Psychotherapy," *Journal of Psychiatric Social Work* 17 (1948): 123–129.
76. Peplau, "Principles," p. 1847; Stevens and Henrie, "History of Psychiatric Nursing," p. 37. For contemporary views, see also G.A.P., "The Psychiatric Nurse in the Mental Hospital," *Report No. 22* (May 1952), p.11; and Marguerite H. Holmes, "Psychiatric Mental Health Nursing," in *American Handbook of Psychiatry* 2nd ed. V: 654, 657. For a retrospective of developments in education, see Trudy T. Rosenthal, "University Psychiatric Nursing Education in the United States: 1917–1956," *Issues in Mental Health Nursing* 6 (1984): 21–33.

77. Alfred H. Stanton and Morris Schwartz, *The Mental Hospital* (New York: Basic Books, 1954), pp. 105–106; Albee, *Mental Health Manpower Trends*, pp. 176–180; and “The Inventory of Psychiatric Nurses,” *American Journal of Nursing* 51 (5) (May 1951): 309–312. See also Grob, *From Asylum to Community*, pp. 118–120.
78. Grob, *From Asylum to Society*, pp. 106–113.
79. For a discussion of psychiatric epidemiology, see Grob, *From Asylum to Community*, pp. 101–102.
80. For an insightful history of the Menninger Clinic in the 1940s, and Rapaport’s career there, see Friedman, *Menninger*, pp. 167–176, 224–253. For a good overview of Rapaport’s work, see Robert R. Holt, “Editor’s Preface,” in *Diagnostic Psychological Testing* David Rapaport, Merton M. Gill, and Roy Schafer, rev. ed., (New York: International Universities Press, Inc., 1968), 1–44. See also Reisman, *History of Clinical Psychology*, pp. 225–231.
81. Reisman, *History of Clinical Psychology*, pp. 251–252, 292–293; Napoli, *Architects of Adjustment*, p. 148; Group for the Advancement of Psychiatry, *Report No. 7*, p. 6; Kelly, “Clinical Psychology,” p. 36; Bernard Lubin “Survey of Psychotherapy Training and Activities of Psychologists,” in *The Clinical Psychologist*, ed. Lubin and Leavitt, p. 133; Meltzer, “The Place of Private Practice,” p. 216.
82. Group for the Advancement of Psychiatry, “The Relation of Clinical Psychology to Psychiatry,” *Report No. 10*, (July 1949), p. 3. See also Menninger, “The Relationship,” esp. pp. 9–13.
83. Kelly, “Clinical Psychology,” pp. 41–42. (Parens in original.)
84. *Ibid.*, p. 48; Rotter, “A Historical and Theoretical Analysis,” p. 42; Reisman, *History of Clinical Psychology*, pp. 242–245, 285–286. Lubin, “Survey,” p. 133, gives data on the number of Rogerians in the field.
85. Jane D. Hildreth, “Psychology’s Relations with Psychiatry: A Summary Report,” in *The Clinical Psychologist*, ed. Lubin and Leavitt, pp. 253–258.
86. Albert Deutsch, *The Shame of the States* (New York: Harcourt Brace, 1948). Stanton and Schwartz, *The Mental Hospital*, is a good example of the academic critiques done in the 1950s. On the Joint Commission, see its Final Report, published as Jack Ewart, ed., *Action for Mental Health* (New York: Basic Books, 1961), and Robert H. Felix, *Mental Illness: Progress and Prospects* (New York: Columbia University Press, 1967), pp. 54–80.
87. Ewart, ed., *Action for Mental Health*, p. 248.
88. National Institute of Mental Health, *Community Mental Health Centers* DHEW Pub. No. ADM 78–677 (Washington, DC: Government Printing Office, 1978); Stanley Yolles, “The Role of the Psychologist in Comprehensive Community Mental Health Centers,” in *The Clinical Psychologist*, ed. Lubin and Leavitt, p. 210. On the growing influence of psychology more generally, see Ellen Herman, *The Romance of American Psychology: Political Culture in the Age of Experts, 1940–1970* (Berkeley: University of California Press, 1995) and Capshew, *Psychologists on the March*.
89. *The Community Mental Health Center*, pp. 6–7; Paul Lerhrman, *Deinstitutionalization and the Welfare State* (New Brunswick, NJ: Rutgers University Press, 1982). On the antipsychiatry movement, see Norman Dain, “Psychiatry and Antipsychiatry,” in *Discovering the History of Psychiatry* (New York: Oxford University Press, 1994), pp. 415–444; and Dain. “Critics and Dissenters: Reflections on ‘Anti-Psychiatry,’” *Bulletin of the History of the Behavioral Sciences* 25 (1989): 3–25. Two of the key texts of the antipsychiatry movement were Thomas Szasz, *The Myth of Mental Illness* (New York: Hoeber Harper, 1961) and R.D. Laing, *The Divided Self* (London: Tavistock Publishing, 1959.)
90. An important issue insufficiently treated here is the impact of the patient/consumer/survivor movement on professional relations in the mental health field, a topic that deserves more historical work. See Nancy Tomes, “The Patient as A Policy Factor: A Historical Case Study of the Consumer/Survivor Movement in Mental Health,” *Health Affairs* 25: 3 (May/June 2006), 720–729. One such organization, composed of family members of sufferers from the major mental disorders; has, perhaps understandably, adopted a heavily medical perspective on mental illness—the national alliance for the mentally ill (“NAMF”). Their state legislative and congressional lobbies are quite active; and their alliance with the American Psychiatric Association very close.
91. Brown, “The Federal Government and Psychiatric Education,” p. 9.
92. David Mechanic, *Mental Health and Social Policy* 2nd ed. (Englewood Cliffs, NJ: Prentice-Hall Inc., 1980), pp. 139, 141.
93. *Ibid.*, p. 5. In explaining the long-term origins of the new psychiatric “crisis” of the late 1970s, Brown pointed to post-World War II funding decisions, which essentially allowed the mental health sector to expand without any regulation or rationalization, thus exacerbating already existing problems of physician maldistribution. Once past their residencies, psychiatrists receiving federal traineeships were not required to do any hospital or clinic work; not surprisingly, the vast majority used the public funds to prepare for lucrative private practices. Note the parallel to the argument in Starr, *The Social Transformation of American Medicine*.

94. Brown, "The Federal Government and Psychiatric Education." pp. 8–9.
95. Goleman, "Social Workers Vault into Leading Position," pp. 1, 3. Robert Barker. *The Business of Psychotherapy* (New York: Columbia University Press, 1982), pp. 10–14. See Gifford's chapter in this volume for a discussion of the antitrust suit against the American Psychoanalytic Association.
96. Grob, *From Asylum to Community*, pp. 298–299.
97. Reisman, *The History of Clinical Psychology*, pp. 376–380.
98. A provocative account of the turn toward clinical social work is Harry Specht and Mark E. Courtney's *Unfaithful Angels: How Social Work Has Abandoned Its Mission* (New York: The Free Press, 1994). As the subtitle suggests, they regard social work's "seduction" by psychotherapy as a betrayal of its "true" professional mission.
99. E. Jane Martin, "A Specialty in Decline? Psychiatric-Mental Health Nursing, Past, Present, and Future," *Journal of Professional Nursing* 1 (1985): 48–53.
100. Data from 1987 show that non-professional workers account for well over fifty percent of staff in mental health organizations, including hospitals and clinics. See Ronald W. Manderscheid and Sally A. Barrett, *Mental Health, United States, 1987* [DHHS Publication No. (ADM)87-1518] (Washington, DC: U.S. Government Printing Office, 1987), pp. 21–22.
101. For useful surveys of the contemporary mental health field, see Richard G. Frank and Sherry Glied, *Better But Not Well: Mental Health Policy in the United States Since 1950* (Baltimore: Johns Hopkins University Press, 2006); Gerald Grob and Howard H. Goldman, *The Dilemma of Federal Mental Health Policy: Radical Reform or Incremental Change?* (New Brunswick: Rutgers University Press, 2006); and David Mechanic, *Mental Health and Social Policy: The Emergence of Managed Care* 4th ed. (Boston: Allyn and Bacon, 1999).

Epilogue

Psychiatry and the Mind-Body Relation

Chapter 23

Thoughts Toward a Critique of Biological Psychiatry

John Gach

Biological psychiatry is now the dominant paradigm in psychiatry, so much so that to use the term “psychiatry” at the beginning of the twenty-first century is often to mean “biological psychiatry.” With the abandonment of mind-based therapies and explanations to psychotherapists, who increasingly are clinical psychologists and social workers, psychiatry—the discipline historically straddling the mind–brain split in medicine—has come down firmly on the side of brain, with strict biological reductivism as its explanatory model. Axiomatically, mind events are reducible to, or at least entirely mappable onto, brain events with nothing left over to explain. This does not mean that mental phenomena are “caused” by prior biological events (a Cartesian dualist position), but rather that there is no difference between the two. There are not two events—a body event followed by a mind event or vice versa—just one, though it is capable of many kinds of description.

Implicit in the paradigm of biological psychiatry are five metaphysical assumptions about the world: monism, materialism, mechanism, realism, and nominalism. It is monist in that the paradigm assumes the world is a single substance (minds and bodies are not distinct kinds of things); materialist in that it assumes that the single substance is material (the world consists entirely of matter and of the rule-governed actions of material substances upon other material substances); mechanist in that all biological processes (including psychological ones) are assumed to be physicochemical events governed only and entirely by the laws of natural science with no possible extraphysical causal agents allowed; realist in that it assumes that material objects exist independent of whether minds perceive or think about them; and nominalist in assuming that only particulars of the sort posited by its realism exist. The monist-materialist-mechanist-realist-nominalist paradigm of medicine in general and of biological psychiatry in particular has seemed very safe from attack, for its critics and assailants have typically seemed non- or even antiscientific. (Henceforth I shall refer to the entire cluster of attributes simply as “medical monism.”) Originally developed to counter the reigning dualist-vitalist beliefs of the late eighteenth and early nineteenth centuries, medical monism has demonstrated great explanatory power. The point I wish to stress, however, is that in psychiatry, as in medicine, it is an implicitly held ontology and epistemology, a set of beliefs held by practitioners and researchers, almost never rendered explicitly or even acknowledged, about how the world is, how it must be, and how it can be known.

The problems with medical monism in psychiatry are these:

1. As an implicitly held belief instead of a consciously reasoned conclusion, medical monism cannot itself be compared with other kinds of metaphysical assumptions, for it is simply taken as obviously true without need for verification. Attempts to reintroduce dualist concepts (for example, those of Penfield¹ or Eccles²) have, despite the lustrous reputations of the proponents, barely shaken the foundations of medical monism. Such attempts have had negligible impact on clinical practice and research.

2. Within medical monism it is not clear what ontological status the rules governing biological mechanisms (covering laws) have. They obviously are not material objects. If they are ideas, then by fiat they reduce to brain events that, presumably, refer to objects (though these can be other brain events). Such brain events either do or do not refer ultimately to something going on in the outside world. If they do refer outside, to what do they refer, if not to universals rather than particulars? If they refer only to other brain or bodily events in the experiencing, thinking subject, then they refer to representations of the world in the subject, rather than to events in the world themselves. Since medical monism is inherently nominalist (only particulars exist), reference to universals seems to introduce a much unwanted idealism, while reference only to other events within the subject tends to solipsism, for if our ideas are only internally referential, in what sense are they about anything going on in the outside world?

This is a very deep problem with no easy solution, especially since the covering laws can change. I proffer the following as a way out of the impasse: the abstract rules governing biological action are in principle describable reductively as body events (I suggest that we not exclude the participation of the endocrine and immune systems—until recently thinking has been construed as something that happens only in the brain). What they refer to is not other brain or internal body events but organizations and patterns of experience in the world. The patterns do not exist, in the sense that they are not material objects but concatenations of such objects. The patterns derive their existence from the objects of which they are concatenations and from the concepts in the brains of thinkers and perceivers. The same material objects can be reparsed into different sets (has anyone recently seen any phlogiston, ether, or monomania?). Such immaterial “objects” have the same ontological status as, say, “societies” or “cultures.”

3. The realist assumption makes it all too easy to construct experience in the image of medical monism and to confuse concepts with “objects.” Terms such as “general paralysis of the insane” or “schizophrenia” or “synapse” do not and cannot refer to things-in-the-world existing in-themselves. They point to sets of concepts that specify what attributes experienced things must have in order to be included within a specific category. The concepts refer to the categories, or classes, rather than to particular objects, meaning that it is pointless to argue whether “objects” are solely constructed from experience (the radical empiricist position) or defined entirely by one’s pre-existing ideas (Platonist idealism), for they are always both. Though we are evolutionarily predisposed to experience the world in certain ways, which is to say that our possible categorizations of experience are limited by our actual sensory and cognitive equipment, our experiencing the world through the cognitive filters of particular cultures and languages imposes further constraints on our ability to conceptualize the world. We bring ideas (theories) to the world, and the world brings things to our ideas. I am tempted here to paraphrase Virchow by describing the situation this way: No ideas without things, and no things without ideas.

To say that a person is schizophrenic includes the person within the category of schizophrenia by virtue of his or her possession of certain attributes, whether these be metabolites in blood serum, the possession of genes in a certain state, particular kinds of aberrant behavior, or some combination of physical and psychosocial characteristics. In a different culture the same person might be categorized quite differently—as a shaman, perhaps, or a witch. The essential point is that the conceptual categories are not themselves objects, but ideas about what kinds of experience count as objects and what kinds do not. This is not a problem unique to psychiatry, for “cancer” no more exists than “schizophrenia” or “general paralysis of the insane.”

The underlying issue with both the realism and nominalism of scientific medicine is: what counts as an object, how can you know one, and how can you be able both to recognize it in somewhat changed form and to communicate about it to others? We confront here, again, nontrivial issues. The three forms of the question address fundamental ontological, epistemological, and semiotic/linguistic aspects of the world.

What counts as an object? To keep only to psychiatry, why do we today have schizophrenics, depressives, and obsessive-compulsives but no monomaniacs (except metaphorically, the term now being devoid of technical reference)? Yet, we still have drug addicts, just as did the mid- and late-nineteenth century (though not earlier). The attributes that formerly identified a person as a monomaniac are no longer perceived or cognized as cohering together. We have no active psychiatric concept of monomania, so we

wouldn't know a monomaniac if we saw one—in fact we cannot “see” one. To “see” an object, whether it be a monomaniac or a tree, is already to have the concept. Much of a child's acculturation is devoted to learning the concepts and conceptual structures that constitute a particular culture's universe. Likewise much of higher learning in a disciplinary specialty consists of acquiring the requisite concepts so that he or she can identify objects as defined by the specialty.

Concepts have double reference: to objects and to linguistic signs spoken or written (not the same thing, a point less obvious in most Western languages than in, say, Chinese, where the spoken and visual representational systems have little connection to each other). Once the (presumably neural) connections among the three have been established—and we know that this entails coordinating at least three different physical parts of the cerebrum—any of the three can refer to or stand for the other two functionally, word (or, more precisely, linguistic sign) = concept = percept. Once you know what a “monomaniac” *is*, the sight of one (percept) can elicit the concept or the verbal sign (word). Just so, the concept *monomania* can bring to mind an image of a person whose characteristics mark him as monomaniacal (i.e., a percept stored in memory), or it can call to mind some form of the word “monomania.” And so with the word, eliciting concept or image (stored percept). Not everything works this way. For example, most of us have neither concepts nor vocabulary relating to practical-level skills like riding-a-bicycle or driving-a-car, except at a very abstract level where we use notions and verbal terms that refer to the activity itself. Much of quotidian experience is therefore idealess and nameless. But if we want to talk or write about something then the triadic relationship between word—concept—percept must be in place.

Though each of the three terms in the triad can refer to or stand for (represent) the other two, they differ fundamentally from each other. Whereas concepts are entirely abstract and ignore the irregularities and idiosyncrasies of individuals, mental images retain at least some of the particularity of the perceptual experience from which they derive and which they represent. For example, the concept “tree” cannot refer to any individual tree, for it refers, as Plato first understood, to “treeness,” to the essence of what it means to be a tree devoid of those particular features that must belong to actual trees that are oaks or elms. The mental image of a tree, on the other hand, signifies some existing kind of tree, though it too may possess only those features sufficient to identify the kind of object represented.

Even though concepts are all abstract by definition, some are more distant than others from the realm of sensory experience. The concept of a “birch tree” is closer to perceptual experience than the concept “tree” and the concept “tree” less distant from perception than the concept “flora.” Thus, concepts naturally form hierarchies based on degree of abstraction from experience and relatedness to each other. Direct perception is abstractive as well, since we selectively attend to some features and not to others.

Are the physical objects that correspond to our concept “tree” real? That is, do they exist in the world apart from our ideas about them? This is, of course, the classic question of idealist philosophy. As one might infer from my brief discussion in the last several paragraphs, I think it is the wrong question to ask.³ If you already have the concept, then you are already prepared for the possible existence of an object corresponding to the concept. Take unicorns, for example. We think we know that they do not and cannot exist, just as Cheiron, the half-man, half-horse of Greek mythology did not exist as a perceivable creature. So to what kinds of objects do unicorns, Cheiron, and the present king of France refer?

I alluded earlier, without mentioning it explicitly, to the hierarchy of concepts we make by ablating features (birches are trees, trees are flora, etc.). Higher-level (more abstract, less picturable) concepts refer and must refer to classes, rather than to particulars. There is, of course, a huge philosophical literature on this issue. I refer the interested reader to any of W. V. Quine's works for classic discussions of the topic.⁴ Though it is clear that classes or universals do not exist in the tangible sense that individual trees do, the question of whether they exist in some other sense is hoary and hallowed in the history of philosophy. They certainly have profound effect on human lives, a fair share of which have been sacrificed in the name of universals such as “democracy” or “fascism” or “communism”—and some would say “schizophrenia.”

To return to the problems we started from after this brief excursion through concepts, words, and percepts: covering laws refer to classes of rules governing the connections of concepts to each other. As John Searle described at length in his *The Construction of Social Reality*,⁵ there are actually two kinds of such

rules: constitutive and regulative. Constitutive rules exist—and can only exist—within an institutional setting, which means they are always embedded within a complex network of other such sets of constitutive rules. The rules governing chess (one of Searle’s examples) do not organize an activity that exists outside the rules themselves: to follow the rules *is* to play chess. A regulative rule, on the other hand, constrains a pre-existing activity (Searle gives the example “drive on the right”).

In psychiatry (and in medicine in general), as in much of human life, we have a mixture of the two kinds of rules. Who counts, say, as a schizophrenic comes under constitutive rules, while particular treatment procedures often come under regulative rules (if a person has the attributes A, B, and C, then treat him or her with X). What interests me here is first that both clinicians and theoreticians in psychiatry/medicine for the most part remain unaware of the distinction, and second that the resulting confusion of the two kinds of covering rules frequently leads to what I can only call a philosophical mess. That it works at all probably stems from medicine actually being more an empirical than a theoretical area of practice and inquiry, borrowing its high-level theories from the relevant sciences of physiology, biochemistry, molecular biology, genetics, and so forth.⁶

The mess is much worse in psychiatry than in medicine. Until roughly the 1840s, both the young discipline of psychiatry and the old field of medicine shared a—by modern standards—dubious mapping of concepts to existential facts, much of which was still rooted in neo-Galenic medical theory (blood-letting, for instance). However, in medicine and physiology the mid-nineteenth century reconceptualization of the objects and object of medicine by revolutionaries like Johannes Müller, Rudolf Virchow, Theodor Schwann, Matthias Schleiden, Claude Bernard, and—perhaps most important, Louis Pasteur—redefined what counted as facts and causes in medicine, invented new concepts, established entirely new constitutive rules binding concepts and facts, and established new classes of facts, which were (and are) capable of objective verification with standard techniques and instruments (like microscopy). The identification of bacteria, parasites, and viruses as agents causing specific diseases now stands as a set of inarguable brute facts. Medicine had finally become science instead of just art.

Psychiatry, of course, followed in the footsteps of medicine. Many late nineteenth century psychiatrists worked with microscopes as much as or more than with patients. Unfortunately for psychiatry, except in a handful of areas—such as general paralysis of the insane, pellagra, and Huntington’s chorea—the new medical model did not work very well, for what counted as an object in psychiatry (and why) remained an unstable and unsettled question.

In psychiatry the defining rules refer to tangible objects only through the mediation of the ideas that they govern. The rule-governed organization of classes of concepts mirrors (through the idea-word-object scheme I described earlier) sensate patterns that can be experienced in the world. Our actions in the world can and do affect our hierarchy of concepts—the Kraepelinian and Freudian conceptual revolutions changed first how we conceive the world and then how we experience it, as the new conceptual schemes replaced the old.

As the new schemes won wide acceptance they obliterated the world views they were struggling to replace. World views, after all, that cease to be held as ideas in the heads of living persons quickly become relegated to books read only by the kinds of folks who write books such as the one you are reading. We lose the ability to see the world through their concepts.

4. There is no place for subjective experience in medical monism. Since subjective experience is devalued, replaced by descriptions of objects concatenated according to discipline-specific rules, the patient’s reports and actions only count insofar as they indicate (or fail to indicate) physical pathology. In his *A Leg to Stand On*⁷ the neurologist Oliver Sacks masterfully recounted the problems he had with his clinical neurologist in London after he had broken his leg and lost sensation in it. At the point in his treatment at which the nerves in his leg were functional again, he still could not feel his leg—he had lost the mental image of his leg and had to learn to re-experience his leg as part of his body. Within the scheme I outlined above he still had the concept “leg” but the “Oliver Sacks’s leg” subdivision had become detached from the perceptual representation to which it was naturally linked. He could *see* his

leg; he *knew* it existed factually; but he could not feel it as his own leg. Sacks's neurologist was exasperated, since there was no longer an objective reason for Sacks to be unable to feel his leg—medical monism at work with a vengeance rapping the knuckles.

With its integration of twentieth century genetic and statistical methods biological psychiatry has become a powerful tool for investigating the normal and abnormal aspects of human psychophysiology; but its theoretical underpinnings are woefully weak and, at times incoherent. Rendering explicit its current theoretical assumptions about the world is, I believe, a modest first step toward the construction of a more coherent theoretical basis for psychiatry.

As the contributors to this book have frequently mentioned (for example, Marx, Decker, Weiner, Wallace, and Gach), psychiatry has throughout its disciplinary history been pulled back and forth between mentalist and physicalist explanations. In perhaps too religious a metaphor I once termed this as psychiatry's having been crucified on the mind–body cross. Is it minds (disordered ones) that are the essential objects of psychiatric thought, discourse, and practice, or is it bodies? Or is it both? Biological psychiatry has, of course, decided that it is bodies. But why? In my chapter on the history of biological psychiatry, I detailed many of the contributing causes in the nineteenth century: the scientific revolution of the 1840s through which medicine adopted the methods of the physical sciences, with psychiatry (led by Griesinger) following right along; the adoption around the same time of the basic principles of medical monism; the extension of materialist determinism to living beings with the publication of Darwin's *Origin* in 1859; and the vanquishing of vitalism in medicine with the work of Schwann, Virchow, Koch, and Pasteur, the effect of whose work was to show that there were no gaps between living forms—all biological processes have antecedent biological processes describable entirely in physicalist terms with nothing left to explain requiring nonphysical agents as causes.

It is, of course, the “nothing left to explain” that is the issue. Just as spiritualism arose just before 1850 as a kind of dualist counter-explanation with its own facts claiming to be inexplicable within the framework of orthodox materialist science, sophisticated systems of medico-psychological theories arose in the late nineteenth and early twentieth centuries that attempted to reclaim mind (Janet, William James, Freud). What many of these theories had in common was an implicit dualism: physicalist explanations are appropriate for body events and mentalist ones for mind events, though they did not claim (nor am I claiming for them) that the world was actually dualist. If anything, they were materialist monists, having been reared in the standard science and medicine of the day. They were functional dualists without ontological commitments (as probably was Griesinger himself). Freud certainly was a working dualist after his 1895 *Project*⁸ failed to reduce mental events to neurophysical descriptions—his next major theoretical attempt being chapter seven of *The Interpretation of Dreams*,⁹ which proposed an entirely psychological explanation for mental events. So theorists like Janet and Freud thought there was quite a bit left to explain.

Since I am more familiar with Freud's work than Janet's, I shall restrict my remarks to the former. A remarkable feature of early psychoanalysis was its allegiance to psychic determinism,¹⁰ which clearly mirrored Helmholtz's law of conservation of energy and Virchow's concept that cells came only from other cells. What differentiated psychoanalysis from other scientific theories in medicine was its inability to express its concepts and theories in *precisely measurable* quantities. Psychoanalysis and similar psychological theories deal in qualities, which can be described and connected according to various systems of rules (such as those governing repression, parapraxes, or symbol formation in dreams) but which cannot be reduced to relations of *measured* quantities. Freud knew this; although he spoke of relative differences in the strength of affects, unconscious wishes, and so forth (see Wallace's Epilogue chapters).

Kraepelinian psychiatry also deals with qualities rather than quantities and is devoted more to accurately describing patients in order to figure out which diagnostic category to put them in than it is to measuring anything. It tends toward theoretical agnosticism, for good reason, since its explanatory apparatus is feeble (a fact much obscured by the ever-increasing number of diagnostic categories and subcategories with each incarnation of the American Psychiatric Association's *Diagnostic and Statistical Manual*¹¹). Correct diagnosis was important to Kraepelin because he believed that the various syndromes had distinct prognoses, some hopeless, others optimistic. Kraepelin thought he was describing objective phenomena when he delineated

the characteristics of dementia praecox and manic-depressive psychosis in the fifth through eighth editions of his *Lehrbuch*.¹² Did it ever occur to Kraepelin that inventing new syndromes both encourages psychiatrists to find patients who exemplify the new categories and provides the conflicted and disturbed with a new model and vocabulary through which to express their suffering and discontent?¹³

There were many nosological and diagnostic systems being proposed around 1900 (as there always are—theories are cheap and never in short supply, though good ones that endow us with the power to comprehend better the multitude of facts constantly besieging us are not overly abundant). If one asks why Kraepelin's won out, though, no simple answer emerges. Ignoring externalist factors (such as, for example, his prestigious position at the University of Munich and his training hundreds of students, many of whom propagated the Kraepelinian gospel), I suggest that the Kraepelinian conceptual system was congruent with how psychiatrists at the time were experiencing their patients and congenial to their possible theoretical categorization of the clinical material. In other words, they were ready—even waiting—for a theory like Kraepelin's to make sense of their clinical experience. Increasingly their patients were not fitting into the nineteenth century's syndromic categories, the histories of which Berrios in his chapter in this book and elsewhere has for years been describing and taxonomizing.¹⁴ Though I am arguing for a resonance in the early twentieth century between psychiatric experience and Kraepelin's theories, I am not arguing that the Kraepelinian model mirrors the world as it was or is, only that practitioners and theoreticians found it useful for organizing and understanding their world. The adoption of Kraepelinian and Schneiderian ideas in DSM-III, III-R, and IV conferred an aura of reality upon the Kraepelinian diagnostic system far beyond what it had before 1980.¹⁵ It went from being a prominent theoretical mode to being the only one to use in talking to insurance companies and government agencies in the United States. It went from being useful to being necessary, quite similar to the way that some form of mastery of psychoanalytic terms and concepts was necessary in the 1940s and 1950s.

If we construe psychiatric syndromes as cultural products, then it becomes possible to understand the kind of objects psychiatry deals in. Since psychiatric symptoms and syndromes are obviously not real in the same sense that stones and chairs are (though what it means for stones and chairs to be real is not exactly easy either), it is tempting to dismiss them as convenient fictions or to explain them solely in terms of grabs for status and power under the aegis of a profession. I maintain that the issue is much more complicated. Symptoms and syndromes (and not just psychiatric ones) have a middling ontological status: they are second-level concepts through which people of a particular time and place comprehend social reality.¹⁶ Less durable than stones, more durable than today's all-the-rage pop songs or adolescent argot, they are very much like (and can, indeed, even become) social institutions. They are no less real than a state or national government, which in order to continue to exist also requires the consent of a majority—or in some countries sufficient power in the hands of a minority to suppress the majority. So, if we think of "schizophrenia" as existing in the way that the U.S. Congress exists, I think we shall be very close to understanding the kind of thing it is. Just as the Congress does not have to continue to exist (there could be a revolution or fascist takeover tomorrow, after all) but probably will, so with psychiatric objects like "schizophrenia." Both are concepts built up from the shared experience of many, many different individuals over time and both are comprehended as enduring across multiple lifetimes. And just as truly, either could disappear tomorrow. For example, should it be shown that the attributes hitherto comprehended as belonging together in the family of schizophrenic syndromes in fact should be parsed into different, completely unrelated categories, "schizophrenia" will go the way of nineteenth century "insanity" or "monomania." The attributes will still occur in persons, but they will cease to be perceived as cohering together, and may even come to be ignored by practitioners as unimportant or epiphenomenal.

What most distinguishes biological psychiatry from both Kraepelinian and mentalist explanatory modes is its concern with quantities and their measurement. The idiopathic has no place. Now, this is not quite true, since human beings differ a lot, so that there must be an agreed-upon method for eliminating idiographic irregularities, the norms that are left being what is important. And that method is, of course, statistical. The individual case history, used precisely to allow the inference of general truths from idiopathy,

has little place in biological psychiatry. In biological psychiatric research individual persons are units to be averaged—what is unique is just what is of no interest to the researcher, of no more interest than the individuality of molecules is to a chemist.¹⁷

Treatment in biological psychiatry is not as simple, for it is obviously the case that individual persons, not averages, are treated. Of the many forms of physical treatment, psychopharmacology probably stands as the paradigm. A typical psychopharmacological treatment follows this kind of regimen: (1) identifying the pathology (diagnosis); (2) figuring out what chemical substances will induce a benign change in the patient's condition, based on existing theoretical notions that are in turn rooted in empirical research; (3) trying to get the dosage right through trial and error; and (4) if it does not work, starting over either with a different diagnosis or another drug; and (5) if it does work (for how long always being an issue), taking the thanks, credit, money, and moving on. What is missing from this model is just what makes the person uniquely different as a human being. No wonder that in this time of the hegemony of psychopharmacology in psychiatry there is greater demand than ever for psychotherapy, in which therapists use various theoretical models to try to understand their patients as suffering persons—the actual theories undoubtedly being much less important than having a concerned person, conceded authority and at least a modicum of wisdom, spending an hour paying attention and trying to help (see the mountain of published work on the efficacy of the various brands of psychotherapy, especially Jerome Frank's *Persuasion and Healing*¹⁸).

The conundrum for biological psychiatry (as with medicine in general) is this: its theories and research aim to construct ideal types, while its practice is with persons who usually deviate from the ideal type. The more powerful biopsychiatry becomes as an instrument for scientific research, the more detached it perforce becomes from human reality. Dr. Wallace trenchantly discusses this and related issues in this book in his Chapter 24.¹⁹ One should note that a very similar criticism has been made of orthodox psychoanalysis, in which the emotional absence of the analyst can have malign effects (see the many bitter first-person accounts of analyses, a well-known one being Jeffrey Masson's *Final Analysis*²⁰)—a result, I believe, of the psychoanalytic emulation of the methods of “hard science.”

Again I shall cite Oliver Sacks, whose 1973 *Awakenings*²¹ brilliantly described the ideal/real conundrum. Administering dopamine to his encephalitic patients indeed awakened them from their, decades-long twilight consciousness. But dopamine was neither “cure” nor panacea for the encephalitics. Each reacted differently; many patients developed severe symptomatic reactions after taking it for some time and had to be taken off the drug. Some then improved when put on it again after a vacation from dopamine, while others got worse. Some were never able to take the drug again. Not only did each patient react differently to it, but in addition most patients continued to react differently from their own previous reaction each time Sacks began giving them dopamine anew. A neurologist rather than a psychiatrist, Sacks has had considerable influence on the psychiatric community and has virtually reinvented the case history as a means for discovering and communicating profound truths (universals) about human beings suffering from neuropsychiatric disorders. Sacks knows that the abstract ideal-type knowledge gained from the manipulation of quantities grants the physician little leverage in treating individual patients. The patients are just too different from each other and from the ideal classes into which we subsume them for nosological and diagnostic purposes.

Biological psychiatry, eschewing both phenomenologically rooted diagnostic systems and mentalist modes of explanation, has followed its own, mostly separate path in the twentieth century. Where other thought systems in or closely related to psychiatry have made broad theoretical claims, until recently biological psychiatrists have tended to restrict their theorization to narrow, scientifically defined territories, much as most scientists in other fields do. With the emergence in the late twentieth century of the biological paradigm as one of the major ways for explaining human behavior (along with the neuropsychological-cognitive and evolutionarily rooted theoretical systems), biological psychiatrists began to suggest that the concepts in their field sufficed to explain both normal and abnormal behavior, that body explanations were all that was necessary with—dare I say it again—nothing left to explain. We've heard it before. Every new or newly conquering therapeutic modality tends to claim improbable success. Isador Coriat in the second decade of the twentieth century claimed a 90% cure rate using psychoanalysis with schizophrenics.²²

Behavioral therapists in the third quarter of the twentieth century made similar claims of being able to “cure” just about anything with behavior modification.

In the 200-year history of psychiatry as a separate medical discipline, body and mind explanations have sometimes coexisted, but have more often taken turns. The proponents of each explanatory mode have typically promoted their kind of theorizing as pan-explanatory—able to explain nearly everything. Alas! theories of everything all too typically become theories of nothing as the next generation discards them into the trash bin, with the generation after that one not even remembering that they existed. There is a name for such intellectual imperialism, and it is “*hubris*.”

Notes and References

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2. Eccles, John C. *The Human Psyche*. Berlin: Springer International, 1980.
3. And so does the distinguished American philosopher John Searle. See his *The Construction of Social Reality* (New York: The Free Press, 1995). Most of the ideas I present in this chapter are completely congruent with Searle’s, though they were developed quite independently. Searle uses a different vocabulary and set of concepts than I (though I have adapted several for use here), but the basic conceptual structure is highly similar.
4. See, for example, *Methods of Logic*, 3rd rev. ed. (New York: Holt Rinehart and Winston, 1972); *Ontological Relativity* (New York: Columbia University Press, 1969); *The Roots of Reference* (La Salle, IL: Open Court, 1973).
5. Op. cit., pp. 27–29 and 43–50.
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8. “Entwurf einer Psychologie,” pp. 371–466 in Sigmund Freud, *Aus den Anfängen der Psychoanalyse: Briefe an Wilhelm Fliess, Abhandlungen und Notizen aus den Jahren 1887–1902* (London: Imago Publishing Co., 1950). Edited by Marie Bonaparte, Anna Freud, and Ernst Kris (with Kris actually doing almost all the work). Translated in 1954 by Eric Mosbacher and James Strachey as *The Origins of Psychoanalysis: Letters to Wilhelm Fliess, Drafts and Notes: 1887–1902* (London: Imago Publishing Company, 1954). The “Entwurf” is translated as “Project for a Scientific Psychology,” pp. 347–445.
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13. See Sander Gilman’s chapter on the history of the concept of schizophrenia in the *Handbook*.
14. See, for example, his *The History of Mental Symptoms: Descriptive Psychopathology Since the Nineteenth Century* (Cambridge University Press, 1996) and German Berrios & Roy Porter, eds. *A History of Clinical Psychiatry: The Origins and History of Psychiatric Disorders* (New York University Press, 1995).
15. Schneider, Kurt. *Clinical Psychopathology*. New York/London: Grune & Stratton, 1959. Translation by Marian W. Hamilton of the fifth revised edition of *Klinische Psychopathologie*, first published by Georg Thieme in Stuttgart

with this title; originally published in 1946 as *Beiträge zur Psychiatrie*. Other than Kraepelin, Schneider's book, which went almost completely unnoticed when it first appeared in English translation in 1959, was the major influence on the diagnostic recategorization of DSM-III.

16. See Searle's *Construction of Social Reality* for an outstanding discussion of exactly how this works in practice.
17. See David Healy's commentary on the subject in his chapter in the *Handbook*.
18. Frank, Jerome. *Persuasion and Healing: A Comparative Study of Psychotherapy*, 3rd rev. ed. (Baltimore: Johns Hopkins University Press, 1991) [1st ed. 1961].
19. See also Wallace's "Psychiatry's Sickness and Its Biological Cure," *Psychiatry* 60(1997): 89–99.
20. Masson, Jeffrey Moussaieff. *Final Analysis: The Making and Unmaking of a Psychoanalyst* (Reading, MA: Addison-Wesley, 1990). The best-written such account I have read, by a former insider in the American psychoanalytic establishment. For a very readable and fairly objective account of Masson's break with Kurt Eissler and departure from psychoanalysis see Janet Malcolm's *In the Freud Archives* (New York: Alfred A. Knopf, 1984), originally published as a *New Yorker* article.
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Chapter 24

Two “Mind”-“Body” Models for a Holistic Psychiatry

Edwin R. Wallace, IV

Introduction

The two essays that make up this chapter are presented as alternative “mind”-“body” positions for a biopsychosocial medicine and psychiatry. They piggyback on four earlier and longer papers.* I take no position on whether the two models presented are in any way compatible with each other. However, I believe that there are at least some areas of overlap between the two. I confess that in many respects, I prefer the second over the first. Even so; I believe that walking through the first facilitates appreciation of the second and of its extensions in Chapter 25. In addition, if we invoke (like Sir Karl Popper) an evolutionary epistemology; then it is impossible to have a surplus of models to select from! Both are, in the spirit of the times, integrating moves on “mind”-“body” and the philosophy and theory of psychiatry. I hope, and believe, that—based on neurobiological and social scientific investigations and evidence, and clinical studies—we shall arrive at such a model, though probably not in our lifetimes, for there is still too much work and hard thinking ahead. Moreover, integrative attempts in psychiatry/psychology are very much in the spirit of contemporary natural science; which tries to reduce, *as much as possible*, metaphysical quandaries and positions to its own explanatory and applied categories—in other words, to convert *metaphysical “ontologies” (i.e., theories of being) to scientific ones.*

After this chapter, Chapter 25 goes back in time to a pertinent and interesting topic, “Freud on Mind-Body.” In it I also reflect back on both parts of this chapter and consider further the extent to which the “functionalism” of the second part of this chapter might also be construed as a subtype of “identity theory” (with “type-type” as well as “token-token” features). See also Chapter 26, for more on Freud.

Monistic Single Aspect–Dual Aspect Interactionism

This model clears space to consider motivation and meaning without violating either materialism (understood as the axiom that “*but for* matter and energy nothing in the universe would exist”) or the thesis of

* The first part of this chapter is a *précis* of, and elaboration upon, selections from two prior essays. The *first*, “Mind/Body: Monistic Dual-Aspect Interactionism,” appeared in the *Journal of Nervous and Mental Disease* 176 (1988): 4–21. A revised version was presented at the 1993 Annual Meeting of the American Philosophical Association (Eastern Division). The *second*, “Toward a Phenomenological and Minimally Theoretical Psychoanalysis,” was presented at the Fall 1988 Meeting of the Atlanta Psychoanalytic Society and was published in the *Annual of Psychoanalysis* 17 (1989):17–69.

man's psychobiological unity. That "mind" (read "mentation" or "symbolically mediated/image-laden motivated activity") cannot exist independently of matter and energy I take as axiomatic; that mind assumes certain properties radically different from other organizations of matter and energy I take as empirical fact. The reconciliation of these two I regard as a mystery upon which I throw no light. But I know no physicist who claims to know, for example, the essence of "gravitation" or even "matter," though he or she does not consider the referents of these concepts any less real or causally efficacious for all that. Moreover, interactions among organizations of matter-energy at levels far less complex than the plane of human organism and environment produce novel emergents in no way predictable from knowledge of the properties of each entity "in isolation."

This dual-aspect model should in no way be confused with that of Spinoza, which is a psychological-biological parallelism. Hence it excludes interactions between the biological and the psychobiological, which my model permits. Moreover, it is an explicitly metaphysical dualism; more problematically so than the Cartesian one Spinoza set out to correct—for Descartes's metaphysical dualism at least allows interaction between the "mental" and the "bodily," whereas in Spinoza they are tightly insulated from one another.

In dealing with fundamental conceptions, scientists and philosophers must accept that they will have their ambiguity in one place or another. In any event, that thinking, feeling, and willing should arise from the human body poses no more—indeed less—problem than if it is credited to a conjectured "soul" or "spirit" whose "properties" are notoriously indeterminate. In short, what we term "mental" is best understood as the imaginal and symbolic *activity* of the intact human organism-in-world. Put in another fashion, in terms of explanatory disciplines, it is the "biosocial" that spawns the "psychological." I adhere to a fallibilist, objectivist (i.e., "intersubjectivist"), or critical realist epistemology and a correspondence theory of truth¹ (i.e., that true propositions and theories *approximately* represent aspects of real organizations with structures and functions whose existence is to some degree independent of the presence of the investigator). See references to pertinent transcultural medical and psychiatric/psychological, and cultural anthropological and sociological/social psychological, texts in Addenda C–F in Chapter 2—as well as in note 66, this chapter.

Hence, I reject what I view as the most plausible alternative explanations—neutral monism and linguistic dualism. The latter perspectives assert that human reality corresponds to neither biological nor psychological propositions but is in some sense a "neutral" entity, process, or whatever, about which the "biological" and "psychological" are purely convenient "scientific fictions" or "modes of discourse." I eschew neutral monism-linguistic dualism for yet another realist reason—the wealth upon wealth of clinical and commonsense data making it extraordinarily difficult to espouse theories that disallow interactions between the meaningful, image-laden and symbolically mediated features of human existence and those understandable in purely physiological or pathophysiological categories. If the "biological," "sociological/anthropological," and the "psychological" are simply ways of talking without factual referents in human existence; then they cannot be said to "determine" anything—except perhaps the discourse of their practitioners.

In this section I propose *an ontology (i.e., a theory of being or existence)—for I suggest that if we scrutinize any approach to this problem, we shall find an ontology (often several) buried somewhere. Moreover, while such ontologies are presently more or less metaphysical, they are not without definite clinical implications and often some empirically testable consequences.* Hence, it behooves the psychiatrist to do some serious self-reflection, and hard thinking, about the ontology embedded in his or her clinical and investigative practice.

At the current level of psychological, biological, social scientific, and philosophical sophistication; any approach to the mind-body problem is scandalous. None avoids logical and empirical pitfalls. What I have outlined should be construed as an image or primitive model rather than a theory; as a device intended to promote theorizing and data gathering. *This is especially true of this first—and earlier—model.*

I adhere to a jaw-breaking "monistic multilevel, single-aspect-dual-aspect interactionism" (to be called simply "monistic dual-aspect" henceforth): multiple levels of ("horizontally" and "vertically") causally

interactive activities from the subatomic through the organ systemic to the interpersonal somehow yield, at the highest level of integration, one reality with two aspects. Let us call this reality at its highest level of integration and emergence (i.e., “dual-aspect”) “mentation” or “mind” (i.e., the organization of image-laden and symbolically mediated, or “meaningful,” activity), and accept that it is successive states of mind that we try to connect causally. Desiring to avoid, as much as possible, Spinoza’s ambiguity about the ontological status of “aspect,” let me say that I intend it to refer to something very real, and not to an operational “scientific fiction”—call it a “face” or “facet” if one prefers. Again, I eschew Spinoza’s metaphysically dualistic parallelism (which disallows interactions between single-aspect and dual-aspect varieties of human being).²

And what is the nature of these “faces” of mind? They are best approximated by our neurobiological and our socioculturally cognitive psychologically informed interpersonalist/object relations psychodynamic propositions and theories, respectively. Beyond this I shirk essentialist questions. We understand enough about neither of the two aspects to answer them: a century’s extraordinary advance in neurobiology has driven home how fundamentally little we know about the incredible complexities of human brain circuitries and neurotransmitters (some estimate that we are aware of only 25% to 30% of brain neurotransmitters), much less about their precise correlation with mental/behavioral states. And our psychosocial theories of humankind, though clarifying and converging in important respects, are still in flux, ferment, and confusion.

Thus, I propose that all activities of the human organism may be divided into “single-aspect” and “dual-aspect” processes. The latter, as just explicated, are the representational and symbolizing activities of mind, characterized by faces captured by neurophysiologic-anatomic and psychological (or psychosocial) theories, respectively. It is essential to appreciate, when considering dual-aspect activities, that neither the physiologic nor the psychological aspect is considered the cause of the other. Each is conceptualized as a different facet of one reality. Single-aspect processes, by contrast, are those grasped by purely physico-chemical-physiological explanations, such as digestion, biliary secretion, renal filtration, midbrain and other ontogenetically/phylogenetically older brain processes, and so forth, though they themselves may of course be influenced (as later explicated) by dual-aspect processes (especially via the autonomic and neuroendocrine systems).

Dual-aspect processes (incipient mind) probably begin at some point in early infancy. The ability to differentiate, integrate, and, eventually, maintain internal (i.e., “private”) representations of human and non-human environment progresses through later infancy and early toddlerhood. With the onset of verbalization, the capability of engaging in progressively sophisticated, symbolically mediated activity begins.

Nonetheless, psychology has overemphasized the significance of propositional, or sentential, cognitive (i.e., linguistic) representation. This overlooks the importance of mental imagery as a valid, and indeed adaptationally necessary, mode of mentation throughout life.³

1. There is overwhelming evidence that rats form cognitive maps when they learn mazes, images sufficiently sophisticated that they can immediately reorient themselves to complex rotational shifts of the maze boxes. Rats and pigeons can learn to recognize different plane geometric shapes.
2. The accurate spatial memory of environment has prominent internal representation in the hippocampus, which is evidenced anatomically in many animals as well as humans. For example, birds in which spatial memory is especially important—because they store food in many sites—have a larger hippocampus than other avians. Such spatial mapping is also key to London taxi drivers, who undergo intensive training to learn every street name and location in the metropolis and the most efficient route to get between any two points. Functional magnetic resonance imaging has shown that, after this, they have significantly larger hippocampuses than do their age-mate controls. And the hippocampus continues to enlarge with time spent on the job (from practice, and because they must take periodic “refreshers” as London grows and changes). Particularly interesting in terms of mental imaging as an important variety of cognitive/mnemonic activity is that, when asked to imagine traveling to a certain destination, the cabbie’s hippocampus lights up on brain imaging as well! By contrast, sufferers from Vietnam-induced Post traumatic stress disorder (PTSD) have hippocampuses significantly smaller than normals—perhaps resulting from the neurotoxicity of chronic excess stimulation by much-increased levels of glutamate and corticosteroids.

3. The cognitive/mnemonic activities of preverbal—and incipiently verbal—infants and children are carried by mental imagery. Recall here Freud's distinction between "primary" and "secondary" "process" mentation. The former is manifested in the full gamut of mental imagery—visual, auditory, olfactory, gustatory, and tactile. It is said to characterize the conscious mental life of children and of several types of mentally disturbed adults (i.e., hallucinations) and the unconscious mental life (as manifested in dreams, for example) of all of us. Of course, Freud did not gainsay the value of intense mental imagery in the creative activity of artists and composers. Consider even its place in scientific inventiveness—the role of Kekulé's famous dream of the hexagon of snakes in awakening him to the actual structure of the benzene ring. This also demonstrates the important role of unconscious problem-solving; which operates in psychotherapy too. It is an important aspect of neo-Darwinian "*adaptation*."
4. In secondary process mentation, Freud emphasized the preconscious substitution of the "word presentation" for the unconscious "thing presentation." Still, one should consider what a graphic and metaphoric writer Freud was—reflecting, I believe, his preconscious awareness that this was probably the most effective way to characterize the shading and ambiguity in the hitherto-overlooked realm of mental/behavioral phenomena that he addressed.

I think that linguistic processes are much overemphasized in the actual processes of thinking—as opposed, for example (in thinking and writing), to putting various drafts or the final product in print. When, for example, I am pursuing a line of thought or struggling with a particular intellectual quandary, I do not experience myself "silently talking." Nor do I, for the most part, experience myself conjuring up images. Rather, I am simply aware of a certain effort and concentration—manifested, as much as anything, in emotional and coenesthetic/somesthetic sensations. When I feel ready to "talk" it is to the page before me. It is not until this point that I am indulging in Freud's "word presentations." I then react to the objectified "word presentations" with more of the type of thinking I have just described until it "feels right" to churn out more words—and so on until the project is "finished," perhaps weeks later.

"*Mind*," the total, more or less enduring organization of dual-aspect activities, is overwhelmingly unconscious, as Freud held.⁴ The experience and activity of which we ultimately become conscious is a function of causal interactions among dual-aspect processes *within* mind itself and *between* mind and single-aspect processes. Among the most important of these single-aspect processes are endocrine and brain functions that do not themselves possess a psychological aspect, though they influence mentation by interacting with its physiologic face.

The events of the outside world are communicated to mind via a multitude of single-aspect processes of the sensory organs, peripheral nerves, and central nervous system. Within mind itself these environmental inputs are first processed unconsciously. They interact with a number of, again, unconscious dual-aspect structures and functions, such as cognitive-interpretive schemata, conflicting motivational states, defensive maneuvers, memories, and so forth. The eventual contents of consciousness (phenomenology) are derivatives and vectors of the unconscious activities of mind. Hence, all perception begins nonconsciously (single-aspect processes) and unconsciously (dual-aspect processes) and becomes preconscious and conscious only insofar as it is unopposed by unconscious defensive maneuvers and cognitive structures. Apperception is shot through with memory, cognitive-affective structure, and psychical conflict.

For any sensation—whether exteroceptive, proprioceptive, or coenesthetic-enteroceptive—to be consciously experienced, *it must pass through and impinge upon mind*. Meaning, as explicated elsewhere, is *necessitated* in the constitutionally intact, post-infantile human being. It is in this sense that there is no such thing as a purely "physical" or "physiological" experience. We do not experience single-aspect phenomena directly, but only insofar as they are mediated by mind. I thus oppose the James-Lange theory of emotion, whereby we are said to first experience a "physiological happening" and then only afterward endow it with meaning through attribution and interpretation.

Rather, I contend that what is consciously experienced is *already* the fruit of the interaction between a single-aspect process (whether it be indigestion or joint pain) and the unconscious dual-aspect processes of mind. This is not to say that we cannot then subsequently laden the experience with additional

meaning—certainly we can and do—but it is to assert *that the experience is meaningful from the outset*. What is actually meant by “physical” or “physiological” experience is the human individual’s experience of his or her body. And this is as much the fruit of the history of one’s fantasies and interpersonal relations (including especially the attitude of important others toward one’s body and its processes) as of the sensory, proprioceptive, and gnostic functioning of peripheral nerves, thalamus, somesthetic cortex, and association areas or of the “coenesthetic” sense of organ systemic processes and of general bodily well-being or the converse. Hence, Freud was quite correct to locate the sense of the body in the mind, or “psychic apparatus” (“id” and “body ego”).

In fine, the individual’s conscious experience and activity is the effect of unconscious state-of-mind, itself a function of interactions among dual-aspect structures and processes and between dual- and single-aspect activities. If, to use a well-worn analogy, mind is like an iceberg, then consciousness is its tip. Although a thorough understanding of the patient’s conscious experience must precede and inform our psychobiological explanations, a clear distinction must be drawn between the patient’s phenomenology and our explanations of it. Phenomenology hints at, and points the way toward, hypotheses, but never, as some philosophers and psychiatrists would have it, simply explains itself—without reference to nonconscious (single-aspect) and unconscious (dual-aspect) causal processes—and without theories as well. For the most part, as Freud maintained, consciousness is a sensory organ, registering nonconsciously-unconsciously determined changes in total state-of-being. Moreover, to remain with the iceberg analogy, its apparent causal efficacy is largely carried by the unconscious processes continually underpinning it.

Nevertheless, by considering conscious experience and activity as the effect of interactions among underlying nonconscious and unconscious processes, I am not necessarily declaring that the sensory activity of consciousness, itself, exerts no causal influence on subsequent states of mind. Conscious experience, while its potency was vastly overrated by pre-Freudian psychologists, may well causally affect reality—including that reality whence it has arisen. Certainly, if conscious mentation possesses no causal efficacy whatsoever; then it is difficult to understand, by the Darwinian tenets of natural selection and adaptation, how and why it has persisted.

It may be helpful to depict what is, after all, an image or model in the diagrammatic medium appropriate to it (see Fig. 1).

The arrows indicate directions of causality. Unfortunately, this sketch cannot portray the *intersectional*⁵ (recall discussion and example, in the “Causation” section of Chapter 1), as opposed to externalist, nature of the cause–effect relationship, nor can it take account of the invariably nonconscious–unconscious overdetermination both of mind itself and of its derivatives in consciousness. Neither does it do justice to the continual interaction with a physical and symbolic-interpersonal environment. Important aspects of this schema will become increasingly clear in the following pages.

Within this framework human intraorganismic and organismic–environmental *interactions* can be characterized as: (1) single-aspect processes with single-aspect processes—for example, the interaction between the vascular diathesis of diabetes mellitus and renal structure and function, the spinal-reflex arc, and, as H. Weiner⁶ suggests, certain features of environment–brain and intrabrain–intrabrain interactions that precede or accompany, but do not directly contribute to, state-of-mind; (2) single-aspect–double-aspect—for example, the interaction between Penfield’s⁷ electrical probe and the patient’s hitherto unconscious meaningful memory trace, and the so-called “somatopsychic” disorders; (3) double-aspect–single-aspect—for example, the “psychosomatic” or “psychophysiological” diseases, such as the relationship between historically/situationally determined interpersonal/psychical “stress” (itself a genuinely sociopsychobiological concept) and duodenal activity (recall the work of Hans Selye); and (4) double-aspect–double-aspect—for example, the stimulation of one association by another or of multiple associations by an unconscious complex, the generation of a hysterical paralysis by an unconscious intrapsychic conflict, the relationship between Penfield’s presence and the neurosurgical patient’s symbolizing sentience.

Where it is a case of double-aspect–double-aspect causation, as in that between consecutive unconscious states of mind underpinning two conscious items in a chain of association, there is causal continuity between *both* the psychological and the physiological aspects of each state of mind. Since “mind” (the

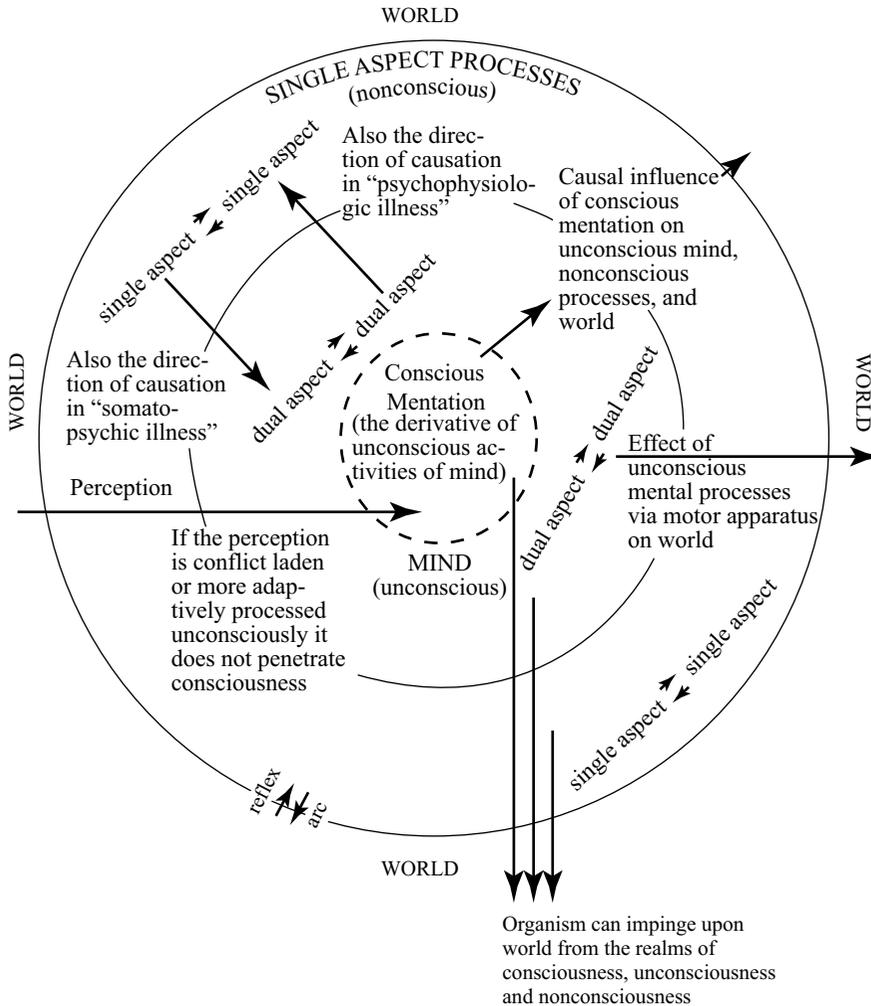


FIGURE 1. Diagram of Monistic Single Aspect-Dual Aspect Interactionism.

organization of dual-aspect activities) is not pronounced immaterial, no essentialist claims need be made—though I posit a minimally metaphysical one of some sort of materialism/energeticism. Since it is asserted that mind has a physiologic, as well as a psychologic, face, then it neither loses its footing in brain-body, as is threatened in Popper and Eccles⁸ dualist-interactionist model, nor becomes a spiritual entity requiring a bridge to materiality, as with Descartes.

In instances of double-aspect–single-aspect causation, such as the stressful interpersonal event and the peptic ulcer, the causal efficacy is presumably carried from the *physiologic face* of the stressed state-of-mind to the *physiologic (and only) face* of the duodenal activity. Dual-aspect realities, such as a state of grief, may affect single-aspect realities, such as the immune system, so that yet further single-aspect realities (e.g., an infection) ensue—as demonstrated by much “psychoneuroimmunological” research (suggesting that such factors may even play a predisposing role in the eventual formation of malignancies).

Conversely, when processes with a purely physiologic face (say, an infectious disease with pyrexia—possibly the same infection partly caused by the grieving) influence dual-aspect realities, the effect is presumably mediated *from the physiologic (and sole) face* of the infectious process to the *physiologic face* of the dual-aspect state-of-mind. If the altered status of the latter includes, for example, disinhibition of

ordinarily repressed derivatives of unconscious structures of meaning and motivation, then one assumes that the pathophysiology, and febrile aspects, of the infection has in some manner impinged upon the physiological face of the activity of repression.

But our hypothetical situation is supremely complicated by the fact that, from the outset, the infection *means* something to the patient—within the context of the history of his or her prior infections and their interpersonal-affective matrices. This meaning itself plays a determining role in the subsequent state-of-mind and consciousness (whether the infection connotes, unconsciously or consciously, welcome opportunity for dependent succor, a punishment for real or imagined misdeeds, and so forth). In this sense, the term “infection” actually subsumes *two* causal realities: on one hand, a purely single-aspect process comprehensible in terms of the pathophysiologies of bacterium and host; on the other hand, a dual-aspect, meaningful activity—itsself contributing to both the subsequent pathophysiologic course of the infection, and the subsequent meaningful states-of-mind with their conscious effects. Similar considerations apply to the impact of psychotropic medications on state-of-mind and conscious experience (always including a “placebo,” or relationship, effect).

In fact, the placebo effect has even been shown to operate in internal medicine. There, it is a cofunction, on one side, of a sufficiently beneficent doctor–patient relationship and the physician’s qualifiedly (not excessively) positive stance on the particular pharmaceutical; and, on the other side, of the patient’s transference/working alliance vis-à-vis the clinician and the patient’s optimally favorable expectations (i.e., not inordinately so, for that can backfire). Patient-blind controlled studies of internal medicine’s peptic ulcer remedies, and even of digoxin in moderate congestive heart failure, have been pursued in which equal numbers received the active medications or superficially similar placebos. Anywhere from 40% to 60% of patients on placebo had some measure of therapeutic results—at times as much as from the active medications!⁹

Hence, the monistic dual-aspect interactionist model allows not only for the generation of meaning (dual-aspect reality) by dual-aspect reality (meaning), but also for *the influence of single-aspect realities on meaningful states of being—via the physiologic face of the dual-aspect reality*. Again, frequently it can be a matter of both. Clinically and commonsensically, it appears indispensable that a model allow for the aforementioned. Would anyone, for example, argue that the impact of a gin and tonic on one’s state of mind is carried solely by the historically/situationally determined meaning of the cocktail?

Recall the great Darwin-influenced neurologist John Hughlings Jackson (1834–1916), well known for his work on aphasia and lesion-induced epilepsy. He greatly affected his fellow Darwinian, Freud—especially with the former’s dictum that, in cerebral disease, there is a “dissolution” or “disinvolution” of the evolutionarily most-recent levels of cerebral integration toward progressively, ontogenetically and phylogenetically earlier modes of less-complex integration and function. This also affected Freud’s concept of psychopathology as *ontogenetic and phylogenetic “atavism” or “regression”*; or, to use the term of the cultural evolutionist anthropologists, who also greatly influenced Freud, “survivals.” The cultural evolutionists also shaped some of Freud’s most important psychological concepts: aspects of his dream theory, projection, the omnipotence of thoughts, again neurosis as atavism, primary and secondary process, psychic unity, Lamarckism and the biogenetic law, universal psychic determinism, and the comparative method. But, more to our point about the possible single-aspect impact on dual-aspect phenomena via the single-aspect face of the latter and of potential dual-aspect/dual-aspect determination too were Jackson’s brilliant observations (both clinically and clinico-pathologically) that post-brain injury mentation/communication/behavior is a resultant, not only of tissue destruction, but of the remaining intact cerebral function as well, which might include temporary excitation or release of hitherto-inhibited mental content.

The last-mentioned tenet of cultural evolutionism, the comparative method, was crucial to Freud’s thinking on the Oedipus complex. In invoking the ancient Oedipus legend to “confirm” the universality of the complex he discovered in himself and in his nineteenth century patients; Freud was using the comparative method, root and branch. Had Freud not been exposed to, and espoused, the cultural evolutionists’ comparative method and doctrine of psychic unity, then he could not have universalized his findings with such assurance.

To return to Jackson and “disinvolvement,” it is not unusual, for example, in early post-stroke conditions for lifelong “prim and proper” elderly ladies to discomfit visiting relatives with an enraged eruption of all manner of four-letter words. Sometimes it makes little sense: presumably, single-aspect impact on the single-aspect facet of dual-aspect processes. Nevertheless, at other times, it may make all too much sense—especially to older family members, who can grasp plausible, hitherto-veiled anger at, say, her long-deceased husband or toward siblings or adult children, who are not completely surprised at the now-overt attitudes.

Moreover, the dual-aspect model comprehends that *overdetermination* is the rule in explaining human experience and behavior. Multiple lines of single-aspect–single-aspect, single-aspect–dual-aspect, dual-aspect–single aspect, and dual-aspect–dual-aspect determination converge to produce unconscious states-of-mind and the phenomenologies deriving therefrom. To return to the cocktail, we now appreciate that experience and behavior during intoxication are even partly shaped by cultural factors.¹⁰

In this context, consider Hartmann’s brilliant studies of the paramnesias and paraphasias of patients with Korsakoff’s psychosis, *which strongly suggest that intrapsychic conflict influenced the content of their linguistic and mnemonic mistakes*.¹¹ In my own work on Tourette’s syndrome, thought by many to be a primarily “neurological” disease, I have been struck by the apparent effect of type of situation on whether and which expletives emerge. Rigorous clinical, longitudinal, and epidemiological study could contribute greatly to unraveling the relative contributions of personality structure and neuropathological processes to these and other syndromes, such as the schizophreniform states of temporal lobe epilepsy described by Flor-Henry.¹²

From our thesis it follows that certain disorders (“medical” and “psychiatric”) and states of mind may yield to pharmacologic *or* psychotherapeutic interventions, or to a combination of the two. Consider, in this regard, that both chemical (amytal) and psychotherapeutic (hypnosis) modalities can precipitously influence the activity of repression—the former presumably primarily through its physiologic aspect, and the latter largely through its psychological (though also its physiologic) face.

Psychiatry seeks to comprehend causally “human states of being as experienced and enacted” in order to influence them through environmental input in the form, most especially, of pharmacologic substances and words. Each of these interventions—and its effects—is no more or less material and “somatic” or meaningful and “psychic” than the other. Words are meaningfully patterned sound waves intercepted and processed by sensory organs, the eighth cranial nerve, and, ultimately, those dual-aspect activities known as mind. Medications are physiologically active substances dispensed within the context of the historically/situationally determined meanings of a doctor–patient relationship. Alterations in states of mind affected by either modality include changes in both psychological and neurophysiologic-anatomic aspects of mentation. In regard to the latter, fascinating studies suggest that actual structural changes in neuronal processes accompany new learning and experience (especially in the conversion of short-term memory into long-term)—including of course psychotherapy.¹³

By way of closing this section, I emphasize that no assumption is being made about the place in organic evolution at which dual-aspect realities arose—whether only at the inception of human symbolic communication (language) or at some much earlier point in hominid development. Suffice it to say that there is a broad sense in which, for the more intelligent mammals, events appear to take on “meaning”—for example, a puppy’s handling (“history”—and it is history whence meaning arises) affects the mature dog’s perception (“interpretation”) of a variety of situations. For instance, consider my prize-winning Basenji, “Champion Abai Umemi” (Swahili for “Streak of Lighting,” which he was, for he could reach 30 mph and turn on a dime). Genetically, these originally East African thirty-pounders are strange mutts with many cat-like personality features, a “yodel” instead of a bark, much greater visual acuity than most, predominantly smell-oriented, dogs, and aggressive readiness to take on hounds several times their size. Some of these characteristics resulted from the Egyptian Pharaohs’ and nobles’ domestication, and selective breeding of them to track and chase down lions until the latter were exhausted and the spear-wielding noble could home-in for the kill. Of course natural selection reinforced artificial selection, for the dogs that were too slow or unable to turn swiftly did not leave progeny. After Lightning’s breeder and trainer had shown him far beyond our satisfaction, I retired him, for he was my son’s pet.

One thing I quickly noticed from the time I got him at about 9 months and before he went on the road and returned, that I did not think genetic or even constitutional, was the fact that if a visitor even pulled out a pack of cigarettes, much less lighted one, he would snarl and move away quickly (though never attack). He steadfastly held to this trait for his entire 15 years. Later, I asked his breeder/trainer about it. He smiled knowingly and told me that Lightning had been mistreated by a chain-smoking kennel boy, whom the breeder fired when he discovered it. I always regret that we didn't farm him out to Surgeon-General Koop, for a great public television stop-smoking advertisement.

Animal behavior, as Darwin appreciated, exhibits similarities to human behavior too striking to dismiss as coincidental.¹⁴ Among these, I would conjecture and exemplify the cross-communicational capacities of man and the “higher” mammals; parallels in emotional expressiveness among them; the often exquisite mutual empathy between master and dog (arrived at through millennia of domestication and selective breeding); commonalities in mechanisms of human and animal learning and problem solving; the apparent capability of the more intelligent mammals to hold nonverbal representations in mind (Hall's¹⁵ “infra-symbolic capacity”) and to engage in what amount to primitive defensive maneuvers (displacement); apparent “phenomenology”—a dog's shame when scolded, or sense of rejection when ignored—presumably akin to the human's; even—in the case of certain chimps—the apparent ability to manipulate symbols and learn some sign language in a laboratory situation—though there is some evidence the great apes use gestures in the wild.¹⁶ Above all, both animal and human behavior are subject to the evolutionary constraints and compulsions of natural and sexual selection and to the requirements for phylogenetic and ontogenetic adaptation (to which molecular-biological psychiatry must attend).

In these senses, it may well be appropriate to speak of the “mind” of certain organisms other than man. If so, “mind” would have arisen, like any other living phenomenon in the material-energetic universe, through the adaptive advantages conferred upon its possessors. All anthropomorphism aside, I wager, however, that self-reflective consciousness did not arise *until late in human biological and cultural evolution*. It is probably the most singularly human characteristic of all.

In sum, from this model it follows that psychoanalysis and other clinical psychologies are disciplines limiting their perspective and explanatory programs to the experiential-motivational-behavioral-communicative: the psychosocial face of dual-aspect phenomena. Within this empirical domain, and by their concepts and methods, they can say nothing whatsoever about the biological aspects of human mentation and behavior, though they provide invaluable data and hypotheses for rigorous psychological–neurobiological correlational work. Hence, this particular approach to mind-body allows psychoanalysis and psychology a degree of autonomy in their proper sphere—image-laden, symbolically mediated, motivated human experience and activity—without either declaring their subject matter in any way disembodied and “spiritual” or pretending that their explanations are necessary *and sufficient*. See my two chapters on Freud and mind–body.

Psychiatry's Sickness and Its Biological Cure: A Functionalist Approach to the Mind-Body Relation*

[If a psychiatrist] thinks he can exclude philosophy ... he will eventually be defeated by it in some obscure form or another—Karl Jaspers^{16a}

* This part of the chapter takes off from two prior papers: (1) “Mind-Body and the Future of Psychiatry,” *Journal of Medicine and Philosophy* 15 (1990):41–73. This was presented in 1989 at a symposium presented by the Association for the Advancement of Philosophy and Psychiatry; at the American Psychiatric Association 1989 Annual Meeting; and in 1990 at Psychiatry Grand Rounds, Columbia University School of Medicine. (2) “Psychiatry's Sickness and Its Biological Cure,” *Psychiatry: Interpersonal and Biological Processes* 60 (1997): 89–99. An initial version was presented at the First World Symposium on Philosophy, Psychiatry, and Mental Health, Linacre College, Oxford University, June 28–30, 1991. A later version was presented at the 1993 American Psychiatric Association Annual Meeting in San Francisco.

Introduction

In extending health-illness-disease and healing tropes beyond their usual range, I follow time-honored medical footsteps, for doctors' secularizing forebears abducted them from their hoary religio-moral homes where they had signified states of cosmic and societal, as well as individual, right order or balance versus disorder or imbalance. Consider the ancient Egyptian concept of "*Maat*" (and also the origin of the original Greek concept of "cause"—*aitia* or *aiton*, source of our "etiology").

Lately, certain philosophical pundits have turned diagnostic, therapeutic, and even necroscopic gazes on professional philosophy itself, as did those such as Nietzsche before them.¹⁷ Like such nosographers as Jaspers, I deem psychiatry and philosophy sick when they fall into either apodictic hard shells or skeptical chasms.

Some time ago, I applied historico-philosophical and social scientific perspectives to psychiatry's hygienic and pathological concepts.¹⁸ Rather than idealistic strivings for sempiternal and pancultural definitions of these terms, I advocated a Wittgensteinian¹⁹ mapping of their manifold historical and contemporary usages, contexts, and family relations. The present discussion neither rehearses the previous ones nor regrips the multidisciplinary nettles surrounding the ontological status of these constructs. See S. Gilman's and G. Berrios's chapters, this book.

"Functionalism," the proposed treatment, began assuming its current theoretical contours at the hands of William James.²⁰ It underwent subsequent operational sophistication in Adolf Meyer's²¹ "psychobiology" and consummate conceptual and instrumental refinement with George Engel's²² "biopsychosocial" paradigm.

Functionalism is primarily a methodological orientation. Procedurally plural, it demands theories, concepts, and methods appropriate to human phenomenology and behavior. It may remain agnostic on the ontology of "mind" or take any of several metaphysical stances. Frequently it adopts a minimal, or noneliminative, materialism ("*but for matter/energy, nothing in the universe would exist*"), construing mentation as an emergent level of sufficiently intact embodied brain functioning. Metaphysical functionalism, on the other hand, diverges from the foregoing by declaring psychology's absolute independence from biology and asserting the "realizability" of mentation by physical systems as different from persons as computers. This is not addressed further. See, however, Penrose's and Searle's²³ cogent arguments against it. *Popper suggested that those wanting to develop a completely humanoid computer would be well advised to send it through the precise evolutionary process that produced embodied human minds!*⁸

Though not necessarily forsaking my prior version of dual-aspect monism, I ignore it for the purpose at hand—marshaling epistemological, scientific, and clinical support for a genuinely *biological psychiatry* and *psychiatric medicine*. Although this part of the chapter is concerned with philosophical as well as theoretical, investigative, therapeutic, and moral/ethical issues, it does not view these vantage points as sharply separable. There are three sections: "Preliminary Concerns," "Reductive Visions of Neuroscience and Molecular Biology", and "Human Biology and Biological Psychiatry."

Preliminary Concerns

Antithesis and Synthesis: Initial Issues

As previously, I oppose reductionistic approaches to the mentally disordered—whether psychological, sociocultural, or neurobiological. Given its chronicle of concurrent and consecutive kingdoms contending for transient hegemonies to the eternal deficit of the whole, psychiatry desperately needs comprehensive conceptualizing.

I envision psychiatry as an integral and indispensable part of medicine, and the latter as applied "*human biology*" widely conceived—including ethological-ecological (i.e., "psychosocial") and evolutionary perspectives, as well as biomedical, neurobiological, and molecular/genetic ones. A species-specific physiology, ethology, and ecology of *Homo sapiens sapiens* must encompass the image- and symbol-laden dimensions of both personal experience/behavior and its sociocultural surround. In short, the naïve and energy-wasting

warfare between “biological” and “psychosocial” psychiatrists, is founded on a breathtakingly constricted construct of *human* biology and on an unacknowledged “mind”-“body” split. As we shall see, such a straitened signification of “biology” is inadequate for many mammals, much less for primates and persons.

For functionalism, mentation and behavior are phenomena of the integrated organism-interacting-with-ambience. Its legion component processes and planes of progressively complex organization and “emergent” activity are in ever-ongoing, reciprocally causal, and virtually inextricable interrelations. Thus, there is no temporal freeze-framing or abrupt bounding into autonomous structures and functions, and hence none of the lockstep, unilinear, master causalities proclaimed by our various reductionisms (recall “intersectional causation”).

Often judged inoperably ambitious or mindlessly syncretistic, Engel’s biopsychosocial model actually accents attitudes and vantage points more than specific theories and facts. For a physician to master the latter, from chemistry through physiology to psychosocial science, is patently impossible. Some theoretical and practical focus is necessary and inevitable. Nor does it intend to dictate algorithmic treatments for patients’ multifarious modes of distress and disability. Rather, to paraphrase and summarize, it enjoins the following:

Be aware of the scientifically and clinically pertinent “bio”-medical, neurobiological, and psychological-sociocultural purviews and paradigms but, above all, (1) perceive, think, and act empathically and comprehensively, (2) watch for cues demanding further information from each stance, and (3) plan subsequent explorations and interventions accordingly.

In many ways a moral, as well as an epistemological and clinical-scientific, outlook; it appreciates medicine’s need for accompanying ethical and humanistic perspectives.

“Given” and “Subject Matter”

In order to become optimally scientific, psychiatry must adequately conceive of its “given” and “subject matter.” *Its given, as all medicine’s, is the mutually influential relationship with the patient, as experienced and interpreted by the clinician or researcher. As a function of what I have termed “intersectional causation” and “perspectival realism,” the doctor’s apperception of the patient reflects the interface between both parties.*²⁴ From the clinician’s side, there are his or her affective-cognitive, motivational, defensive, and theoretical lenses (including “countertransference”) and his or her attitudinal, behavioral, and methodological impact on patient presentation and the sort of “data” obtained. *Hence, the injunction that physicians “know and heal” themselves. From the help-seeker’s side, there come his or her constitutionally, historically, and situationally determined mental set and verbal/nonverbal behavior (including “transference”); the anamnesis, with its psychosocially and biomedically pertinent patterns; and the “raw material” for indicated laboratory, radiographic, and psychometric tests.*

From the foregoing given, we “abstract” (because we cannot know it as does our counterpart) our “subject matter”: the patient’s being as experienced by himself or herself. It is distressed and dysfunctional persons, including their attributions for their conditions, that we must first sensitively understand, in order to then optimally explore, comprehend, and ameliorate their subsidiary pathologies. That is where we begin and whence we return, as Eisenberg’s²⁵ and Kleinman’s²⁶ distinction between “disease” and “illness” grasps.

The sick individual’s behaviors cannot even begin to be described without knowing something of their meaning and motivation. All our investigations should subserve comprehensive “diagnoses” of individual patient problem constellations in their biographical life contexts. *Hence, encounters with ill persons constitute our most radical empiricism.*

Unfortunately, this can be overlooked by disciples of any of the psychiatric denominations. The *ur* goal of medicine, as Pellegrino and Thomasma²⁷ remind us, is “a right and good healing action” for the particular sufferer before us. Consequently, ours is a finally practical and moral endeavor. It draws on indispensable humanistic purviews and the best available biomedical, neurobiological, and psychosocial science to the end of optimally enabling each disordered life-world.

Lest this chapter seem pessimistic or hypercritical, let me say that I realize psychiatrists practice the youngest and most complex medical vocation. Our superlative problems and possibilities lie partly in us, but more in the expanse of our subject matter. We have accomplished much in barely two centuries as an organized specialty. Moreover, the field's antitheses and oscillations make its history no different from that of the rest of civilization and its enterprises. On larger paper, our extremes level out and the slope moves optimistically. Still in our youth, perforce we have experimented with myriad modes of apprehending disorder and helping the sick.

Theoretical and methodological evolution needs multiple forms to "select" from. Hence our historical and contemporary welter, our reactions and counterreactions, are necessary. Syntheses, always partial and open, come slowly and strenuously, when they come at all, and from the very polarities they seek to subsume. They, in turn, are eventually replaced by improved theses, antitheses, and syntheses, and so on. It should be possible to eliminate error, construct more coherently comprehensive and veridical theories, and enhance healing efficacy—without becoming either nihilistic or dogmatic.

Chronically worrying about whether we are doctors in a sense that would satisfy our most captious critics, we really stand and strive for the most embracingly humanistic and scientific physicianship imaginable: that for the lived brain/body-in-ambience. See H. Weiner's two chapters.

Reductive Visions of Neuroscience and Molecular Biology

Now to the latest in a long line of sparsely clad and expansionistic emperors, each with still-vocal retainers—the *reductionistic version* of molecular/pharmacological psychiatry. Its gargantuan literature plays mostly variations on a single strain: more and better neuroscience will crack the ancient mind-body cryptogram, yielding all-powerful pharmaceutical and genetic treatments. Such is regrettable, for this branch has borne tremendous scientific and clinical fruit. Cultivated nonimperialistically, as part of a broadly biomedical and psychosocial program, it helps furnish the balanced psychiatric medicine advocated by Meyer, Engel, Lipowski,²⁸ and Nemiah.²⁹ Otherwise, it is as harmful as the previous psychoanalytic and social-community tyrannies.

For a research neuroscientist who is exploring molecular biology and neural structure for what it will contribute to a more scientific and integrated psychiatry (including psychoanalysis and psychotherapy), see the discussion (below) of Eric Kandel. The discussion is interspersed with comments on his only psychiatric predecessor to also win the Nobel Prize, Julius Wagner-Jauregg, including early "somatic" psychiatric treatments and Kandel's discussion of Austria's "denial" or "repression" of its prepotent role in the Holocaust versus the response of Germany, which has done a much better job of dealing with its guilt, and of course considerations of Kandel's scientific achievements and predictions for psychiatry and psychoanalysis.

As mentioned, Erik Kandel is only the second psychiatrist to win the Nobel Prize, in Physiology or Medicine (in 2000). As a basic scientist and theoretician whose work is very likely to bear diagnostic and therapeutic fruit, he is superior to the first winner (in 1927), Professor Julius Wagner-Jauregg (1857–1940). Wagner-Jauregg was formerly of the University of Graz (then Austria's second-largest city), where he succeeded Richard von Krafft-Ebing (the influential sexologist) as professor; he moved to the University of Vienna as professor of psychiatry and subsequently dean of the Medical Faculty.³⁰ Since he has been largely forgotten; some digression is in order. He did not start with the malaria-fever therapy of neurosyphilitics (who then constituted 10% to 20% of most mental hospital censuses in Europe and North America) until relatively late (1917), though its success rates had come to European and American attention by the early 1920s. In my aforementioned comparison of him with Kandel, I do not mean to denigrate Wagner-Jauregg's achievement: the first major successful "somatic treatment" in psychiatry, and for a patient population that had otherwise been pretty much written off. However, he made no claims to be a theorist and basic-science investigator. The eventual discovery and application of penicillin, including in very early cases of syphilitic infection, prevented the disease from progressing to spinal cord, peripheral nerve, and cerebral syphilis (i.e., "general paresis of the insane") and eventually replaced malaria-fever therapy for neurosyphilitics as well. Still, there was a considerable time lapse between Fleming's (and others, such as

Florey’s) discovery of penicillin and its antibiotic effects and its widespread pharmaceutical production, such that malaria-fever treatment had an extra interim of use. Wagner-Jauregg’s study of cretinism, then a common cause of neuropsychiatric disorder in Central Europe, was conducted more scientifically. He obtained large supplies of thyroid tablets from Burroughs-Wellcome, and such patients were treated for the first time. Unfortunately, his public-health plea for iodized salt to prevent endemic goiter, was unsuccessful until after his death.

Of course we cannot proceed with our discussion of earlier-20th century “somatic” psychiatric treatments without mentioning the 1935 “psychosurgery” of the Portuguese neurosurgeon Egas Moniz—and of his American and other disciples; including psychiatrists such as Walter Freeman (a founder of the American Board of Psychiatry and Neurology), who began doing a simplified form of Moniz’s procedure themselves. Moniz’s “prefrontal lobotomy” cut important fibers connecting the frontal and prefrontal lobes. Results were equivocal, with some improvement patients with severe schizophrenia, bipolar disorder, and florid obsessive-compulsive disorders. Nevertheless there was a high price to pay; including a coarseness of personality and inability to recognize or control their socially-inappropriate behavior. Also, while general intelligence remained fairly intact; creativity was blunted. Moniz was awarded the Nobel Prize in 1949. As late as the 1970’s several neurosurgeons in Boston were performing cingulotomies on depressives and obsessive-compulsives. See Valenetein’s history of psychosurgery, referenced in “Addendum F” in Chapter Two.

Other “somatic” treatments of neuropsychiatric disorders (e.g., schizophrenia, mania, and melancholia)—electroconvulsive therapy (ECT), insulin shock, and metrazol shock—did not become current until the mid-1930s. Insulin shock was very physician time-intensive; metrazol shock was dangerous and its use gradually faded out; and ECT carried the potential for vertebral and other fractures. This last problem was solved around 1940 by two Medical College of Georgia (Augusta) neuropsychiatrists, Hervey Cleckley and Corbett Thigpen, who introduced curare-modified (a muscle-relaxant) ECT. (Thigpen and Cleckley wrote *The Three Faces of Eve* in 1957.) In 1950, in *The Mask of Sanity*, Cleckley codified the diagnosis of “psychopathic character” (later called “antisocial personality disorder”); just as Kraepelin had done earlier for “dementia praecox” and “manic-depressive illness.” The last revised edition of *The Mask* was in 1981; not long before Cleckley’s death.

Cleckley was an interesting man. He was a football star at the University of Georgia (Athens) and valedictorian of his graduating class. He used his Rhodes Scholarship to take a “First” in Classics at Oxford. He enjoyed reading Attic Greek and Ciceronian Latin philosophy, literature, and history into his eighties; and composed Greek sonnets for several generations of female faculty at the Medical College of Georgia (MCG); where he became founding chairman of one of the older Psychiatry and Neurology Departments in the country, in 1939—a position he held until the mid-1950s; when he elected to resign in order to devote full-time to a burgeoning private practice (he and Thigpen having achieved world notoriety for their expertise in ECT by that time). Cleckley had already been director of the large MCG-affiliated Lenwood Veterans Administration Neuropsychiatric Hospital prior to being invited to chair the new academic department in 1939. Many of the hundreds of case studies of “psychopathy” were done at the latter hospital and at the Georgia Central State Hospital in Milledgeville (the world’s largest, with a peak census of over 16,000 in 1960). In 1957; the year *Eve* appeared, the prolific writer drew on his knowledge of the classics, as well as of clinical psychiatry, to produce *The Caricature of Love*, a book on what are now called the “paraphilias.” It is a brilliantly written and incredibly learned treatise, which, unfortunately; has never received anything like the readership of *Eve* or of the several editions of *The Mask*.

To return to Kandel, he trained during the latter 1950s when psychoanalysis was still academically hegemonic. He considered becoming an analyst for a time, but he grew disenchanted with the then-current lack of interest among analysts in devising empirical tests of their theorems and therapy, a situation that, as mentioned, has changed very significantly in the last 25 years. But it was far from the case at that time, so he embarked on then-underfunded, and little psychiatrically appreciated, neuroscientific research. At the National Institute of Mental Health (NIMH) and elsewhere; he learned from the best in the field—theory, information, and a variety of rigorous wet-bench approaches. His 2006 *In Search of*

*Memory: A New Science of Mind*³² is at once an exposition of the research track he followed and of his and others' important scientific findings and an enthralling life-and-times autobiography—a general intellectual history of neuroscience really (with retrospectives on early discoverers such as Broca, Wernicke, the great Helmholtz, and Ramon y Cajal, and so forth; but the really interesting part is his 45-year eye-witness history); and nostalgic reminiscences of the Vienna of his boyhood. He makes the personalities of his many now-famous colleagues come to life with a literary verve all too rare for most scientists; along with their intellectual achievements and our ethnographic induction into the vibrant sociality of high-level laboratory life.

Kandel was much kinder than he could have been toward the gentile mayor of Vienna's hypocritical attempt to take ownership of this erstwhile Jewish lad, whose family fled post-Anschluss Vienna for their very lives (never mind the unrecovered funds and lost possessions, for which most Austrian Jews have never been compensated). Kandel was struck by the pervasive Austrian "denial," "collective repression," or whatever, of the Holocaust and Austria's important role in it—out of all proportion to its tiny fraction (8%) of the German population.

Despite this continued national "repression," psychoanalysis has made some comeback in Austria. However, not so much as in Germany, where psychoanalytic institutes and societies have been flourishing, as never before in its history. This is partly due to the German government's financing of training, beginning as early as 1964, and its health care system's funding of a surprising numbers of sessions—of not only psychoanalytic psychotherapy, but actual on-the-couch analysis; though it has been cut back some recently. M.D.'s certainly figure in German psychoanalysis. For example, Thoma and Kächele, at the University of Ulm, have written one of the most scientifically, as well as clinically, rigorous two-volume textbooks of psychoanalysis anywhere (the first on principles, and how techniques derive therefrom; and the second on applications in practice).³¹ They head up a very large clinical and extraclinical empirical research effort there. However, and Freud would certainly be pleased, the majority of German analysts or analysts-in-training are laypersons, PhD's in social and experimental psychology, sociology, cultural anthropology, history, philosophy, linguistics, classics or literature, and even theology.

Thoma and Kächele remark that, while there was clearly a period of culturally constituted repression of the Holocaust (and indeed as much of the war as possible) in Germany, by the early-1960s, there was an ever-increasing acknowledgment of the horror that Germany begat. The rise of Freud's psychoanalysis, which he feared would become an exclusively "Jewish science," in gentile Germany is a tangible sign of some of the group-psychological work that Thoma and Kächele claim the Germans have engaged in. In fact, they say, if anything; among German analysts and trainees, there is an over-reverence for Freud and hesitancy to criticize his texts—probably, I suppose, a sort of "reaction formation" out of lingering guilt. This is as opposed to many analysts and trainees elsewhere, who seem to develop their professional identities by opposing some of Freud's key ideas, his obvious failure to have analyzed himself—per impossible—out of his own neurosis, and his self-avowed weaknesses as a clinical analyst, including having "too much to be the father," "talking too much," brow-beating analysands (such as the Rat Man) with grossly premature and insufficiently evidenced interpretations, and so forth. We must also encompass, among many other types and examples of Freud's serious clinical errors, wrecking Dora's treatment out of his own countertransference, gross suggestion to analysands, problems with working in the transference, too-frequent contact with friends or family members about his analytic cases, a general difficulty recognizing when a patient was pre-psychotic and definitely not a candidate for the couch (for example, the Wolf Man and the would-be American analyst Dr. Frink, both of whom were made much sicker by Freud's attempt at "classical psychoanalysis"), and so forth.

No wonder the philosopher Adolf Grünbaum has had a field day trashing, root-and-branch, any empirical probity of psychoanalytic theories and technique whatsoever. He has only read Freud's texts and case histories, and, conveniently enough, has made absolutely no effort to familiarize himself with psychoanalysis as actually practiced in 2006, or to read the mass of post-1970s empirically sophisticated intra-clinical and extraclinical tests, many quite supportive of analytic propositions, or to look at the much more scientific (including audiovisuals) assessments of analytic process and outcome. See Chapter 26, note 43.

In any event, to return again to Kandel’s work, he has wisely chosen to focus on the molecular biology/genetics, neuronal and synaptic transmission, and neural circuitry of phylogenetically older and less-complex organisms with relatively large neurons and circuitries—such as the giant marine snail, with neuronal clusters in the abdominal ganglia—pertinent to the gill-withdrawal reflex he wished to stimulate (and those subserving associated reflexive-tail movements).³² Kandel first macroscopically/microscopically identified the neural concentrations and circuitries in *Aplysia pacifica*. He alternately sensitized and habituated *Aplysia* and engaged in classical conditioning of the gill-withdrawal reflex and the concomitant tail/gill-withdrawal reflexes. Kandel studied and compared the molecular biology of the results of conditioned or sensitized learning, which led to short-term versus long-term, *performative* memory (a type of memory, generally unconscious, we share with *Aplysia*—e.g., the ultra-complicated movements, balancing, etc., of riding a bicycle). This is as opposed to “declarative” memory, which *Aplysia* lacks—for example, our recollection of names, persons, events, dates, and so on, which is generally unconscious, too, unless an environmental stimulus, or our own attentional process, or a problem-solving endeavor calls them up.

Kandel studied both the molecular biology and the effects on synaptic strengths and neural structure of *Aplysia*’s short-term and long-term memory. The molecular biology is complicated, following the (usually serotonergic) neurotransmitter stimulus—and resultant second-messenger involvement, along with a number of enzymes—including “repressors” that must be deactivated, the mRNA-mediated formation of new proteins, and so on. Suffice it to say that short-term memory is cytoplasmic, and does not involve the nuclear DNA. By contrast, long-term memory involves the originally environmental stimulus (e.g., the classical conditioning of the gill-withdrawal reflex), as mediated by neurotransmitter and associated cytoplasmic events, *with the crucial difference that it affects the nucleus and its DNA*. For years biology taught that nuclear DNA was well insulated against environmental influences, as well as from many cytoplasmic events. That dogma has now been dashed on the rocks of Kandel’s research.* Moreover, he found that, whereas short-term memory involves the increased strength of synaptic transmission; long-term memory involves the actual formation of new neural structure—especially new axons and new axon terminals, and a corresponding formation of new dendrite extensions. Since evolution is fairly conservative at the molecular and neural structure-formation levels, much of this applies to human beings as well.

Kandel is not, in principle, either a molecular biological reductionist or a reductionist to intraneural or interneural events. He has simply chosen to work with an appropriately simple organism and to mine that ore for all it will yield. He explicitly cautions that we must simultaneously engage in “top-down” researches as well.³³ Since psychotherapy is a learning experience, involving long-term memory, it stands to reason that it can contribute to the building of new neural structure as well. And recently there have been enticing correlations between successful psychotherapy and brain-imaging indices. Brain-imaging studies have found that obsessive-compulsive disorder (OCD) is associated with increased metabolism in the caudate nucleus. Kandel reports that Lewis Baxter and his colleagues at UCLA have found that successful treatment of OCD by cognitive behavioral psychotherapy or by antidepressants inhibiting the uptake of serotonin each reverses the increased metabolism of the caudate nucleus. One more excellent example: Brain imaging of depressives commonly reveals decreased activity in the dorsal side of the prefrontal cortex and increased activity in the ventral side. Again, either psychotherapy or medication reduces these abnormalities. Daniel Amen also cites a number of correlations between similar brain-imaging changes and positive results with either psychotherapy or pharmacotherapy.³⁴

Kandel notes that there are four major forms of brief psychotherapy: (1) Beck’s cognitive behavioral therapy, (2) Klerman and Weissman’s interpersonal therapy (ITP), (3) Sifneos’s and Davanloo’s brief psychoanalytically oriented psychotherapy, and (4) Kernberg’s transference-focused psychoanalytic

* The maize-geneticist and nobelist, Barbara McClintock, also helped demolish molecular genetics’ aptly so-called “Central Dogma” (see her biography by psychoanalytically-oriented biologist/science historian, Evelyn Fox Keller, cited in my Chapter Two); as has virology’s discovery of the action of “retroviruses” (such as HIV).

psychotherapy. Kandel thinks that there are different clinical criteria for choosing among them. He predicts that brain-imaging studies will help to evaluate psychotherapeutic outcomes of these and perhaps help to determine who should have which. He is a great advocate of additional infant/childhood longitudinal developmental studies. He is also committed to correlational studies between what he takes to be key psychoanalytic propositions and biological studies, including: unconscious mental processes and unconscious declarative memory; psychic determinism (including that of parapraxes); the role of unconscious processes in psychopathology; and the therapeutic effect of psychoanalysis itself. See his recent book on psychoanalysis and biology, with excellent commentators on each essay.³⁵

Some Logicolinguistic Problems with Neuroreductionism

How, to begin with, do reductionistic “neurophilosophers”—for example, the Churchlands,³⁶ who are psychologically eliminative materialists, reconcile (1) positions proclaiming image-laden and symbolically mediated experience and activity nonexistent, or else merely epiphenomenal and causally impotent; with (2) the fact that this (i.e., their “life-worlds”) is where they themselves breathe and move and the lens through which they apperceive anything whatsoever? Moreover, these instances of Schopenhauer’s “theorist who forgot to take account of himself” do not appreciate that their premise is logically inconsistent with any attempt to verbally, or even gesturally, convey it—and, likewise, with any impact it could conceivably have on auditors or readers who would, necessarily, be symbolically insentient and representationally immovable anyway!

In other words, translating motivation and meaning into purely neuroscientific or molecular biological language is still *an image-laden and symbolically mediated activity and experience* (i.e., conceptualizing, theorizing, and communicating). As such, the *very act of neurobiological theoretical reduction* proves both the existence and causal efficacy of what it denies and, *ipso facto*, refutes its own scientific, or rather *metaphysical*, mission.

Nevertheless, what if, almost unimaginably, the Churchlands’ images, metaphors, and wordings were to permeate ordinary discourse and visions of “personhood”—for example, “My C-fibers are stimulated” or “My catecholamines are imbalanced.” instead of, “Ouch, that’s hot!” or “I’m down”? Then they would still be the sentiently representational phenomena that the new diction seeks to fine away! Furthermore, this neurobiological discourse would be deficiently descriptive and scientific: for burned or depressed individuals do not directly apprehend the activity of their C-fibers or catecholamines. Hence, they cannot report on their statuses per se, but only as they are mediated by cerebral “central processing”—that is, image-laden/symbolically mediated, apperception/interpretation.

Finally, if such imaging and symbolizing, our sole immediate data of awareness, are epiphenomenal rather than integral to body/brain functioning; then what are they? Huxley’s “smoke” from the smokestack, or “water vapor” from the boiler (to use his nineteenth century locomotive analogy of eliminative materialism)? “Steam,” “spirit,” “foam,” or whatever would mean then that their “neurophilosophy” is really metaphysical dualism—something it professes to abhor! If, on the other hand, such mentation (including consciousness and self-reflective awareness) is an actually existing aspect of the highest level of embodied brain functioning, then, how, again, as James asked, can it be causally inefficacious and yet countenanced by natural selection? Fortunately, these questions need not be answered by biopsychosocial functionalists—because such queries do not arise for them. For their part, (1) *image-laden and symbolically mediated molar activities simply are incarnate brain functioning at its most organized stratum of ongoing-interaction-with-world* and (2) *psychosocial science is, in a sense, that branch of neurobiology (!) necessarily coaddressing it.*

Of course, against all linguistic and epistemological odds, “neurophilosophers’” apparent metaphysical, scientific, clinical, commonsensical, and moral howlers may prove somehow correct. If so, then it would be probably the first time in history that one level of genuinely scientific explanation has been wholly supplanted by another. It also would entail collapsing all planes and purviews from the organismic-environmental and psychosocial, through the systemic bodily and macro- and microanatomical/physiological, into a neuromolecular basement. But by then there doubtless will be atomic/subatomic excavators to square off with. Indeed, there already are: a few psychiatrists declare that the acausal,

radically random, interpretation of quantum mechanics explains all brain functioning, and even permits “free will” (however it squares with radical randomness)!³⁷ And all this with the most complicated organization of matter and energy in the universe—the human brain, embodied-in-ambience!* It is one thing to mine, for all its worth, the neuroscientific and pharmacological vantage point, and quite another to make it an exclusivistic metaphysical credo.**

Further Pitfalls

Neuroreductionists generally stress unicity from below, believing genetic, molecular-synaptic, subcortical, or component-cortical phenomena fundamental in most mental disorders. This ignores that pathology often appears to begin at the highest (symbolically mediated) plateau of molar organismic activity-in-interaction-with-surround. Component and lower-level processes are then impinged upon, becoming part of the subsequent causation and pathophysiology; and eventually contributing back to the overt phenomenological/behavioral and symptom/sign complex itself. When, on the other hand, pathogenesis begins “below” and then spreads “apically” and molarly, then the former is etiological and the latter pathophysiological and symptomatic. But here, likewise, the altered “pinnacle” turns around to affect the originating processes themselves. Think of classical obsessive-compulsive symptom neurosis as likely instantiating the first path, and post-encephalitic obsessionalism the second; or of mania or major depression, with subcortical-systemic, central cortical, and ambient factors playing to and fro.

Presently, we can only grope after the complex and multiple intercausations involved. And “causation” is more apt than “causes,” for the latter are abstract, though perhaps heuristically necessary, clinical-scientific breakdowns of polyprocessual continua. It was, after all, Hume’s oversharpe separation of “cause-events” and “effect-events” that led him into his radically skeptical notion of cause-and-effect, as no more than psychological expectations based on prior experience of successions between events. (And yet, illogically, he espoused a hard psychological determinism!) Consider the increasingly popular “interactional” model of personality and psychopathology development. This, and more, suggest a now unfathomable genetic, constitutional/temperamental, molecular, anatomic-physiologic, and environmental nexus operating in each part of the predisposing, precipitating, and maintaining processes, as well as in any stabilizing, worsening, or recovering responses to treatment. Hence scientific research, and science-applied clinical art, confront nearly inextricable causal-consequential-causal networks and flows.

Because of this, it can be hazardous to bolster theories of nosological and etiological kinship with similarities in peripheral biochemical measures. This has been done, for example, with anorexia nervosa and major depression—both showing increased serum levels of cortisol and growth hormone. But it is now clear that a bewilderingly circular array of brain–body neural, neurohumoral, endocrine, and metabolic factors codetermine such measures, and that these processes are quite different in the two disorders.³⁸

Similarly, numerous schizophrenia research centers are dethroning (or rather enthroning other neurotransmitters there too) the hallowed dopamine hypothesis. At least several additional neurotransmitters seem significantly involved, including norepinephrine, serotonin, and acetylcholine, along with neuro-endocrines and peptides.³⁹ In general, concepts of *dysregulation* appear more apt than those of *simple excess or deficiency* (e.g., the major affective disorders).⁴⁰ The latter reminds one of age-old humoral theory, founded on balance and imbalance.

* Throughout, I ignore contemporary physics’ raging debates over the nature of matter and energy or whether matter can be said to “exist” at all.^{37a} In any event, it is hard to know the relevance of ultraissues such as these and the quantum controversies to psychiatry’s macro- and micro-concerns. If we take embodied human sentience and behavior as our concern, then it is of course quite possible to remain agnostic on the *ur* stuff of the universe.

**Paul Churchland may have grasped some of the abovementioned problems; for a more recent work veers from a psychologically-eliminative materialistic reductionism; toward an identity theory which need not exorcize consciousness: *The Engine of Reason, the Seat of the Soul* (MIT Press, 1995).

Finally, when moving from purely neurochemical or endocrine purviews to psychoneuroendocrine and, most recently, socioendocrine vantage points, we encounter reciprocal causality with a vengeance. This last— primarily primatological and ethological—subdiscipline has garnered much on the interface between psychosocial and endocrine parameters.⁴¹ For example, mammalian, primate, and human phenomenological/behavioral data suggest strongly that increased levels of hormones such as testosterone succeed, as much as or more than they precede, sociobehavioral phenomena such as sexuality and aggression. This knowledge might have prevented the morally, clinically, and scientifically embarrassing castration of certain sexual offenders.

With post-stroke depressions, some series suggest localizational factors (e.g., degree of left hemispheric anteriority),⁴² whereas others do not.⁴³ Until studies sufficiently attend to the relevant historical and current psychosocial, biomedical, and neurobiological parameters; then it will be hard to know. Since neither all post-stroke depressions have such localizations, nor all such localizations depression; it is probably seldom unifactorial. The same multicausal ambiguity often presents in dementia, brain injury, and toxic constellations of affective, perceptual, cognitive, motivational, and personality disturbance, as well as in some epileptic and basal gangliar conditions. Moreover, as philosopher of science Rom Harre and associates have shown with institutionalized primary dementia patients, they make considerably more sense in the presence of an interested, patient, empathic listener and facilitator than with clinicians who pop in, do a mini-mental status exam, and pop out again.

Then there is the matter, as previously touched on, in the aforementioned and many toxic states, of the nonmeaningfully determined release of hitherto masked, or only moderately expressed, image-laden/symbolically mediated cortical phenomena: paranoid traits; obsessive-compulsive styles or symptoms; primeval recollections; and previously warded-off conflicts, preoccupations, motives, feelings, and fantasies. (Of course, this “decompressed” mentation/behavior itself may be altered, especially in motivational and affective intensity, by the releasing neuropathology.) Such disinhibited material then often intertwines with, or is difficult to distinguish from, persons’ meaningful reactions to their compromised statuses. Think of pseudobulbar palsy patients’ responses to their otherwise meaningless and non-“subjectively” experienced affective discharges, or of early dementia patients’ anxiety and depression over their cognitive deterioration, which latter may worsen yet further because of them. In their turn, perceptual-cognitive and praxic deficits can subserve motivations, defenses, and “secondary gain.”

Neuroanatomical reductionism, for its part, reflects at least two philosophical and scientific “category” errors: (1) collapsing functions into structures and applying parameters pertinent only to the latter (e.g., mass, locale, spatial extension) to the former; and (2) conflating molar functions (e.g., respiration, mentation) into their substructures and processes.

Such gaffes breed controversies such as whether depression is “in” certain molecules or perisynaptic territories, the hypothalamic-pituitary-adrenal axis, locus caeruleus, limbic system, and so forth. One could spin out similarly fatuous scenarios for congestive heart failure, diabetes mellitus, hypertension, and chronic obstructive pulmonary disease, as for any number of multilevel, multisystemic, multicausal, organismic-environmental syndromes and diseases. “Depression,” like any affect, mood, or affective constellation, is a molar experience and activity. The most fleeting self-reflection shows that experiencing and ideation (including the catecholamine theory) are not localized in organs, milieus, or anywhere else.

Neurologists have long known, as earlier discussed, that the clinical manifestations of localized brain lesions reflect interactions between damaged areas and remaining intact brain itself. And there are many instances of functional plasticity—at times after gross cortical or subcortical damage. In this vein, Penfield⁴⁴ knew better than to think that electrosurgical probes gave him direct contact with the stimulated brain sectors themselves! His subjects’ contexts and “mental sets” mediated and codetermined their post-stimulation phenomenologies—as in studies of the experiential/behavioral effects of epinephrine and other injectables. Thus, it was embodied, whole brains-in-ambience, person/patients, that experienced and communicated the results—just as it was the body-brain Penfield, and not merely “its” primary and secondary auditory-association areas, that apperceived their reports. Indeed, after the hand area of the sensorimotor homunculus was stimulated in one patient, the latter said to Penfield, “I didn’t move my hand;

you did.” In short there is an ineradicable phenomenological distinction between self-determination and a professor with an intrusive neurosurgical probe.

Finally, as far as I know, no subreductionist has shown exactly how we get from that which we conceptualize neurobiologically to molar experience/behavior and our symbolic characterizations of it. This applies to the molar behaviors and “phenomenologies” of the “higher” mammals and nonhuman primates as well. Many of these possess quite complicated social structures, rituals, territorialities, and capacities to recognize elaborate kinship and community networks. Apes use complex signs and simple tools, long considered peculiar to acculturated humans; domesticated chimps have even learned to perceive, empathize, think, and communicate symbolically.⁴⁵ Again, reductive neuroscience is insufficient to numerous animals, much less to persons. Reality ill brooks theoretical cravings for unicity.

Ockham’s razor is not an assertion that the simplest (*often the most simplistic*) theory is invariably the best; but that “theoretical entities should not be multiplied beyond necessity.” However, if the “object” of study is the most complex that we know of—again, the imaging, symbolically mediating human organism in a physical, social, and symbolic ambience; then the simplest adequate theory or, more likely, *theoretical constellation* will be quite complex indeed.

Human Biology and Biological Psychiatry

The Integrated Organism

At the molar plane, there are no separate “spheres” of biology and psychology; there is a sense in which even “mind” and “body” are constructs. Psychiatrists study and work with one reality: the sentient, imaging, and symbolizing human organism, with a phylogenetic and ontogenetic history, relating to an environment with an image-laden/symbolic dimension as well. And yet here enters the paradox: to grasp this unitary realm, “integrated at the symbolic level” (as Meyer liked to say), we require a variety of not necessarily unintegratable venues.

The psychosocial, neurobiological, and biomedical basic and applied sciences share the same unit of study and intervention—the mentating organism interacting with world. This process is so inextricable that the concept “organism,” at whatever stage of evolutionary complexity, always entails and comprises “in ambience.” When that organism is *Homo sapiens sapiens*, his or her species-specific “physiology,” ethology, and ecology must, as asserted, embrace the symbolizing activity of both individual and surround. And although any organism’s history is integral to biologists’ studies, humans’ representational dimensions confront them with specifically human modes of historicity, demanding different methods and models.

That a whole human body-in-ambience thinks, wills, feels, acts, and creates may be mysterious, but this is less so than notions that it is spirits or molecules that do. Mentation is an integral, ongoing, and necessitated property of the sufficiently intact human organism-in-milieu. If this is to be the “Century of the Brain,” then let it be that of the whole brain, embodied in world.⁴⁶

Theoretical and Therapeutic Ramifications

By now it should be plain that psychosocial, biomedical, and neurobiological avenues bypassing the patient’s experience are less, not more, scientifically and therapeutically competent. Unphysicianly and immoral, they ignore key arcs of their “subject matter” and hence overlook indications for supplementary information from complementary perspectives (whether biomedical, neurobiological, psychosocial, or ethical). Moreover, sensitive patients will feel insufficiently appreciated and understood, adversely affecting their conditions, therapeutic alliances, and the effects of the truncated treatments themselves—even with surgery and post operative recovery, as amply attested. Novelist William Styron⁴⁷ spoke of the harm done him by a psychiatrist in-hospital who only wanted to medicate him without human contact. Kay Redfield Jamison,⁴⁸ clinical psychiatric researcher and a bipolar; when being treated as an inpatient for severe suicidality; felt the psychotherapy was as important as the medication. Thus, humanistic medicine *is* scientific medicine. Ironically, certain neuroscientists, neurologists,

and neurosurgeons have emphasized this—Eccles,⁴⁹ Penfield,⁵⁰ Sacks,⁵¹ and Sherrington.⁵² Furthermore, the founder of a genuine American psychobiology was himself a long-time neuropathologist (Meyer).

Excepting the comatose, diseased “somas” are not met with, nor are disembodied diseased “psyches.” It is the person—experiencing, interpreting, and relating to an ambience (including the doctor)—who is disordered. Maximally elucidating his or her distress and disability demands traditionally neurobiological, biomedical, and psychosocial takings and tools.

There are no purely “neurobiological,” “biomedical,” or “psychosocial” ills, no more than there are solely “psychical” or “somatic” treatments. As experienced and enacted, all disorders and treatment responses, like all molar human activities, are “prepsychophysiological”⁵³; as conceptualized, they are “sociopsychophysiological.” This is bedrock for an integrated and embracing medicine—a moral/ethical, as well as a scientific and clinical, desideratum.

NIMH projects document similar symptomatic improvement in moderate depressives with either imipramine and “medication checks” or more formal psychotherapy; and combinations of both seem superior to either alone.^{54,55} Such findings are fathomable from a functionalist footing, as are monkey studies in which a variety of “phenomenological”/behavioral states (e.g., depression-like syndromes secondary to unavoidable stressors, conflict, or separation) are affectable either environmentally (“psychosocially”) or pharmacologically (“neurobiologically”).⁵⁶ Rats regularly petted by their researchers reveal both “phenomenological”/behavioral and (ante- and postmortem) systemic and brain biochemical differences from nonhandled controls.⁵⁷

As mentioned, Kandel suggested that the criteria for which psychotherapy to select for a given patient, as well as psychotherapy outcome studies, may increasingly use laboratory markers, brain-imaging indices, and other neurobiological data and theories in addition to phenomenological/behavioral criteria and psychosocial perspectives. In fact, that day is now dawning, as Amen⁵⁸ points out.

All this supports what an appropriately broadened definition of “biology” entails: that human psychotherapy, like its animal counterparts, is fundamentally biological. Nevertheless, this is hardly to argue that all psychiatric conditions will ever be etiologically, as opposed to semisymptomatically, treatable pharmaceutically. The so-called character neuroses are cases in point. Although they possibly possess heritable or other constitutional predispositions, I doubt that they generally reflect either discrete or diffuse brain lesions or dysfunctions. Rather, they are idiosyncratic and largely historically determined patterns of maladaptive perception/interpretation, motivation, defense, and interpersonal relations, probably corresponding to incredibly widespread cortical-subcortical constellations of *functionally intact* neurons and neural circuitries. *Consequently, psychotherapy will likely remain their biological treatment of choice.*

In any event, as practitioners, we do not strive to totally explain either the sufferer’s condition or its therapeutics. Instead, we try to discern which evidentially based theoretical programs provide optimal levers to the particular patient’s improvement. Thus, for therapeutically heuristic purposes and in certain pathologies; the neurobiological, biomedical, and psychosocial approaches may each have some independence and self-sufficiency. Even so, without an encompassing biopsychosocially oriented evaluation, we cannot discern the requisite investigational and therapeutic maneuvers from our various subparadigms.

Further Implications and Consequences

Biomedically, neurobiologically, or psychosocially reductive foci and “mind”-“body” dualisms foster the continued specious separation of “psychiatric” disorders from so-called “medical” ones. Likewise for unfortunate splits such as that of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-III/III-R) between “organic” and “nonorganic” or “functional” mental disorders—as if the former are any less functional and the latter any less embodied (i.e., “organic”)! Nor was the subsequently suggested “physical” versus “mental” any better,⁵⁹ as its advocates themselves⁶⁰ soon realized. *By contrast, a genuine sociopsychobiology believes that all medical presentations (e.g., diabetes mellitus),⁶¹ including those attended by psychiatry; have compelling biomedically, neurobiologically, and psychosocially addressable determinants, processes, and resultants.* The pertinence of this for the perennially debated ontological status of disease is

plain, as psychoneuroimmunology is demonstrating with infections and cancers themselves.⁶² To their everlasting credit; the craftsmen of DSM-IV, and the two-volume *Treatments of Psychiatric Disorders*, have banished the “mental”/“organic” devil to hell once and for all.

Finally, before moving toward closure, let me just mention a fascinating area—supporting identity theory—that I do not have time or space to boldly enter: “split-brain” studies, whether that condition results from trauma or pathology, or from an epilepsy-treating commissurotomy. Clinical and psychoinstrumental assessment of these conditions is most intriguing, suggesting that each hemisphere constitutes an independent center of apperception, volition, and indeed of consciousness in general. Some of such persons’ manifestations of conflict between “will” and “counterwill”—or rather between competing motivations—are quite bizarre.⁶³

Before leaving this part of the chapter entirely, I want to briefly consider whether my particular presentation of functionalism is compatible with “identity theory.” I do this by drawing on the arguments, and attempted rebuttals to objections; of J. J. C. Smart—along with fellow-philosopher U. T. Place the most-sophisticated “identity theorist” on the block. Unfortunately, I must be brief, so I refer the reader to Smart’s⁶⁴ clear and relatively short paper; as well as to my historical and philosophical overview on Freud and mind-body (Chapter 25). As mentioned, Chapter 25 is both a study of Freud’s various positions on mind-body and, via this, of the relationship between functionalism and identity theory—token–token, with some aspects of type–type.

It is, first of all, key to appreciate *that we are not talking about correlations between ostensibly independent psychical activities and brain processes (whether “accessed” through some sort of brain imaging or whatever)*. Furthermore, Smart is not denying that people have experiences that they can communicate comprehensibly to fellows in their linguistic/cultural community. In fact, he very much agrees with Wittgenstein⁶⁵ that there is no such thing as a purely private language. Smart is contending that feeling pain, perceiving, thinking, behavior, and so forth simply are brain processes. If they are not brain processes; then it is hard to know what they are—except “spirits” or, if one prefers (equally metaphysically), “molecules.” However, having said this, neither Smart nor I would deny that the aforementioned require psychosocial heuristic approaches and not simply neurobiological ones if they are to be adequately grasped.

Admittedly, what miscalled “identity theorists” sometimes fashion move around, as rapidly as Daedelus’s proverbial statues, toward the metaphysical quagmire of “Churchlandian” eliminative reductionism, but this is not where Smart is heading. I must say, I find “identity theory”—“token–token,” with some place for “type–type” (see Chapter 25 on Freud for an explanation of the difference) aesthetically, metaphysically, and scientifically pleasing and parsimonious. Although I would have to rethink my entire “Functionalism” paper, I wager that much of it is compatible with identity theory. *For example, to say that the “psychosociocultural” is the neurobiological idiom that captures the sentient, symbolizing, imaging activities of the human being at its most complex level of integration with ambience; is thoroughly compatible with “identity theory,” which is not, again, a psychologically eliminative reductionism.* See, however, George Graham (*Philosophy of Mind*, Oxford: Blackwell, 1993) for a withering assault on materialist theories of mind.

Sociocultural perspectives, long missing in biopsychosocial theory and practice, are becoming incorporated.⁶⁶ This is fortunate for many reasons. Weighing cultural factors and adaptational value in local contexts, helps to distinguish psychopathology from institutionalized experience, belief, and behavior. Sociocultural variables not only affect individuals’ illness experiences, attributions, behaviors, and treatment adherence; they also figure in pathogenesis, pathophysiology, pathoplasticity, course, and outcome as well. The reality abstracted into the “biological,” “psychological,” and “sociocultural” is unitary; etiology, pathophysiology, and treatment are all “biopsychosocial.”

A special instance of the power of apical (symbolically-mediated, psychosocial) factors spreading downward through hypothalamic and midbrain/brainstem structures; through the autonomic nervous system to the heart, is “thanatomania,” or voodoo death. Upon being convinced he or she has been hexed; or upon becoming subsequently aware that one has broken a taboo (perhaps through the trickery of a “host,” who has served him a forbidden animal meal, and then subsequently informed him); anthropologists in Haiti and elsewhere have documented the death of otherwise healthy parties (often within 24 hours).

Autopsies performed on such persons—as well as on attempted skyscraper-suicides, who land safely in the fireman’s net, and still die nonetheless—have revealed the “stone heart syndrome.” In short, the person’s psychosocially precipitated fear or terror leads to a massive discharge of catecholamines, and other neurotransmitters and neuroendocrines; that cause a contractile paralysis of the heart, accompanied by massive release of calcium into the cardiac myofibrils—hence “stone heart.”

Human experience, perception/interpretation, motivation, personal and interpersonal conflict, and behavior—in health and disorder—are patterned by the convergence of genetics, constitution, personality, and micro- and macrosociocultural structures and folkways. Indeed, there is no hard-and-fast line between the constitutional and the family/social factors in personality development, for they mutually impinge from the outset, “temperament” reflecting early relations with the human surround as much as genetics. Society/culture is humans’ attempt to adapt to their environment, within a range of sociopsychobiological compulsions, constraints, and capacities; and society/culture becomes a force in humankind’s subsequent evolution through natural and sexual selection—that is, as something itself to be continually adapted to. As the brilliant biologist/ethnologist Gregory Bateson said, “zoology, anthropology, and psychiatry are really all one ... it is perfectly natural to glide gently from one to the other via an interest in patterns.”⁶⁷

Conclusion

If one understands “biology” appropriately broadly, then there is no puzzle or debate over psychiatrists’ identities: we are humanistic applied natural scientists, clinical human biologists—in short, physicians. A comprehensive, species-specific human physiology, ethology, and ecology comprises interlocking biomedical, neurobiological, and psychosocial stances and methods. Medicine approaches its patients as *persons* experiencing, interpreting, and attempting to cope with pathological sociopsychobiological and physicochemical or symbolic environmental processes. And again, although this is itself a moral position, it calls on formally ethical, epistemological, and sociopolitical-economic approaches when indicated.

Genuinely “scientific,” which is also to say “humanistic,” psychiatric physicians know that to “see” a whole body–brain at its most complex level of functioning and integration with ambience; they must look first at their patients and themselves—before moving “downward” and “outward” with indispensable, but ancillary, theories and procedures. *In short, we are ourselves the neurobiological laboratory apparatuses for apperceiving the highest level of embodied brain functioning.*

Thus, although psychosocial and neurobiological/molecular science, sound nosologies, and therapeutic quasi-algorithms are invaluable, they must subserve, not master, idiosyncratic clinical-investigative encounters. Since classical times, the doctor–patient relationship has been the *sine qua non* of medicine. It is, and will remain, our primary exploratory and therapeutic instrument. That it is fundamentally humanistic does not make it unscientific, unstudyable, and unteachable. Although clinical judgment probably cannot, and perhaps should not, become totally “recipeable,” surely its blending of the nomothetic and idiographic can be better clarified and codified.

In sum, “being medical” means bedding functionalist biopsychosocial theories, findings, and methods in a phenomenological and empathic base. In a profession increasingly dominated by commercialism and reified machine-like metaphors, psychiatry should stand for the possibility of a simultaneously scientific, technological, and humanistic medicine—founded on the Hippocratic concept of human naturalness, and of physicians as “those versed in nature [*physis*]”; and actuated by what Laim Entralgo calls “Medical *Philia* [friendship].”⁶⁸

*“Though I speak with the tongues of men and of angels, and have not love, I am become as sounding brass, or a tinkling cymbal. And though I have the gift of Prophecy, and understand all mysteries, and all knowledge, and have all faith so that I could remove mountains, and have not love, I am nothing.” 1st Corinthians 13: 1–2.*⁶⁹

Notes and References

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Finell, ed. *Mind-Body Problems: Psychotherapy with Psychosomatic Disorders* (London: Jason Aronson, 1997); and, finally (!), (28) M. Pilisuk and S. H. Parks, *Social Networks and Human Survival* (Hanover, NH: University Press of New England, 1986). Stresses the importance of social networks—from the family outward—in the maintenance of mental and medical health; as well as in healing.

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66. Kleinman, *Rethinking Psychiatry*, op. cit.

G. D. Spindler, ed., *The Making of Psychological Anthropology* (Berkeley: Univ. of CA Press, 1980); T. Schwartz, G. M. White, and C. A. Lutz, eds., *New Directions in Psychological Anthropology* (Cambridge Univ. Press,

1992); and R. A. Schweder, *Thinking Through Cultures: Expeditions in Cultural Psychology* (Harvard Univ. Press, 1991).

- A. Kleinman and B. Good, eds., *Culture and Depression* (Berkeley: Univ. of CA Press, 1985). An impressive array of interdisciplinary experts explore the cross cultural similarities and differences in the processes and manifestations of major depression.
67. B. Bateson, *Group Processes* (New York: Josiah Macey Foundation, 1954), 5.
68. P. Lain Entralgo, *Doctor and Patient* (New York: McGraw-Hill, 1959).
G. E. R. Lloyd, ed., *Hippocratic Writings* (New York: Penguin Books, 1978), 70–86.
For comprehensive philosophical theories of medicine as art/science; that is to say, as a historically and presently distinct profession; see, in addition to Lain Entralgo and Pellegrino and Thomosma: S. Buchanan, *The Doctrine of Signatures: a Defense of Theory in Medicine*, 2nd ed. (Chicago: Univ. of IL Press, 1991).
69. It is worth noting that early Christianity had no mind/soul–body split. It viewed man as *thoroughly incarnate* or material. There was a doctrine of future resurrection of a “glorified body,” but none of an immortal soul. Some Christian denominations appreciate this better than others.

Chapter 25

Freud on “Mind-Body” I: The Psychoneurobiological and “Instinctualist” Stance; with Implications for Chapter 24, and Two Postscripts* **

Edwin R. Wallace, IV

This chapter is partly a postscript to Chapter 24, because some of my thinking on mind-body has been influenced by Freud's. Moreover, because many psychiatrists are mostly aware of the heavily psychological orientation of psychoanalysts (although a segment of these analysts is becoming more interested in neurobiology), they may be surprised by Freud's early and career-long neuropsychiatric bent and concern with the neurobiological aspects of both human psychology and the discipline he founded. Moreover, as mentioned, large parts of this chapter are equivalent to the development of my third stance on mind-body: “identity theory.” I try to avoid, as consistently as possible, use of the term “mental” because of the ontically dualistic connotations it carries for some. As I see it, “mental” refers to the image-laden/symbolically mediated activity of the molar human organism-in-interaction-with-ambience: motivation, cognition, affect, apperception, phenomenology, behavior, communication, and, last, but hardly least, self-reflective consciousness. Generally, I prefer the term “psychological” to that of “mental” or to Freud's terms “psyche,” “psychical,” or “psychic” (from the ambiguous German “*Seele*”). Nonetheless, such locutions are so deeply-embedded in our language, that I can hardly avoid using them altogether.

Despite his early neuroanatomical researches under Brucke, and *contra* his psychiatric preceptor, Meynert's, fundamentally neuroanatomically localizable theories of all psychopathology, Freud adopted a “functional” or broadly “physiological” stance toward the neuroses, and generally (though he wrote much less about them) the psychoses too. Surely, there were many influences on Freud's vantage point: but Darwin and his followers such as Huxley, as well as Haeckel and Claus in Germany and Austria respectively, loomed large. Freud took two courses on evolutionary biology under Claus; in addition, the Darwinian neurologist John Hughlings Jackson was important for his functionalist ideas.¹ Moreover, Freud's six years of philosophical study in an excellent *Gymnasium* and his two years in philosophy with

*This chapter is a condensation of, and elaboration upon, my paper at the 1990 Hannah Lectureships in the History of Science (University of Toronto): “Freud and the Mind-Body Problem,” in *Freud and the History of Psychoanalysis*, T. Gelfand and J. Kerr, eds. (Hillsdale, NJ: Analytic Press, 1992), 231–269.

**It is key to note, as I remind the reader in Chapter 26, that “instinct” was Strachey's Standard Edition translation of Freud's term “*Trieb*”—meaning “drive” or “impulsion.” Freud used “*Instinkt*” sparingly; and usually with reference to animal behavior, not human. “*Trieb*” is a more experience-near concept than the English “instinct.” However, for bibliographical reasons (i.e., my use of the Standard Edition); I generally use “instinct/instinctual” herein. Please read “drive [*Trieb*],” “driven,” or “drivelike” when I do so. Two “*Postscripts*” follow the “*References*.”

Brentano and Gomperz (he almost followed his M.D. with a Ph.D. in philosophy) stood him in good stead in appreciating the metaphysical and epistemological aspects of the various approaches to “mind”-“body.” In short, be prepared for a quite sophisticated journey with a man in many ways “ahead of his times”—and certainly far beyond any other physician or neuropsychiatrist in his philosophical disquisitions—aside from the great philosopher/psychopathologist Karl Jaspers. Freud came to feel, especially given the then-current knowledge of neurobiology (and his recognition that his 1895 *Project for a Scientific* [i.e., “neural”] *Psychology*² was much premature), that, *heuristically*, psychological theories and concepts would be necessary indefinitely. Nevertheless, as demonstrated herein, he seldom wavered from an ontological monistic materialism/energetics. His materialist/energetic, neurobiological/psychological standpoint was, as mentioned, most broadly characterized as “functionalist.” One can leave it at that or seek to delineate it further, as I did in the paper cited in the opening footnote. There, I posited (and still do) that Freud was either a “monistic single-aspect–dual-aspect interactionist” along the lines explicated in Chapter 24, or else a “token–token identity theorist.” I believe, and shall demonstrate, that Freud’s functionalism veered strongly toward a “mind–body” “identity theory,” but, for various reasons, he could not whole-heartedly and consistently endorse it. It is key to appreciate that the *Project* was not an instance of psychologically eliminative neural reductionism, for it retains, as we shall see, a psychological, and even an epistemological, discourse. Rather, it argued that the psychological was also a neurally localizable molar organismic function. It was, in other words, and strictly speaking, a neuropsychology, an instance of identity theory, on which more later.

A “type–type” identity theorist holds that generically similar thoughts, feelings, perceptions, and behaviors are subserved by virtually identical brain processes across human individuals. By contrast, a “token–token” identity theorist acknowledges that there are instances of typological identity—such as hippocampal transfer of short-term to long-term memories. However, he or she believes that the cerebral processes of the aforementioned genre of complex psychological phenomena are, by and large, peculiar to each idiosyncratic human being—*biological individuality*.

In any event, if Chapter 25 is successful, then it should convince contemporary psychiatrists, psychologists, and psychoanalysts that Freud would hardly be antipathetic to the current neurobiological/pharmacological revolution—as long as it does not endorse the metaphysical (i.e., “Churchlandian”) stance of “eliminative materialism”: the elision of the psychological co-characterization, indeed ontological reality of, historically determined, symbolically mediated/image-laden, human perception/interpretation, emotion, motivation, cognition, communication, and behavior. As remarked previously, by such an ontology, it becomes difficult to know how one could engage in scientific activity, a symbolically mediated (i.e., verbal or symbolic/mathematical, as in chemistry or physics) process, much-less communicate it (as the Churchlands have done in countless publications!). In short, their position has a fatal logical (not to mention *empirical*) flaw; which philosophers call the problem of “self-reflexivity.” *Pari passu* with Rorty’s surprising adoption of their position—in complete violation of his “post-philosophical,” radically relativist, deconstructionist stand (and current ensconcement in a department of literature and literary criticism).³

In studying Freud on mind–body, I will proceed fairly chronologically, but not always so. As a well trained neuropsychiatrist (he did 2 1/2 years of neurology residency and only 6 months of psychiatry because he and Professor Meynert did not see eye to eye), neuroanatomist, and neuropathologist, he was well aware of discrete anatomical explications—indeed, we shall see that his classic 1891 *On Aphasia* attended to neuroanatomy but still pursued a largely functionalist line—as did his theory of the neuroses. In 1888 he wrote,⁴

Hysteria is a *neurosis* in the strictest sense of the word—that is to say, not only have no perceptible changes in the nervous system been found in this illness, but it is not to be expected that any refinement of anatomical techniques would reveal any such changes. *Hysteria is based wholly and entirely on physiological modifications of the nervous system and its essence should be expressed in a formula which took account of the conditions of excitability in the different parts of the nervous system.* A physio-pathological formula of this kind has not yet, however, been discovered. [Italics added]

From delineating, in the same paper, the “physical” symptoms of hysteria and their lack of correspondence to actual neuroanatomy, Freud went on to characterize the “psychical” disturbance in the disorder⁵:

These are changes in the passage and in the association of ideas, inhibitions of the activity of the will, magnification and suppression of feelings, etc.—which may be summarized as *changes in the normal distribution over the nervous system of the stable amounts of excitation. ... On the other hand, the psychical changes which must be postulated as being the foundation of the hysterical status take place wholly in the sphere of unconscious, automatic, cerebral activity*. [Last italics added]

This early, 1888 paper is key because Freud laid down positions he would henceforth cleave to. In hysteria, “the organ of the mind” is subjected to physical or psychical trauma. This “surplus” excitation is distributed “by means of conscious or unconscious ideas.” Conditions “related *functionally* to sexual life ... on account of the high psychical significance of this function” are declared etiologically significant. *Thus, by 1888, we see the linkage among excitation, ideation, sexuality, trauma, and functionalism that permeated Freud’s later work.* Note especially that by “psychical” he meant “*cerebral activity*” (italics added) rather than an ontologically distinct spiritual process. *This is classical identity theory, as are the excerpts from his “Preface” to Bernheim cited later: where the “psychical sphere” is equated with “the cerebral cortex,” though Freud considered subcortical (i.e., “physiological”) processes as well.* Freud’s 1888 “Preface” to his former teacher, Bernheim’s, textbook on hypnosis; expressed discomfort with the latter’s sharp split between the “psychical” (i.e., hypnosis) and the “physiological” (i.e., the patient’s response). *Freud thus espoused one of the earliest sophisticated neurophysiologically unitary accounts both of psychotherapy (i.e., hypnosis) and its effects (see Kandel and Amen⁶):*

The antithesis between the psychical and the physiological phenomena of hypnosis [had] a meaning in it only so long as by suggestion was understood a directly psychical influence exercised by the physician which forced any symptomatology it liked upon the hypnotized subject. But this meaning disappears as soon as it is realized that even suggestion only releases sets of manifestations which are based upon the functional peculiarities of the hypnotized nervous system, and that in hypnosis characteristics of the nervous system other than suggestibility make themselves felt as well. *The question might still be asked whether all the phenomena of hypnosis must somewhere pass through the psychical sphere, in other words—for the question can have no other sense—whether the changes in excitability which occur in hypnosis invariably affect only the region of the cerebral cortex.* By putting the question in this other form we seem to have decided the answer to it. There is no justification for making such a contrast as is here made between the cerebral cortex and the rest of the nervous system: it is improbable that so profound a functional change in the cerebral cortex could occur unaccompanied by significant changes in the excitability of the other parts of the brain. *We possess no criterion which enables us to distinguish exactly between a psychical process and a physiological one, between an act occurring in the cerebral cortex and one occurring in the subcortical substance for “consciousness,” whatever that may be, is not attached to every activity of the cerebral cortex, nor is it always attached in an equal degree to any of its activities; it is not a thing which is bound up with any locality in the nervous system* (all italics mine).

Thus Freud’s “Preface” to Bernheim, though at this early date insufficiently attending to the “unconscious cerebral” factors he would more and more emphasize, contained, in embryo, the predominant mind-body position Freud held throughout his career. *In deeming psychical activities to be cerebral cortical activities, Freud avoided metaphysical dualism and any consequent dysfunction between mentation, on one hand, and subcortical and bodily systemic processes, on the other. Any dualism was hence that between cerebral cortical functioning (“psychical”) and that of the rest of the human organism (“physiological”).* Moreover, this dualism did not mean “duality,” for, again, Freud recognized the ever-present incorporation of the “physiological” (i.e., lower-brain and systemic bodily processes) into the “psychical” (i.e., cerebral activities), as well as their reciprocal causality. Again, there is nothing that we have read so far that is incompatible with identity theory. His apparent dual-aspect monism does not surface in a robust fashion until later in his writings.

At one stroke, Freud’s 1888 position permitted him a clinically, investigational, and theoretically necessary methodological and explanatory interactional dualism without committing him to a correspondingly ontological one. Freud’s psychology sought to capture the properties, attributes, and processes of brain functioning at its most complex level of organization and integration—an organization and

integration in which lower levels of brain functioning play an integral role. *By refusing to localize anatomically such items as consciousness, viewed as properties, not substances, Freud declared himself a functionalist. He continued in the broadly physiological vein that replaced his earlier, structural one. And there was no Cartesian purchase price:*

In this way, too, we arrive at a definition of a psychical trauma which can be employed in the theory of hysteria: any impression which the nervous system has difficulty in disposing of by means of associative thinking or of motor reaction becomes a psychical trauma.⁷

It is this ontology that allowed Freud, in the 1895 *Studies on Hysteria*,⁸ to explain neurotic symptoms as symbols, reminiscences, defenses, pathogenic ideas, and manifestations of intentionality and counterwill and still consider hysteria a functional nervous illness, as opposed to a systemic bodily disease or a localizable cortical or subcortical lesion. In short, functional nervous disorder was characterized by the diffuse and excitatory nature of the central nervous system processes. While Freud's subsequent texts do not always make this plain, I believe it was an ever-present assumption. In any event, it is stated explicitly in too many later items to be much in doubt. Freud's growing emphasis on the role of sexuality in normal and pathological development—indeed in motivation in general—would put a bodily systemic foundation under his theorizing on cerebral processes and nervous excitation.⁹ *Doubtless, Freud felt that this sexual emphasis considerably strengthened his fundamentally physiological, nonanatomical conception of mental activity in health and illness.* While important aspects of his sexual theorizing were influenced, as Sulloway argues,¹⁰ by nineteenth century sexology and evolutionary biology (including of course Darwin), we should not ignore its clinicoempirical impetus. Here, as elsewhere, it is more often a matter of reciprocal interactions between *à priori* and *à posteriori* factors than of decisive dominance by one or the other.¹¹

Freud's 1889 "Review of Forel's *Hypnotism*" and his 1891 essay "Hypnosis" continued the previous lines of thought, conceiving of "psychical" disorder as "functional, nervous" illness. Freud's "Footnotes" to his 1892 translation of *Charcot's Tuesday Lectures*, his 1892 draft for his and Breuer's "Preliminary Communication," and his 1893 comparison of organic and hysterical paralyses demonstrated further his conviction that psychical disorder is a functional illness of the nervous system and that psychological explanations are compatible with materialism.¹²

Increasingly, Freud (1891) pictured the functional disturbance as one in the distribution and discharge of excitation¹³:

The nervous system endeavors to keep constant something in its functional relations that we may describe as the "sum of excitation." It puts this precondition into effect by disposing associatively of every sensible accretion of excitation or by discharging it by an appropriate motor reaction [T]he psychical experiences forming the content of hysterical attacks ... are all of them impressions which have failed to find adequate discharge, either because the patient refuses to deal with them for fear of distressing mental conflicts, or because (as in the case of sexual impressions) he is forbidden to do so by modesty or social conditions, or; lastly, because he received these impressions in a state in which his nervous system was incapable of fulfilling the task of disposing of them.

*In On Aphasia, one of Freud's aims, as in some of his earlier studies, was to combat the naïve localism of those such as Meynert—"that the speech apparatus consists of distinct cortical centres in whose cells the word presentations are contained." He wished to combat Wernicke's less extreme localism as well—"that only the simplest psychical elements, the different sensory presentations, could legitimately be localized—localized at the central termination of the peripheral nerve which has received the impression."*¹⁴

These writers, Freud averred, confused categories. They should have written "that the physiological modification of the nerve fibre through sensory stimuli produces another modification in the central nerve cells which then becomes the physiological correlate of the 'concept' or 'idea'."¹⁵

Freud was arguing against putative neuroscientific/psychological correlations in advance of then-current neuroanatomic and physiologic knowledge and against confusions between neurobiological and psychological perspectives. He chided those concluding that the neural processes corresponding to psychology's "elementary presentations" must be equally simple and localizable to single anatomical points. For his part, Freud, attending to what we now call "central processing," promoted a more holistic model of brain

function. Nervous system activities, he pointed out, must be comprehended as such; and not simply inferred from the data and hypotheses of psychology¹⁶:

What, then, is the physiological correlate of the simple idea emerging or re-emerging? Obviously nothing static, but something in the nature of a process. This process is not incompatible with localization. It starts “at” a specific point in the cortex and from there spreads over the whole cortex and along certain pathways. When this event has taken place it leaves behind a modification, with the possibility of a memory, in the part of the cortex affected Whenever the same cortical state is elicited again, the previous psychic event re-emerges as a memory.

This still smacks of “identity theory,” though talk of “correlations” is already moving us toward dual aspect monism as well.

Freud combined a respect for empiricism with an appreciation of the extraordinary explanatory—indeed metaphysical—problems involved:

We have, of course, not the slightest idea how animal tissue can possibly undergo, and differentiate so many various modifications. But that it is able to do so is proved by the example of the spermatozoa in which the most varied and highly differentiated modifications lie dormant and ready to develop.¹⁷

Finally, *On Aphasia* (1891) contains the earliest complete exposition of the atavistic conception of pathology that would come to dominate Freud’s theoretical understanding of the “physiology” (writ broadly) of neurological and psychiatric disorder. Influenced by direct readings of Darwin, Jackson, Spencer, and other psychological and cultural evolutionists (e.g., Tylor, Lubbock, and Frazer), as well as by contemporary sexologists, Freud adopted their concepts of functional retrogression (Jackson’s “dinvolution”) and of ontogenetic and phylogenetic survivals.¹⁸ From the interaction between his reading and his clinical experience, Freud enunciated a neuropsychology of the psychiatric disorders that was, in effect, *physiological, developmental, evolutionary, and biographical*. Whatever the evidential and logical cogency of Freud’s sociopsychobiological theorizing, this reflects his realization that any approach to human phenomenology and behavior that would move toward explanation, must address the apparent continuity between constitution and phenomenology/intentionality. It implies, moreover, in my opinion, the fatuousness of any attempt to grasp fully human experience and behavior with either a biomedical or a psychosocial reductionism.

The 1895 *Project for a Scientific Psychology* has spawned an immense scholarly literature. While the *Project*’s goal is primarily physiological, it lapses into the psychoneuronal localism that Freud eschewed in *On Aphasia* (itself not totally bereft of such tendencies). Furthermore, certain of its ostensibly neurobiological concepts were metaphors for fundamentally psychological ideas or were to become progressively “psychologized.”¹⁹

Nevertheless, for physicians steeped in the mechanistic ambience of mid-nineteenth century German science, such neurological cryptopsychologizing was hard to avoid. Indeed, the *Project* proffered not merely a neurological cryptopsychology, but a neurological cryptoepistemology as well—Freud equating the “subject” with certain neurons, and neuronal processes and the “world” with others! Of course, the *Project* was not merely a neurological cryptopsychology, a point of recession in the advance of Freud’s psychological thinking. As Pribram and Gill show,²⁰ it contained some genuinely neurological ideas, generally accorded with the more sophisticated neurological theorizing of the day, was an early cybernetic model, and had neurobiological insights still worth considering.

Many have deemed the *Project*—with its explicit considerations of excitation, energetics, and the constancy principle, bound and free energy, cathexis, build-up, resistance, discharge, and so forth—to be an *à priori* legacy of the mechanistic aspects of Freud’s scientific education. However, the most cursory survey of his clinical writings through 1895 demonstrates a clinical-phenomenological source as well. Again, let us beware of seeking purely *a priori* or *a posteriori* determinants of a thinker’s work and of ignoring the importance of overdetermination, interactionism, and intersectional and reciprocal causality.²¹

Consider also *Studies on Hysteria*’s buttressing of the nervous energy concept with reference to the states of fatigue caused by merely being awake and, especially, by states of intense expectation or concentration.²² Similar notions, reflected in common parlance, were again invoked.

Finally, like many psychological clinicians before and after, Freud found it impossible to dispense with a quantitative, energetic element in an otherwise intentional and qualitative discourse; we encounter this throughout his corpus. “*This is derived directly from pathological clinical observation [where] the quantitative characteristic emerges more plainly than in the normal*” [Italics added].²³ Moreover,

In mental functions something is to be distinguished—a quota of affect or sum of excitation—which possesses all the characteristics of a quantity (though we have no means of measuring it), which is capable of increase, diminution, displacement and discharge, and which is spread over the memory-traces of ideas somewhat as an electric charge is spread over the surface of a body. ... It is provisionally justified by its utility in coordinating and explaining a great variety of psychical states.²⁴

In any event, the *Project* is consistent with Freud’s overall materialistic metaphysic. However, it muddies his earlier distinction between functional and anatomical approaches and attempts, except for its section on psychopathology, to abrogate Freud’s otherwise lifelong *methodological* dualism. Like Flanagan, I deem the *Project* a species of type–type identity theory.²⁵ For example, the class of events characterized mentalistically as “perception” is identical to the neurological class of consciousness *phi* neurons, that of memory to the *psi* neurons, and that of consciousness generally to the *omega* neurons.

Consider, in this light, the *Project*’s neurology of infantile wish fulfillment and object representation. However primitive the neuroscience, this is a really sophisticated first stab at a robust concept of “wishing” as a crucial motivational concept, *for it incorporated the memory of the gratifying object and situation. It is thus “dynamic” as well as “genetic.”*

When the helpful person has performed the work of the specific action in the external world for the helpless one, the latter is in a position, by means of reflex contrivances, immediately to carry out in the interior of his body the activity necessary for removing the endogenous stimulus. The total event then constitutes an experience of satisfaction, which has the most radical results on the development of the individual’s functions. For three things occur in the *psi* system: (1) *a lasting discharge is effected and so the urgency which had produced unpleasure in omega is brought to an end;* (2) *a cathexis of one (or several) of the neurons which correspond to the perception of an object occurs in the pallium;* and (3) *at other points of the pallium information arrives of the discharge of the released reflex movement which follows upon the specification. A facilitation is then formed between these cathexes and the nuclear neurons.*²⁶

Thus, from the purview of Freud’s overriding metaphysical materialism, the *Project* is not anomalous. I submit that Freud abandoned it not because he suddenly embraced an ontological dualism, but because he sensed that his efforts at what we would term “identity mapping” were, given the knowledge of the day (and of today, for that matter), grossly premature. Once more, it is hard to know conclusively whether Freud’s subsequently untrammelled methodological dualism was held provisionally, in the hope of eventual neurobiological reduction, or whether it reflected a token–token identity theory or a dual-aspect monism, either of which permits both a materialistic metaphysic and an open-ended methodological interactional dualism. Of these three possibilities, I lean toward dual-aspect monism or identity theory, as will become progressively clear.²⁷

In characterizing Freud’s mind-body position, it is not a matter of fixing on one, for he expressed several: functionalism, identity theory, dual-aspect monism, and, very rarely, even eliminative reductionism and metaphysical dualism. It is, rather, a matter of which was predominant throughout his career.

Beyond the Project: The Middle and Later Years

Thenceforth, Freud never made a concerted and systematic effort to reduce psychology to biology, though he never doubted body and brain as the substrate of mind. By “mind”—for which, at times, to the end of his life, he would substitute “brain” or “nervous system”—he clearly did not mean an immaterial and nonenergetic essence. As a deterministic atheist, evolutionist, and thermodynamicist, he could hardly have done so.

In any event, after 1895, his theorizing became progressively *psychological*. *The Interpretation of Dreams* (1900) was a landmark here. His corpus demonstrates overwhelmingly that his predominant

*concept of causation was psychological—historical determinism, and the wish, purpose, intention, or affect-laden fantasy.*²⁸ See the next chapter. Of course, Freud used other causal concepts as well. Biogenetic-Lamarckian principles permeated his writing (1913, 1915, etc.); instinctual determinism remained unabated, its relationship to his psychological notions never fully clarified; and in 1920 he introduced a novel causal concept, the repetition compulsion—overriding, he believed, the pleasure principle.²⁹ Moreover, in principle, as we shall see, motivation was rooted in the body—the instinctual drives—though, Freud felt, the psychoanalyst had access to them only through their psychical representatives or aims (i.e., higher cortical manifestations).

For a critique of Freud’s phylogenetic/Lamarckian bent, and repetition compulsion and death instinct ideas; see Wallace.²⁹

Having examined Freud’s mind-body position prior to 1900, let us succinctly review his thinking thereafter.

In 1905, Freud commented, regarding the idea of “psychical locality,” that “though the mental apparatus is also known to us in the form of an anatomical preparation, ... I shall carefully avoid the temptation to determine psychical locality in any anatomical fashion.”³⁰ He disallowed that “cells and nerve fibers, or ... systems of neurons” are the paths of psychical processes and energy.³¹ Nevertheless, he projected that “it would have to be possible in some manner which cannot yet be indicated to represent such paths by organic elements in the nervous system.”³² Freud (1914) submitted that “*all our provisional ideas in psychology will presumably some day be based on an organic substructure*” (emphasis added).³³ Still, Freud “tr[ie]d in general to keep psychology clear from everything that is different in nature from it, even biological lines of thought.”³⁴ From a dual-aspect, token-identity, or functionalist perspective, one could seek such a substrate without abrogating psychology.

Freud came to promote conceiving of unconscious processes along the psychological lines by which we characterize consciousness—“ideas, purposes, resolutions, and so on.”³⁵ In that same essay, however, he was clear that he was not simultaneously advocating an ontological dualism: “Research has given irrefutable proof that mental activity is bound up with the function of the brain as it is with no other organ.”³⁶ It is only that our general knowledge of this intimate connection gives no grounds for a crude anatomical or microanatomical localization of mental functions—something Freud appreciated, as we have seen, as early as *On Aphasia* (1891) and the “Preface to Bernheim” (1888). This is not to deny all possibilities for eventual, sufficiently sophisticated, localizing attempts, but, Freud (1915) emphasized, *only those “for the present.”* Indeed, in *Beyond the Pleasure Principle*, Freud (1920) again endorsed the *neurological seating of consciousness in the cerebral cortex.*³⁷

In 1926 Freud promoted a purely psychological vision of psychoanalysis, its subject matter the “*mental side of vital phenomena*” (italics added).³⁸ Dual-aspect monism again. Even so, he anticipated a “day when paths of knowledge and, let us hope, of influence will ... lead from organic biology and chemistry to the field of neurotic phenomena.”³⁹ Moreover, Freud was adamant that hereditary, constitutional, bodily systemic, and neuropathological factors figure in mental disorder, including neurosis—and that it is consequently necessary to medically evaluate psychoanalytic patients.⁴⁰

Heed also Freud’s (1933) assertion that *the neuroses are “in fact severe, constitutionally fixed illnesses.*”⁴¹ Though analysis can influence their “historical precipitating causes and accidental factors,” it has neglected the constitutional element “because we can do nothing.” “In theory, however, we ought always to bear it in mind.” The “organic base” of neuroses was not pathological anatomy, but rather “organic functions” and presumed, but then undetectable, “chemical changes.”⁴² Hence, for Freud (1926) the “gulf between the physical and the mental” was “experien[tial]” and “practical,” not ontological.⁴³ It is unfortunate that, like so many physicians, he chose the word “physical” to refer to lower brain and systemic functioning, when by “mental” he meant something no less embodied (diffuse cerebral and higher cortical activity).

It would not be difficult to conclude from such remarks that, again, Freud was a dual-aspect monist; a position that could consistently permit both a materialist/energetic metaphysic and a functionalist methodological dualism. Again, causal interaction would, in principle, be allowable—both among dual-aspect or

mental processes themselves and between them and nonmental (single-aspect) brain and systemic ones. Psychological explanatory modes would then continue to be necessary, for one facet of dual-aspect activity (mentation) must be comprehended in terms of its contextualized and historicized symbolic content or intentionality. This is the only sense in which, as Freud (1926) asserted, the analyst is indifferent to the nature of the ground of the psychic apparatus.⁴⁴

By “intentionality” I mean two things: (1) motivation and (2) the phenomenological sense, after Freud’s philosophy professor, Brentano: the idea that mentation is always about something; directed toward an object (i.e., an idea, a memory, a person in our immediate presence). Freud’s⁴⁵ dawning “object relations theory” (adumbrated as early as 1914, in “On Narcissism” and 1917 in “Mourning and Melancholia”), was progressively developed in *Group Psychology and the Analysis of the Ego* (1921), *The Ego and the Id* (1923), and *Inhibitions, Symptoms, and Anxiety* (1926), and in aspects of some of his later works. It represented Freud’s taking theoretical/therapeutic account of “intentionality” in the phenomenologist’s sense. For example, in the earliest of the aforementioned works, the 1921 *Group Psychology and the Analysis of the Ego*, he introduced the important concept of the “ego ideal” as the “internalized representative” of the external authority figure, and hence the prototype for what became the “superego” in 1923—unconscious conscience, but with conscious derivatives. In the 1921 work, Freud presciently asserted,

*In the individual’s mental life someone else is invariably involved, as a model, as an object, as a helper, as an opponent; and so from the very first individual psychology, in this extended but entirely justifiable sense of the words, is at the same time social psychology as well.*⁴⁶

From these works would evolve the interpersonalist psychiatries of the “neo-Freudians” and the British and American object-relations schools: See next chapter.

It is key to appreciate that, in arguing for the independence of psychological lines of thought, Freud was declaring them necessary but not sufficient for comprehending mentation. Mentation is contributed to not only by nonmeaningful peripheral nervous system, lower brain, and lower cerebral processes, but also by quite distal systemic (such as endocrine) ones as well—and, of course, by the matter/energy in the ambience. Moreover, as a function of the highest (presumably cortical) level of central nervous system integration, mentation has simultaneous neurobiologically explicable features itself. And its ongoing activities reflect continuous feed forward and feedback with nonmeaningful, single-aspect processes—and through them with the environment. Nevertheless, Freud never totally jettisons identity theory (which I view as a superior model), but returns to it, implicitly or explicitly, throughout his subsequent thought—indeed as late as 1938, as we shall see.

That Freud did not view mind as an immaterial soul seems plain from his 1938 evolutionarily based assertion that his “general schematic picture of a psychological apparatus may be supposed to apply as well to the higher animals.” Similarly, an evolutionary stance toward the development of the psychic apparatus had been taken in the *New Introductory Lectures* (1933). *In short, accepting psychology’s lack of reducibility to anatomy and physiology does not ontologically sunder the human organism—just as accepting physiology’s demarcation from chemistry does not metaphysically sever physiological from physiochemical processes—nor ourselves from the rest of the mammalian class.*⁴⁷ In 1938 he wrote,

We know two kinds of things about what we call our psyche or mental life: firstly, its bodily organ and seat of action, the brain (or nervous system) and, on the other hand, our acts of consciousness, which are “immediate data” and cannot be further explained by any sort of description. *Everything that lies between is unknown to us*, and the data do not include any direct relation between those two terminal points of our knowledge. *If it existed, it would at most afford us exact localization of the processes of consciousness and would give us no help towards understanding them* [i.e., in understanding image-laden and symbolically mediated activities—“mental content,” in other words].⁴⁸ Would that the Churchlands had meditated on such passages.

In regard to the nature of unconscious activities, Freud (e.g., in 1938) generally proclaimed their unknowability.⁴⁹ Nevertheless, he always held them to be necessary inferences from the discontinuities in consciousness; hence, it seemed likely to him that unconscious processes were psychological as well. (Once more, we see Freud’s wavering on this.) Still, he never denied them a systemic and cerebral seat. Moreover,

Freud (as early as 1888 and as late as 1938) emphasized their apparent quantitative characteristics and occasionally wrote as if unconscious processes were other than psychical: “The psychical, whatever its nature may be, is in itself unconscious and probably similar in kind to all the other natural processes of which we have obtained knowledge.” See Freud in 1938⁵⁰ and in 1888.⁵¹ Consider also, in this regard, Freud’s (1933) earlier characterization of unconscious activities as “taking place between quotas of energy in some unimaginable substratum”⁵²—supporting Olsen and Koppe’s thesis that the metapsychology referred to a sort of third sphere, between conscious and preconscious processes on one hand and non-meaningful, *nonconscious*, systemic, and nervous activities on the other.⁵³

Of course, if unconscious processes are in fact nonsymbolic and unintentional (purely single-aspect), it is hard to imagine how we could know this. Freud also, at times, characterized unconscious feelings neurobiologically because he believed that feelings seem to be irrefragably conscious. Thus he, using “as-if” language, referred to the neurobiological unconscious “feeling [sic]” as a “longing for affect.” It is not, I am suggesting, so much a matter of what we can or can’t know directly about unconscious processes, such as “longing for affect,” but more a matter of metaphysical and theoretical parsimony and the inextricable linking between cerebral activity and systemic-bodily and peripheral neural processes at all levels.

Dozens of studies—especially subliminally processed “tachistoscopic visual stimuli” and subliminally processed auditory stimuli in “dichotic listening”—strongly support (1) Freud’s notion of unconscious apperception and (2) his concept of unconscious motivation. For example, if the picture of a Coca-Cola bottle is presented rapidly and instantaneously enough, a significant percentage of subjects will suddenly experience the conscious desire for the soda. (It is now illegal for such advertising on cinema screens!). However, there seems to be, Freud thought, better theoretical, clinical, and investigative reasons *to characterize unconscious cerebral processes “as if” they were “psychological.”*⁵⁴

The biologically explicable points of contact with mind included many more than purely anatomical and histological ones. There were the physiological ones—of brain (nervous excitation and the constancy or pleasure principle) and body (the instincts or drives).

Both phylogenetic-Lamarckian and ontogenetic factors were considered. While psychoanalytic therapy emphasizes “accidental” or acquired experiential factors in its explorations of sexuality, Freud always held phylogenetic and heritable aspects important. These included “the precipitate of earlier experience of the species to which the more recent experience of the individual, as the sum of the accidental factors, is superadded” (Freud, 1905). Thus, racial and personal history was given a biological reality, in keeping with trends passed on by his scientific teachers. This coupling of phylogeny-Lamarckism with ontogeny permeates Freud’s corpus. It was mightily influenced by his Darwinian and cultural evolutionist heritage, as Ritvo, Sulloway, and Wallace have shown.⁵⁵

Moreover, Freud did not view the relationship between biology’s constitutional factors and psychology’s experiential ones as oppositional. Rather, he argued, “the relationship between the two is a cooperative ... one. ... The constitutional factor must await experiences before it can make itself felt; the accidental factor must have a constitutional basis in order to come into operation” (Freud, 1905). Such thinking culminated in his famous “*aetiological equation*” (Freud, 1915–1917). Adult neuroses were posited to result from the interaction between a disposition due to the infantile fixation of libido and the traumatic experiences of adulthood. The infantile fixations themselves were determined by the intersection of “sexual constitution” and “infantile experience.”⁵⁶

Freud’s intermeshing of “psychology” and “biology” (not merely neurobiology) may have been correct. *It appears that experience—which Freud (1895) termed “biological experience”—is accompanied by actual structural-functional changes in neuronal elements and connections. There is neuroscientific support that mentation and motivation begin nonconsciously and unconsciously.*^{56a} There is support, as well, for Freud’s concepts of the fragmentation, and of the integration, of “mind.” Evidence mounts for constitutional or single-aspect factors in perceptual (intrapyschic and environmental) threshold, reality testing, frustration tolerance, intensity and modulation of affects and moods, and strength and inhibition of impulses, as well as in personality type, introversion-extroversion, activity-passivity, and “choice” of

defenses, symptoms, and syndromes. As the roles of these constitutional factors are progressively understood, they become therapeutically, as well as theoretically, important. However, they do not negate the existence or role of symbolically mediated and image-laden, or dual-aspect, personal and interpersonal processes in patterning, predisposition, and precipitation in psychiatric problems. Rather, they provide a necessary supplement to them. See, for example, Chess and Thomas' biosocially interactive model of temperament and childhood development.⁵⁷

Or, rather than "a necessary supplement," which implies what would be an ontically dualistic (or maybe only a dual-aspect/single-aspect) "correlation" between the "psychical" and the "systemic bodily" and "brain processes," it would be better to say that the brain structural/functional changes (dendritic and axonal terminal proliferation, along with synaptic potentiation) simply are the new experience that is characterizable "psychologically" (i.e., symbolically mediated and image-laden processes and behavior/communication): Freud too often lapsed into a "correlational" view between the former and latter. Moreover, like the eminent neuropsychiatrists/research neuropsychologists A. R. Luria and Kurt Goldstein, I view the "psychological" as, fundamentally, the "biosocial" or "bioenvironmental." However, this is not to deny that psychological mechanisms, once formed, can become institutionalized as group beliefs and behaviors. For example, the role of institutionalized projections and wish-fulfillments in the creation and maintenance of animistic/magical belief/action systems.

By deriving much of human motivation from sexuality, Freud gave psychoanalysis a systemic bodily base. "In the sexual process we have the indispensable 'organic foundation' without which a medical man can only feel ill at ease in the life of the psyche." At the same time, by focusing on the psychical representations and vicissitudes of this instinct, Freud believed he had given psychoanalysis a measure of theoretical and investigative autonomy from its biological cousin. Freud thereby satisfied two powerful and lifelong "ambitions": "to see how a theory of mental functioning takes shape if quantitative considerations ... are introduced into it" and "to extract from psychopathology what may be of benefit to normal psychology."⁵⁸

Freud (1913) repeated his concern "to find a point of contact with biology"; again, he believed he had found it in the form of the sexual and self-preservative instincts. There he noted that, despite his efforts at a purely psychological terminology, psychoanalysis "cannot avoid using [biological terms and concepts] even in our descriptions of the phenomena that we study." Here again he veers very close to identity theory.

Freud (1915) spoke of the postulates necessary when "dealing with the field of psychological phenomena." First and foremost was one "of a biological nature—'purpose' (or perhaps of expediency): *the nervous system is an apparatus which has the function of getting rid of the stimuli that reach it, or of reducing them to the lowest possible level.*" The instincts were deemed "the true motive forces behind the advances that have led the *nervous system* ... to its present level of development" (italics added). The "feelings" on the pleasure-unpleasure series "reflect the manner in which the process of mastering stimuli takes place." Such reasoning further reflects Freud's thoroughly evolutionary vision of psychology—the adaptive function of the nervous system. That function is the one of discharge of nervous excitation—such excitation being a function of either unsatisfied drives or of unconscious "psychical" or "interpersonal" "conflict"—i.e., "*cerebral conflict*" (to remain with Freud's occasional insight that unconscious processes are characterizable neurobiologically).⁵⁹

Later the ego psychologists considerably enriched the concept of adaptation. Indeed psychoanalysis and psychotherapy are exploratory, problem-solving endeavors; which can enhance adaptation in the neo-Darwinian sense; and in the broader psychological sense of improving interpersonal relations, creativity, overall quality of life, and so forth.

Instinct itself, which Freud often admitted was an obscure and vague notion, even a "mythology" (Freud, 1933), was further characterized as a concept "on the frontier between the mental and the somatic" (Freud, 1915). By this he meant "*the psychical representative* of the stimuli originating within the organism and reaching the mind, as a measure of the demands made upon the mind for work in consequence of its connection with the body [my italics]." This last quote is often taken to indicate that Freud was an interactional ontological dualist. When it is placed in context, however, it is clear that Freud was referring to the impact of systemic bodily processes on an aspect of the functioning of whole brain itself. Likewise

with Freud’s (1915) discussion of affects and in his 1920 emendation of *Three Essays on the Theory of Sexuality*: “special chemical substances are produced in the interstitial portion of the sex glands; these are then taken up in the blood stream and cause particular parts of the central nervous system to be charged with sexual tension.”⁶⁰

Freud (1933) addressed the quantitative factor in the instinctual aspects of mental illness. With psychosis, especially, the “instinctual component is too powerful in comparison with the opposing forces that we are able to mobilize.” Here, Freud hoped, “our knowledge of the operation of the [sexual] hormones ... may give us the means of successfully combating the quantitative factors of the illness.” In this work, like Freud’s others, the instincts constitute one of the most psychoanalytically relevant domains of biology. Indeed, “the unshakable biological fact” of the sexual and self-preservative instincts “shadow[s]” the “independence of psychology from every other science.” Here Freud conceptualized his works on the instincts as “biological psychology,” the study of the “psychical accompaniments of biological processes”—a definition quite compatible with dual-aspect monism.⁶¹

Freud’s elaborations of his oldest point of contact with biology—cerebral excitation—are, like those on instinct, too numerous to mention. Moreover, Freud held there to be a close, though by no means always clear and consistent, interrelation between his concepts of instinct and of nervous excitation and energy (e.g., Freud, 1915, 1933). This was also the case with his final (1920) instinct theory of Eros (libido) and aggression (i.e., the “death instinct” turned outward). In any event, excitation, like instinct, contributed a quantitative aspect to motivation, defense, cognition, and affect.⁶² See note 81: “Hormones, the Brain, and Mentation/Behavior.”

As the years went by, Freud increasingly characterized these excitatory and energetic processes as “psychical.” For instance, in 1938, Freud deemed the nature of psychical energy a “still shrouded secret.” “We assume,” he continued, “as other natural sciences have led us to expect, that in mental life some kind of energy is at work; but we have nothing to go upon which will enable us to come nearer to a knowledge of it by analogies with other forms of energy.” Nevertheless, in this very paragraph, he used “nervous” energy and “psychical” energy interchangeably. To the very end, he often alternated, as in his earliest psychological writings, the terms “nervous” and “psychical.”⁶³ Although he occasionally, as we have seen, treated this energy or excitation as purely psychological, he never ceased to attribute to it a quantitative aspect; nor, it is plain, did he ever truly consider it free of systemic and cerebral roots. (See Sullivan’s interesting and more consistently physicalistic interpretation of energetic and tensional concepts in dynamic psychiatry).⁶⁴

Chapter VII of *The Interpretation of Dreams* is filled with passages on excitation or psychic energy and its binding and discharge. The 1905 book on jokes is an excellent example of Freud’s simultaneously intentionalistic and energetic discourse:

In laughter, therefore, on our hypothesis, the conditions are present under which a sum of psychical energy which has hitherto been used for cathexis is allowed free discharge. And since ... laughter at a joke ... is an indication of pleasure, we shall be inclined to relate this pleasure to the lifting of the cathexis which has previously been present. ... [T]he cathectic energy used for the inhibition [of a proscribed idea] has now suddenly become superfluous and has been lifted, and is therefore now ready to be discharged by laughter. ... [T]he hearer of the joke laughs with the quota of psychical energy which has become free through the lifting of the inhibitory cathexis.⁶⁵

But here we see a mixing of psychological and biological discourse, to which Freud often resorts. In his defense, the phenomena are quite complex. Nevertheless, it is important to reiterate my argument from Chapter 24: (1) that image-laden/symbolically mediated activity simply is the highest level of integrated body/brain functioning—in interaction, again, with sociocultural and interpersonal surround; and (2) that psychology is the neurobiological language addressing it. These notions are fully compatible with identity theory. Moreover, as accented in Chapter 26, psychological concepts and theories are necessary in the study and explanation of motivation, learning, and behavior of mammals much-less complex than man.

Ponder also the following 1915 passage, fairly typical of Freud’s writing on energetics:

The processes of the system Pcs. display—no matter whether they are already conscious or only capable of becoming conscious—an inhibition of the tendency of cathected ideas toward discharge. When a process passes from one idea

to another, the first idea retains a part of its cathexis and only a small portion undergoes displacement. Displacements and condensations such as happen in the primary process are excluded or very much restricted. This circumstance caused Breuer to assume the existence of two different states of cathectic energy in mental life: one in which the energy is tonically “bound”—and the other in which it is freely mobile and presses toward discharge. In my opinion this distinction represents the deepest insight we have gained up to the present into the nature of *nervous energy*, and I do not see how we can avoid making it. *A metapsychological presentation would most urgently call for further discussion at this point, though perhaps that would be too daring an undertaking as yet.*⁶⁶ [Italics added]

The important concept of trauma was, again, in 1920, tied closely to energetics, traumatic excitations sufficiently powerful to “break through the protective shield.”

Such an event ... is bound to provoke a disturbance on a large scale in the functioning of the organism's energy and to set in motion every possible defense measure. At the same time, the pleasure principle is for the moment put out of action. There is no longer any possibility of preventing the mental apparatus being flooded with larger amounts of stimulus, and another problem arises instead—the problem of mastering the amounts of stimulus which have broken in and of binding them, in the psychical sense, so that they can then be disposed of. ... Cathectic energy is summoned from all sides to provide sufficiently high cathexes of energy in the environs of the breach. An “anticathexis” on a grand scale is set up, for whose benefit all the other psychical systems are impoverished, so that the remaining psychical functions are extensively paralyzed or reduced.⁶⁷

In this light, recall that some theories of the predisposition to, and genesis of, schizophrenia; posit deficiencies in the “protective shield” against the myriad environmental stimuli by which we are constantly bombarded. To put it another way, there is a problem with the apperceptive “filter” which separates “signal” from “noise.”

There are, as we have seen, many instances in which Freud espoused a logically consistent “identity theory,” especially up till his abandonment of the 1895 *Project*, for example, his wonderfully astute neurophysiological characterizations of both hypnosis and its effects on the patient. However, after 1895, at times he mixes psychological and physiological language—occasionally illogically so, in a manner that precludes calling it “identity theory.” Still, he is quite capable of returning to identity theory—which, it bears repeating, does not altogether rule out psychological terms—though, more frequently, his later terminology is consistent with monistic single-aspect–dual-aspect interactionism. Again, this is not to be confused with Spinoza's or Hughlings Jackson's “dual-aspect monism,” which was non-interactional: that is, “parallelism.” Thus, energetic concepts lace later works⁶⁸: in 1915–1917, 1925, 1926, and 1933.

I have already referred to the 1938 “Outline,” Freud's last major theoretical effort. It no more dispensed with notions of “psychical” or “nervous” energy, cathexis, binding, displacement, and discharge than do Freud's earlier writings. In his last major essay on technique, in 1937, Freud oracularly deemed such factors to prepotently determine therapeutic outcome:

The power of the instruments with which analysis operates is not unlimited but restricted, and the final upshot always depends on the relative strength of the psychical agencies which are struggling with one another. ... Once again we are confronted with the importance of the quantitative factor, and once again we are reminded that analysis can only draw on definite and limited amounts of energy which have to be measured against the hostile forces. And it seems as if victory is as a rule on the side of the big battalions.⁶⁹

Freud was referring to such energetic distribution in overall brain functioning and diffuse cortical processes involving millions, or even billions, of neurons. Here, the collective magnitudes would be much larger and, it seems, conceivably capable of influencing and manifesting in mental/behavioral states. Moreover, Freud was hardly indifferent to the role of systemic, endocrine, and peripheral and spinal nervous energetic input to the brain itself; nor was he unaware of the environmental (meaningfully patterned or otherwise) energetic impact on the human organism. Although transduction, and concomitant dampening, of such ambient and extracerebral organismic energetic input occurs along the way, we have no reason to believe that subcortical and central brain activity is unaffected by the distribution, patterning, and *relative* intensities and intensity alterations in the energy reaching it from ambient and systemic-organismic sources. It appears quite plausible that such meaningful cerebral activities as unconscious motivation,

defense, and perception/interpretation both reflect and register energetic vicissitudes that are ultimately manifested in phenomenology and overt molar behavior. See, again, note 81.

Like Freud, I suspect that interactive concepts of both “force/energy” and “information processing” are necessary to comprehending mental/behavioral and motivational phenomena. Furthermore, also like him, I do not believe that psychoanalysis can be indifferent to the theories and findings of neurology and neuroscience. *Of course it can't, because, ontically, we have one set of phenomena—brain activities issuing in other brain activities, and in motor behavior including communication.*

Where Freud went awry was in tending, contradictory to his overriding theory and its implications, to view the body/brain (especially in psychopathology) as a *closed* energetic and informational system. This tendency is perhaps exemplified in his oversharpe dichotomy between “psychical” and “actual” reality—and in his overemphasis on the former. Not sufficiently appreciating the interaction and overlap between the two, he became unduly exercised to ground psychical reality in a prehistorical actuality (e.g., the Oedipus complex in the phylogenetic primal father tale) by way of then already questionable biogenetic and Lamarckian hereditary notions⁷⁰—although the biogenetic law, somewhat modified, is coming back. Moreover, as discussed in Chapter 24; Kandel has demonstrated that long-term environmental stimulation (e.g., in the conditioning of Aplysia), leads to effects on the nuclear DNA itself. *Very conjecturally*, might this bear on the issue of the alleged transmission of phylogenetic procedural (i.e., *implicit*), and perhaps even explicit, memory?

Too, while Freud strode fairly consistently with an “identity theory” from the latter 1880s through 1895 and later frequently returned to it, he would repeatedly fall away—because, I conjecture, of his fears that it would lead to an eliminative reductionism, that would disallow all psychological discourse—when this was not, in fact, the case. While he often cleaved to a dual-aspect monism, I believe that his heart was most truly set toward (token–token) identity theory. Indeed, despite his late wavering, there is as much “identity theory,” and fragments of “identity theory,” in his entire corpus as anything else. Thus I call him an (inconsistent) “dual-aspect monist”/“functionalist”/“identity theorist.” In fact, functionalism and identity theory overlap.

In this debate, it is noteworthy that energetics’ strongest proponents tend to defend it on *clinical* grounds. In this context, it is notable that Klein’s (1967) brilliant attempt to develop, through information theory, a force- and energy-free concept of motivation was largely unsuccessful: moreover, it is shot through with economic and dynamic terms and euphemisms for them.⁷¹

To be sure, the controversy is complex and, in many respects, beyond the aims of this chapter. It is difficult enough to know what Freud conceived his metapsychology to be. Perhaps it was meant to be the psychoanalytic “equal in dignity” to the matter-in-motion of Brücke and DuBois-Reymond. Most often, Freud seems to have equated metapsychology with his theorizing about the unconscious, whose activity he considered a sort of Kantian thing-in-itself. While generally characterizing unconscious processes as psychical—unlike most nineteenth century scientific writers, such as Breuer’s colleague, Hering—he was, again, quite capable of wavering here as well:

Perhaps it might be more correct to say: these processes are not of a psychical nature at all, but are physical processes the psychical consequences of which are represented as if what is expressed by the words “detachment of the idea from its affect and false connection of the latter” had really happened.⁷² [Italics added].

In this vein, recall Freud’s 1888 repudiation of the notion of unconscious affect. “Identity theory,” however much Freud pushed it down, kept resurfacing. In any event, Freud could be humble, even skeptical, about the value of metapsychology. He termed it variously a “witch,” his “mythology,” and a “scaffolding,” not to be mistaken for the “building.” Indeed, despite his professed philosophical tone deafness—of which, incidentally, he was a bit too proud—Freud often made surprisingly sophisticated comments about the metaphysical and epistemological aspects of his work. Ornston, Mahony, and Wallace have written widely about this less dogmatic, more philosophically self-reflective and self-critical Freud.⁷³ After all, he didn’t study philosophy—throughout *Gymnasium*, and for two years in University—for nothing.

In regard to a mind-body *metaphysic*, Freud was, as we have seen, quite capable of throwing up his hands. Jones tells us that Freud held “the essential nature of mind and matter [as] quite unknown.”

*The innermost nature of “true psychical reality” is declared to be “as much unknown to us as the external world and ... as incompletely presented by the data of consciousness.”*⁷⁴ *Shades of the skeptical empiricist Hume, whom Freud had definitely studied.* However, I believe Freud more often adopted Kant’s distinction between the “*noumenon*” (i.e., the “unconscious” as the not directly knowable “*thing-in itself*”) and the “*phenomenon*” (unconscious mentation’s derivatives in speech, symptoms, and behavior).

It may well be, as Freud very occasionally considered, that only conscious brain activity can *also be* characterized “psychologically” or, as I prefer, “*psychophysiological*,” while unconscious cerebral activity is characterizable purely neurophysiologically—though “*as if*” denominations of it psychologically may be heuristically—that is, theoretically and therapeutically—necessary. Again, to use a psychological discourse (e.g., “motivation” and “meaning”) with reference to conscious activity is not to practice a Cartesian ontological “mind-substance”/“brain-body substance” split, for there is no denial that symbolically mediated and image-laden processes and behaviors are fully cerebral activities. Science is full of examples of using multiple discourses to describe what is an ontologically self-identical, set of phenomena—the Copenhagen decision to refer to light in some instances “*as if*” it is a “wave” and in others as if it is a “particle.” *In short, self-identity of phenomena (i.e., conscious or self-reflectively conscious cerebration) does not rule out a heuristically dual (again, not ontologically dualistic) discourse.*

In delineating Freud’s position on mind-body, how do we capture and meld (1) a generally unflagging metaphysical materialism and a pervasive concern to establish points of contact between psychoanalysis and biology; (2) a powerful penchant for preserving the integrity and independence of psychoanalytic investigation and explanation; and (3) an interactionist position on systemic, lower brain, and “mental,” or higher cortical, processes? *I believe we can do so by considering Freud, once more, a functionalist, dual-aspect monist, or “identity theorist.”*

Dual-aspect monism does not abrogate materialism (understood as the proposition that “without material/energetic processes and interactions nothing of the universe would exist”). It simply avers that one (presumably evolutionarily emergent) aspect of certain material and energetic processes—“*intentionality*” (in the broad sense of Freud’s teacher Brentano)—is sufficiently different to require a scientific discourse all its own. It asserts that there is also a simultaneously present aspect of mental content that must be grasped physiologically and neurobiologically. It allows, moreover, for causal interactions not only between and among these dual-aspect cerebral processes, but also between them and nervous system and bodily activities without a meaningful face (that is, single-aspect). It eschews talk of “brain-events” and “mind-events”: mentation is deemed a single process, one aspect of which is symbolically mediated/image-laden and addressable only as such; the other aspect of which is approachable neurobiologically—as opposed to those systemic and nervous system processes that are surveyable (at least proximally) purely “biologically.” Nonetheless, it is ambiguous on the underlying reality-aspect of the “faces,” “facets,” or “aspects” to which it refers: hence my discontent with it. Of course, given (1) our present state of neurobiological knowledge and (2) that aspects of mind-body may remain perennially metaphysical (like the controversy over the “singular origin” versus “steady-state” condition of the universe—one of Kant’s “antinomies”), then this ambiguity may be a strength, not a weakness.

At the same time, however, Freud was philosophical enough to consider his metapsychology (i.e., the “structural,” “economic” or energetic, and “adaptational” approaches) as no more than a theoretically provisional “scaffolding”, and to acknowledge that even ontologically dualistic interactionism could not *prima facie* be ruled out of court. I believe, nevertheless, that had he not feared that his sometime-espoused identity theory would logically carry him whither he did not wish to go, that is, to an eliminative reductionism, he would have asserted it more consistently.

In summary, whatever his mind-body metaphysic, Freud established a secure space for psychological modes of explanation, investigation, and intervention in psychiatry. This was a place, moreover, permitting interaction between psychological and neurobiological approaches. Surely, it is unlikely that Freud would have opposed today’s neurobiological and psychopharmacological revolution. He considered the possibility of psychologically contentless psychiatric disorders (the so-called “actual neuroses”); the constitutional and hereditary factors in neurosis, psychosis, and melancholia; temperament–environment interactions; and the

eventuality of humoral and pharmacological maneuvers in even the so-called “functional” mental disorders. I do not believe, however, that Freud—his few reductionistic statements notwithstanding—would have followed those current “biological” psychiatrists striving to *explain away* human experience, motivation, behavior, and mental content.

Unlike many physicians even to the present day. Freud was not ashamed to think psychologically, let the metaphysical chips fall where they may. At the same time, his was a psychology of human embodiment—of the body as imagining, experiencing, remembering, repressing, communicating, enacting, and interacting.

For him, at his best, the mind-body problem was the “*body/brain-environment*” problem. *Psychoanalysis is, as Freud (1938) called it, a “natural science”—“What else can it be?”*⁷⁵ *It is that branch of biology studying the meaningful, motivational, and historical aspects of the human organism-in-its-world.* In other words it is, as Gedo and Wolf⁷⁶ call it, “*humanistic natural science*” (italics added).

Freud understood mentation as the brain functioning at its most complex and integrated level, and that clinicians wishing to encounter it had best look at themselves and their patients and not merely at neurological laboratory tests. Proffering physiology and medicine a window on human phenomena at this plane, he remained, in an important sense, a neuroscientist and neurologist throughout his career.

Conclusion

It is generally thought that none of the major positions on mind-body is decisively refutable—even those, to my mind, as scientifically and clinically outrageous as animism (spiritistic or ideological monism) and eliminativism. At the same time, all are flawed and ignore important issues. Moreover, because of the complex—indeed fuzzy—nature of the problems themselves and of the concepts available to us, it is difficult to be precise and thoroughly coherent.

I favor either monistic dual-aspect interactionism or a functionalism compatible with token–token (and aspects of type–type) identity theory, because of what I take to be their (especially the latter’s) superiority in metaphysical parsimony; consistency with the premier premises and perspectives of medicine and the natural and social sciences; coherence with scientific, clinical, and ordinary reason and experience; and because of certain ineliminably aesthetic factors. Like psychoanalysis, both stances are founded, metaphysically and epistemologically, on a critical “perspectival realism,” itself founded on a concept of “intersectional causation” and evolutionary adaptation and survival.⁷⁷ It is well to point-out here that no scientific discipline or approach can escape metaphysics altogether. Each relies on certain empirically non-testable axioms, assumptions, premises, and presuppositions—at times approaching overriding *Weltanschauungen*.

Now exactly how we get from that which we conceptualize neurobiologically to experience, behavior, and our verbal characterizations of them (including neurological theorizing, investigation, and practice!), is, of course, clarified by no model (each of them begging manifold questions). It is—and may remain—unknown (i.e., metaphysical). However, far be it from me to put a cap on what neurobiology/molecular biology may one day accomplish. They may eventually convert the metaphysical aspects of characterizing and explaining human (symbolically mediated/image-laden) consciousness and self-reflectiveness to neuroscience. Still, it is mind boggling to imagine that they could develop to the point of eliminating the heuristic need for a “psychosociocultural” discourse. But, who knows?

Epilogue

It is apt to close with the assessment by Jerome Shaffer, an eminent student of the mind-body relation; for whom it remains an intractable problem—“a source of acute discomfort to philosophers.” No one has proved it a “pseudo problem”; nor does any “solution stand out as markedly superior to the others.” “*Nor does it seem that new empirical information will furnish a decisive test for one theory or another—for each can easily bend such to fit within its framework (my italics).*” It may be, he suggests, with a modesty

rare among those addressing this most difficult-of-all ontological issues (aside from the existence of God); “that the relation is an ultimate, unique, and unanalyzable one” (my italics). If so, then “philosophical wisdom would consist in giving up the attempt to understand the relation in terms of other, more familiar ones; and accepting it as the anomaly it is.”^{78–80} In Chapter 27, the late Herbert Weiner demonstrates such wisdom.

See *Postscripts 1 and 2; after the “References.”*

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metaphorical, relatively jargon-free, and at times almost “folksy.” The Strachey-supervised English-language translation of the *Standard Edition*, on the other hand, substituted all manner of “scientific” neologisms and jargon. See P. Mahoney (1987), *Freud as a Writer* (New Haven, CT: Yale University Press), and P. Mahoney (1981). *On Defining Freud’s Discourse* (New Haven, CT: Yale University Press).

On Freud’s sensitivity to metaphysical, epistemological, and scientific issues, see Wallace (1983), *Freud and Anthropology*, op. cit.; Wallace (1985), *Historiography and Causation in Psychoanalysis*, op. cit.; and Wallace (1988), What is “truth”?, op. cit. See also correspondence between readers and the author in the September, October, and November 1988 and the January 1989 issues of the *American Journal of Psychiatry*. I examine—and draw heavily upon—the philosophies of science of William James, Sir Karl Popper, and Sigmund Freud. See also Wallace (1989), *Toward a phenomenological and minimally theoretical psychoanalysis*, op. cit., done, partly, in the spirit of Freud.

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*Freud was, as I am, a staunch believer in a hard biopsychosocial determinism. In the “Causation” section of Chapter One I elaborate my reasons—like Einstein’s and Schrodinger’s—for a causal interpretation of quantum theory. Moreover, chaos theory does not abrogate determinism. Rather, it emphasizes the surprising impact that temporally and geographically distal small-scale causes can have on subsequent large-scale events. This impact is of course mediated through a vast nexus of intervening events. I treat Freud’s—and my own—hard determinism in a number of items. See, e.g., E. R. Wallace, IV, “Determinism, possibility, and ethics,” *Journal of the American Psychoanalytic Association* 34 (1986):935–976. See also Chapter 26.*
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Moreover, in our day-to-day lives—including much of clinical parlance—we physicians are all of us *closet-Cartesians* (or *methodological ones, if you prefer*). The social, political, and public-health aspects of his medical philosophy have, likewise, been egregiously ignored. He believed it the *duty* of the state to promote the health and general well-being of its citizens: through universal health-care and preventive measures; including proper nutrition, sanitation, and public housing and neighborhood-improvements. This even extended to the public education and vocational training that could alone raise the poor to a healthier and happier status. Many of the 18th-Century French *philosophes* counted him the father of their sociopolitical/moral meliorism. He was, in many respects, the Rudolph Virchow of the 17th-Century. See also D. M. Clarke, *Descartes' Philosophy of Science* (College Park: Pennsylvania State University Press, 1982).

Postscript 1: Olfaction, Organic Repression, Evolutionism, and Adaptation

Finally, it is in *Civilization and Its Discontents* that we find the culmination of Freud's concern with the role of olfaction in repression. As early as 1897 he wrote a letter to Fliess suggesting that the perversions and hysteria may represent "vestiges of the importance of the sense of smell in animal sexuality" (1887–1902, pp. 186–187). In a second letter from the same year he clearly adumbrated the theory of repression which appears in *Civilization and Its Discontents*.

"I have told you before that it is a question of the attitude adopted to former sexual zones ... in my case the suggestion was linked to the changed part played by sensations of smell: upright carriage was adopted, the nose was raised from the ground, and at the same time a number of what had formerly been interesting sensations connected with the earth became repellent—by a process of which I am still ignorant [The consequence is that the abandoned erotogenic zones now release not libido, but unpleasure.] To put it crudely, the current memory [of the abandoned zone] stinks just as an actual object may stink; and just as we turn away our sense organ (the head and nose) in disgust, so do the preconscious and our conscious apprehension turn away from the memory. *This is repression*" [1887–1902, pp. 231–232].

Similar ideas were expressed in the 1901 Dora case. Discussing the topic at a 1909 meeting of the Vienna Psychoanalytic Society, Freud flatly stated there is "no repression that does not have an organic core" and related this, once more, to "man's detachment from the soil" and the consequent proneness of the olfactory sense to repression (Nunberg and Federn, 1967, Vol. II, p. 323). In other words, previously pleasurable sensations are transformed into unpleasurable ones. In the case of the Rat Man, Freud specifically raised the question of "whether the atrophy of the sense of smell (which was an inevitable result of man's assumption of an erect posture) and the consequent organic repression of his pleasure in smell may not have had a considerable share in the origin of his susceptibility to nervous disease" (1909, p. 248).

In *Civilization and Its Discontents* Freud completed this line of reasoning. He used it to explain the incest taboo and taboos and avoidances concerning menstruation (1930, p. 99):

"The taboo on menstruation is derived from this 'organic repression', as a defence against a phase of development that has been surmounted. All other motives are probably of a secondary nature. ... This process is repeated on another level when the gods of a superseded period of civilization turn into demons. The diminution of the olfactory stimuli seems itself to be a consequence of man's raising himself from the ground, of his assumption of an upright gait: this made his genitals, which were previously concealed, visible and in need of protection, and so provoked feelings of shame in him."

"The fateful process of civilization would thus have set in with man's adoption of an erect posture. From that point the chain of events would have proceeded through the devaluation of olfactory stimuli and the isolation of the menstrual period to the time when visual stimuli were paramount and the genitals became visible, and thence to the continuity of sexual excitation, the founding of the family and so to the threshold of human civilization" [1930, pp. 99–100; see also p. 106n5]. Here and earlier he is referring to many tribal societies' institutionalized isolation of menstruating women—which falls under the general ethnological concept of "avoidances." Perhaps this decreased the intermale rivalry/aggression that would have accompanied the sexual stimulation of seeing—and, *contra* Freud, smelling—menstruating females.

That formerly pleasing genital and anal smells became disgusting was due, Freud believed, both to the aforementioned factors of organic repression *and* to the "existence of the social factor which is

responsible for the further transformation of anal erotism” (p. 100n). Freud thought the presence of this social factor was attested to by the fact that we “scarcely find the smell of [our] *own* excreta [or flatus] repulsive, but only that of other people’s” (p. 100n).

Freud suggested that our adoption of an upright carriage, and the associated organically/socially-induced post-oedipal inhibition of hitherto sexually pleasurable genital and anal smells; may have contributed to our psychopathological predispositions. In *Civilization and Its Discontents* (1930) (literally, *Das Unbehagen der Kultur*, “The Unpleasures of Civilization”); he further reiterated that the requirements of civilization for the ever-greater repression of our sexual, aggressive, and egoistic drives have led to a marked increase in psychopathology and neurosis. This presumably increased with the more densely-populated and bureaucratized Neolithic agricultural/pastoral villages.

For practical reasons let us ignore our small-brained, upright remotest hominid precursors (the East African Australopithecines and “*Homo[sic] habilis*” [ca. 3,000,000–1,000,000 B.C.E.]). Let us begin our ancestry only with the larger-brained *Homo erectus* (ca. 1,000,000–300,000 B.C.E.); who discovered fire, made the earliest sophisticated stone tools, and even had a primitive religion and concept of the afterlife (as illustrated by items buried with the dead). By this *evolutionary history*, we have been *optimally-adapted to a Pleistocene hunter-gatherer existence for at least a million years; including 90+% of the 100,000 or so years-existence of Homo sapiens sapiens!* The Neolithic agricultural/urban revolution began only 10–12 thousand years ago; and did not reach full-speed until the literate high civilizations of the ancient Near East. Recently some have posited the newly discovered *Homo ergaster* as a link between *erectus* and ourselves.

It bears emphasis that *Homo sapiens sapiens* is the first being to engage in artistic activity—whether petroglyphs or carvings on exposed boulders; or paintings in the remotest halls of caves (probably the symbolic wombs of the primal earth goddess). Probably this aesthetic sense was also utilitarian—sympathetic magic in the context of animistic belief-action systems. Surprisingly, there is no evidence whatsoever that Neanderthal man ever engaged in even the most primitive artistic endeavor—not even squiggles, lines, and cross-hatching. Studies of Neanderthal endocranial casts suggest that even through their brain masses were comparable to ours; much more of theirs was taken up by the limbic lobes (and their ventricles were larger). From this one might surmise that a greater proportion of their behavior was instinctually-determined. Moreover, while it was long thought that *Homo sapiens sapiens* and *Homo sapiens neanderthalensis* were interfertile; the most-recent DNA evidence seems to suggest otherwise. Be that as it may, in simple terms of sexual selection; it is unlikely that our taller and slenderer immediate ancestors would have been attracted by the short, thickset, large-boned/heavy-skulled Neanderthals anyway. Many think that through competition between the two for scarce resources, and perhaps through warfare as well; that the Neanderthals simply lost the evolutionary game with *sapiens sapiens*—by ca. 30–40 thousand B.C.E.

The best cultural anthropological evidence confirms several things about 19th/20th/21st century hunter-gatherers, as compared to their agricultural/urban counterparts—much less as contrasted with our contemporary, “type-A” personality-fostering, industrial/postindustrial monopolistic capitalism/consumerism: (1) The fact that male hunters and female gatherers support themselves with about 20 hours of work per week per individual (leaving considerable time for artistry, story-telling, music/song/dance, worship, childrearing, and playful/recreational activities generally); whereas contemporary tribal agriculturist/pastoralist villagers require at least twice as much labor per person per week. (2) Moreover, the agriculturists are much-more prone to infectious disease—from insect and other pathogenic vectors breeding in livestock droppings, and to its contagion (due to crowded villages); and (3) their diet is less-balanced than their hunter-gatherer tribal counterparts. (4) Hunter-gatherer infant mortality rates are significantly lower; and, when one discounts for males killed on the hunt or in battle, their life-expectancies are longer than their agriculturist counterparts.

Hence, through eons of natural/sexual selection, modern Westerners have become optimally-adapted to a hunter-gatherer existence; which they have long-since jettisoned. This, as much as anything, may be the source of much industrial/postindustrial psychopathology—as well as of course our myriad stress-related diseases.

In any event, Freud's consideration of these phylogenetic factors is quite interesting. As he well knew; children pass through a developmental stage (ca. ages 1 1/2 to 3), around toilet training; during which they delight in the smell of their own and others' excrement. At times they will play with their stools in the potty; and obtain a pleasure in the retention and evacuation of their feces not wholly lost in adulthood. Moreover from the time of crawling, and during maternal absences; they often become attached to blankets or cloths which they don't want washed: as they delight in the smells increasingly associated with them. Winnicott and others have conceptualized these as "transitional" "objects" in at least two respects: (1) in that they represent a mother-substitute during times of her absence (taking on her smells as well as those of the infant/toddler); and (2) in that they are simultaneously a part of the self and yet not-self.

Freud's emphasis on the adult's aversion to once-pleasurable anal, urethral/genital, and perspiratory smells; presupposes an organismic-developmental, and not simply parental/social prohibitional, role in the older child's and adult's disgust (i.e., reaction formations toward) and defenses against these once pleasurable olfactory—and tactile/gustatory-activities. *Nevertheless, Freud's accent on the repression of such pleasures is curiously out-of-kilter with the pathbreaking ideas in his 1905 Three Essays on the Theory of Sexuality (and his periodic additions to the original text). There he notes that the pregenital erogenous zones and modes of satisfaction (including touching, smelling, and mouthing the genito-urinary and anal excretory areas of the lover) figure importantly in the healthy adult foreplay leading up to genital intercourse.* Outside a state of lust, the idea/memory of such foreplay may incite conscious revulsion; which subsides once-again when libido resurges. (Of course, such pregenital aspects of love-making were officially frowned upon by Victorian sexual morality.) Moreover, recent studies of human, differentially male and female, "pheromones" attest to the continued importance of smell (even if unconscious) in sexual arousal.

On another note; the uncus is an important associational area in the processing of olfactory stimuli. It is intimately intertwined with the hippocampus which, we have seen, is integrally involved in the transformation of short-term to long-term memory. The auras preceding partial complex seizures (formerly called "temporal lobe epilepsy") can include so-called "uncal fits"; that is, intense fully-formed olfactory hallucinations, not occasionally associated with what seem to be hitherto-repressed childhood memories. I have encountered this in some of my neurological/neuropsychiatric patients—as well as with purely psychotherapeutic cases—and in my own personal experiences. For instance, whenever I jog past creosoted logs; their smell invariably incites awareness of never-repressed childhood memories: pleasant olfactory and visual images of my friends and my climbing over creosoted logs on parked railway freight cars (from ages 6 to 10). The tracks were only a few hundred yards from my house. At other times, ostensible memories emerge in relation to fragrances which I cannot relate to my waking consciousness. Ontogenetically/phylogenetically it would seem to make sense that some of our earliest memories would be associated with olfaction; against which our repressions and reaction formations ordinarily operate.

Perhaps Neanderthals never developed such repressions—trading continued olfactory and pregenital instinctual pleasures; for the "discontents" necessary for civilization!?! Again, endocranial casts of Neanderthal skulls suggest they had much larger limbic systems than we. Thus, more of their behavior may have been olfaction-mediated than ours. Recall that it was the famous Frankfurt School Freudo-Marxist émigré to America; Herbert Marcuse; who argued that "civilized" society's biggest—and most neurotogenic crime against its members—was its repression of pregenital modes of "organ pleasure"; which it baptized as "perversions" and so forth (*Eros and Civilization*, New York: Vintage, 1962). For him, the political liberation of the laboring-class from bourgeois capitalist/consumerist dominance and values; would go hand-in-hand with the liberation of man's "polymorphously-perverse" sexual strivings. Monsieur Foucault would certainly have drunk to this (e.g., his earlier-cited 3-volume *History of Sexuality* and his penchant for sadomasochism).

Freud's positing of an inherited organic basis to repression, his theory of psychopathology as an ontogenetic and phylogenetic regression—i.e., as a sociopsychobiological survival or atavism, his emphasis on the instinctual—or, more accurately, "drivelike"—aspects of motivation and behavior, the adaptational aspect of his metapsychology, his insistence on the phylogenetic determination of psychosexual

development, his accent on the psychobiological unity of humankind, and much more place him in the direct developmental line of both nineteenth-century cultural evolutionism and *present day evolutionary psychobiology*: (1) J. H. Barkow, L. Cosmides, and J. Tooby, eds., *The Adapted Mind: Evolutionary Psychology and the Generation of Culture* (Oxford University Press, 1992); (2) R. Wright, *The Moral Animal: The New Science of Evolutionary Psychology* (New York: Vintage, 1994); (3) S. Pinker, *How the Mind Works* (New York: W. W. Norton, 1997); (4) R. L. Solso and D. W. Massaro, eds., *The Science of the Mind: 2001 and Beyond* (Oxford University Press, 2001); (5) A. Jolly, *The Evolution of Primate Behavior*, 2nd ed. (New York: Macmillan, 1985); (6) D. C. Dennett, *Darwin’s Dangerous Idea: Evolution and the Meanings of Life* (New York: Simon & Schuster, 1995); (7) M. Konnor, *The Tangled Wing: Biological Constraints on the Human Spirit* (New York: Holt, Rinehart, and Winston, 1982); (8) A. Parker, *In the Blink of an Eye: How Vision Sparked the Big Bang of Evolution* (New York: Basic, 2003); (9) I. Tattersall, *Becoming Human: Evolution and Human Uniqueness* (New York: Harvest Books, 1999); (10) M. Ruse, *Darwinism Defended: A Guide to the Evolution Controversies* (Menlo Park, CA: Benjamin/Cummings, 1982); (11) A. Desmond and J. Moore, *Darwin: The Life of a Tormented Evolutionist* (New York: W. W. Norton, 1991); (12) C. Darwin, *Descent of Man, and Selection in Relation to Sex* (London: Murray, 1871); and C. Darwin (1872), *The Expression of the Emotions in Man and Animals* (New York: Barnes & Noble, 2006); (13) D. C. Abel, *Freud on Instinct and Morality* (Albany: State University of NY Press, 1989); (14) C. E. Osgood, W. H. May, and M. S. Miron, *Cross-Cultural Universals of Affective Meaning* (Chicago: University of Illinois Press, 1975); (15) J. D. Vincent, *The Biology of the Emotions*, trans. J. Hughes (Oxford: Basil Blackwell, 1990); (16) S. H. Barondes, *Mood Genes: Hunting for Origins of Mania and Depression* (Oxford, 1988); (17) D. Bickerton, *Language and Species* (University of Chicago Press, 1990); (18) A. Graham, *Psycholinguistics: Central Topics* (Cambridge University Press, 1985); (19) K. Lorenz, *The Foundations of Ethology: The Principal Ideas and Discoveries in Animal Behavior* (New York: Springer, 1981); (20) M. Ridley, *Genome: The Autobiography of a Species in 23 Chapters* (New York: Harper Perennial, 2000); (21) C. Willis, *The Wisdom of the Genes: New Pathways in Evolution* (New York: Basic, 1989); (22) E. Mayr, *What Evolution Is* (New York: Basic, 2001); (23) J. R. Krebs and N. B. Davies, *An Introduction to Behavioral Ecology*, 2nd ed. (Oxford: Blackwell, 1987); (24) T. Ingold, *Evolution and Social Life* (Cambridge University Press, 1986); (25) D. Hamer, *The God Gene: How Faith Is Hardwired Into Our Genes* (New York: Random House, 2004); and A. Newberg, E. D. Aquili, and V. Rause, *Why God Won’t Go Away: Brain Science and the Biology of Belief* (New York: Random House, 2002); and (26), despite their theoretical excesses, and the difficulties *independently substantiating—or falsifying—such all-embracing hypotheses*, the aforementioned sociobiologists as well (e.g., Wilson and Dawkins). See (27) D. M. Senchuk’s *Against Instinct: From Biology to Philosophical Psychology* (Philadelphia: Temple University Press, 1984); for a withering broad-scale philosophical, biological, and psychological assault on sociobiology’s instinctual pangeneticism. For a historical/sociological critique of Dawkins, Wilson, and their kith and kin; see (28) K. Bock, *Human Nature and History: A Response to Sociobiology* (Columbia University Press, 1980)—recall also erstwhile-cited criticisms.

Unlike Hamer and Newberg *et al.*, who argue that religion has become genically hardwired because of its biopsychosocially-adaptational advantages (enhanced group cohesion, etc.); R. Dawkins, in *The God Delusion* (Boston: Houghton Mifflin, 2006), denies it is genically-ingrained—which is curious, given his repeated assertions that *all* major sociocultural institutions are genically determined; and contends that, if it ever had any adaptive value, it has lost it long, long ago. See, by contrast (29) M. D. Hauser, *Moral Minds: How Nature Designed Our Universal Sense of Right and Wrong* (New York: Harper Collins, 2006). This is an extremely Kantian notion.

We have just enumerated works supporting certain strongly-evidenced human universals (which, of course, are anathema to Foucault and his postmodern “groupies”; who believe we can freely “construct” ourselves into whatever beings we want). More to the point, however, is that the days of complete divide between universalizing evolutionary human biologists, neurobiologists, and psychoanalysts on one hand; and relativizing social learning theorists and cultural anthropologists on the other; are mostly over. Psychoanalysts, evolutionary biologists, and even many neuroscientists have become more socioculturally sensitive; and social learning theorists and anthropologists are becoming more psychobiological. Consider

the growing percentage of “biocultural” anthropology departments and graduate training programs in the U.S. And anthropology has always had a fair percentage of practitioners who obtained psychoanalytic training. As mentioned previously, psychoanalysts have increasingly subjected their theories to a variety of extraclinical and intraclinical empirical tests. Too, a healthy number of psychoanalysts has received ethnographic training or collaborated in field work with anthropologists.

Developmental psychology/psychopathology has coupled older longitudinal observational studies with experimental psychobiologically and socioculturally-informed ones: e.g., D. Messer and S. Millnar eds., *Exploring Developmental Psychology: From Infancy to Adolescence* (London: Arnold, 1999) and C. Wenar, *Developmental Psychopathology: From Infancy to Adolescence*, 3rd ed. (New York: McGraw-Hill, 1994). See also the research psychoanalyst, G. E. Vaillant’s 40-year multi-disciplinary longitudinal study of a large cohort of 1950s Harvard male graduates; along a number of parameters of adaptation/maladaptation and consequent physical/mental health or illness: *Adaptation to Life* (Harvard University Press, 1995). And the psychoanalytically-oriented social psychologist D.J. Levinson (a co-author of the famous 1950 *The Authoritarian Personality*) headed up research teams which garnered a great deal of evidence on stages of adult development (in 40 men and 46 women respectively): D. J. Levinson, *The Seasons of a Man’s Life* (New York: Alfred A. Knopf, 1978); and D. J. Levinson, *The Seasons of a Woman’s Life* (New York: Alfred A. Knopf, 1996).

In anthropology, on particularities and universalities, see: (1) D. C. McClelland, *Human Motivation* (Cambridge University Press, 1987); (2) R. Boyd and P. J. Richerson, *Culture and the Evolutionary Process* (University of Chicago Press, 1988); (3) G. M. White and J. Kirkpatrick eds., *Person, Self, and Experience: Exploring Pacific Ethnopsychologies* (Berkeley: U. CA Press, 1985); (4) T. Schwartz, G. M. White, and C. A. Lutz, eds., *New Directions in Psychological Anthropology* (Cambridge University Press, 1994); (5) C. A. Lutz, *Unnatural Emotions: Everyday Sentiments on a Micronesian Atoll and Their Challenge to Western Theory* (University of Chicago, 1988); (6) P. Stoller, *Fusion of the Worlds: An Ethnography of Possession Among the Songhay of Niger* (University of Chicago, 1989)—an upsurge in possession in response to the massive intrusion of Western industrial/capitalistic values on this hitherto isolated tribe; (7) C. M. Turnbull, *The Human Cycle* (New York: Touchstone, 1984). Examines human development in three traditional non-Western societies and one Western one. Suggests that tribal society/cultures have a great deal to teach Westerners about our rape of the world’s resources and the progressive dehumanization and fragmentation in Western “high [sic] civilization”; (8) S. D. Gill, *Beyond “The Primitive”: The Religions of Nonliterate Peoples* (Englewood Cliffs, NJ: Prentice-Hall, 1982); (9) E. T. Hall, *The Dance of Life: The Other Dimension of Time* (Garden City, NY: Doubleday, 1984); (10) M. Cole and B. Means, *Comparative Studies of How People Think* (Harvard University, 1981); (11) T. Lidz and R. W. Lidz, *Oedipus in the Stone Age: A Psychoanalytic Study of Masculinization in Papua New Guinea* (Madison, CT: International Universities Press, 1989); and (12) W. N. Stephens, *The Oedipus Complex: Cross-Cultural Evidence* (New York: Free Press, 1962); which strongly supports its universality—on which most anthropologists would concur.

We turn now to the particularly contentious topic of evolutionary/neurobiological versus cultural explanations of gender features and differences—in these instances especially explanations of female psychology and behavior. The first three items accent evolutionary biological and brain factors. The next two stress a middle way between biological and sociocultural factors; and the last emphasizes sociocultural conditioning. (1) J. H. Barkow, *Darwin, Sex, and Status: Biological Approaches to Mind and Culture* (University of Toronto, 1991); (2) M. Daly, Margo Wilson, *Sex, Evolution, and Behavior*, 2nd ed. (PWS Publishers, 1983); and (3) Louann Brizendine, *The Female Brain* (New York: Morgan Road, 2006); (4) Natalie Angier, *Woman: An Intimate Geography* (New York: Random House, 2000); (5) Diane Ackerman, *An Alchemy of Mind* (New York: Scribner, 2004); and (6) Suzanne J. Kessler and Wendy McKenna, *Gender: An Ethnomethodological Approach* (University of Chicago, 1985).

Postscript 2: Suggested Further Readings on Mind-Body, Evolutionism, and Related Matters; with Annotations

Anyone foolish enough to become trapped in the mind-body snare; soon finds it a delightful/horrible fix to be in. There are enough metaphysical, epistemological, moral, scientific, clinical, and quotidian nettles to prick the repose of adept Zen-masters. God willing, I am quits with it! There is no stopping place, only temporary way-stations. And each year fills a dozen more libraries with mostly reheated-porridge, and an occasional fresh dish. Just a sampling of the scholarly and popular fare.

(1) K. F. Schaffner, *Discovery and Explanation in Biology and Medicine* (University of Chicago Press, 1993). A contemporary *magnum opus*. Heavy-going, but repays the effort. Global coverage of frontier-issues. Not focused on mind-body *per se*; but an essential scientific and philosophical prolegomenon to the topic; by an M.D., Ph.D.

(2) W. Waxman, *Kant's Model of the Mind: A New Interpretation of Transcendental Idealism* (Oxford University Press, 1991). Treats Kant's faculty psychology and "Copernican revolution" generally; and his frequently-overlooked notion that imagination is important both in sensory perception and in deeply-rooted *a priori* categories such as space and time. *Let us not forget that this shy and isolated East Prussian not only fashioned what is usually considered the greatest systematic philosophy since Plato; but also hammered-out, in 1756, a virtually root-and-branch anticipation of the most-currently accepted theory of the evolution (and local devolutions) of the universe.* His philosophy of mind posited nine universal and deeply-ingrained categories of the understanding. In this he "anticipated"—indeed influenced—evolutionary psychobiology, Piaget's stages of childhood cognitive development, and Chomsky's universal, nonconscious, and transformational grammar (overwhelmingly accepted by linguists). Kant also wrote a serious work on psychopathology and psychiatric taxonomy.

(3) L. Wittgenstein, *Remarks on the Philosophy of Psychology*, 2 vols. (ed. and trans., G. E. M. Anscombe and G. H. von Wright; facing leaves in German and English): University of Chicago Press, 1980. Posthumously published from his private notebooks. With few exceptions, the latter-Wittgenstein was not a systematic thinker (he got that out of his system in the *Tractatus*); but rather a kaleidoscope, or a hand-held friction-sparkler: throwing off bursts of light in brilliant aphorisms and mini-analyses. He hardly leaves any area untouched in the philosophy of mind and of psychology; skillfully interweaving linguistic analysis. On mind-body he generally leaned toward an interactional dualism—though he eschewed metaphysics, at the same time that he knew it unavoidable. He once said, "the only way to avoid metaphysics is to say nothing"! But not even then, I argue, for one's very silence would signal one's metaphysical skepticism. Among other things, we sense his powerful approach-avoidance to/of Freud and psychoanalysis (the latter partly out of his oft-expressed, rock-ribbed Victorian morality, and the evident fact that he was festooned with complexes and tottering defenses; as well as a malignantly-neurotic sense of guilt). At the same time he repeatedly asserted that Freud was the greatest psychologist who ever lived! See also Ned Block's splendid, edited two-volume *Readings in Philosophy of Psychology* (Harvard University Press, 1981). Recall also Daniel Robinson's *Philosophy of Psychology* (referenced in Chapter Two).

(4) J. Perry, ed., *Personal Identity* (University of California Press, 1975). A compendium of selections from great philosophical psychologists such as Joseph Butler, John Locke, and the Scots Enlightenment friendly philosophical rivals, Hume and Reid; to gifted contemporaries such as Thomas Nagel and Derek Parfit.

(5) J. Searle—already much-cited herein. See his seminal earlier work, *Speech Acts: An Essay in the Philosophy of Language* (Cambridge University Press, 1969); and the excellent anthology *John Searle*, edited by B. Smith (Cambridge University Press, 2003).

(6) On freedom and otherwise: D. C. Dennett, *Freedom Evolves* (New York: Penguin, 2003); E. Tugendhat, *Self-Consciousness and Self-Determination*, trans. P. Stern (Cambridge: MA: MIT Press, 1986); A. Honneth and H. Joas, *Social Action and Human Nature* (Cambridge University Press, 1988), interpretative essays on a variety of 19th- and 20th-Century philosophical anthropologists; R. Montague, *Why Choose This Book? How We Make Decisions* (New York: Penguin, 2006), witty and informative tract by a Baylor Medical School neuroscientist; T. Honderich, *How Free Are You?: The Determinism Problem* (Oxford University Press, 1993); D. Parfit, *Reasons and Persons* (Oxford University Press, 1987); and K. Popper, *The Open Universe: An Argument for Indeterminism* (London: Routledge, 1982). See, again, my elsewhere-cited “Determinism, Possibility, and Ethics”; and Chapter 26.

(7) Embryology and evolution. Surprisingly embryology did not see the need until lately for a rapprochement between its structural/functional ontogenetic approach and the phylogenetic evolutionary biological one—perhaps recoiling from the earlier days of Darwinism/Lamarckism and an erroneous “adultomorphic” vision of the phylogeny recapitulated in ontogeny (the old-style biogenetic law). (Until the 1960s/70s, cell and molecular biology looked askance at an evolutionism that it considered unscientific—until the bridging began via bacterial and molecular genetics.) See L. Wolpert, *The Triumph of the Embryo* (Oxford University Press, 1992); and S. B. Carroll, *Endless Forms Most Beautiful: The New Science of “Evo Devo”* [i.e., “Evolutionary Developmental Biology”] (New York: W.W. Norton, 2005). By a University of Wisconsin geneticist. Ironically, however, now that embryology is reaching-out a belated hand to neo-Darwinism; the party-line evolutionists/historians-philosophers such as S.J. Gould, Ernst Mayr, and Peter Bowler; are spurning it. The dual Ph.D.-toting; historian/philosopher of science, R. J. Richards, in a terse 1992 monograph, *The Meaning of Evolution: The Morphological Construction and Ideological Reconstruction of Darwin’s Theory* (University of Chicago Press); has brilliantly smoked-out their reasons why. Essentially it is a case of a misplaced fear of political ideology; and of other, more theoretical, concerns. It is now the neo-Darwinians, in a strange role-reversal, who are suspicious of the biogenetic law. They confuse Haeckel’s popularization of the biogenetic law (now understood as the ontogenetic recapitulation of *immature—not adult—approximations* of humans’ phylogenetically ancestral forms); *something Darwin himself endorsed*; with Haeckel’s quite-personal Prussian militaristic authoritarianism, *teleological progressivism* (something which—*heresy of heresies*—Darwin was, again, not himself without) *and, finally and especially, Haeckel’s racism* (which Darwin decisively eschewed).

Hence many neo-Darwinians hear the hoofbeats of social “Darwinism” à la Herbert Spencer and Richard Dawkins; if someone so much as murmurs “biogenetic law.” But there are other—also essentially ideological, and not scientific/rational—inclinations *contra* a full-fledged openness to scientific embryology. To wit, neo-Darwinians resent what they see as its ontogenetic/structural constraints on the free-wheeling variational possibilities they view as the life’s-blood of evolution. Hence they must misinterpret Darwin as a wholesale non-developmentalists to padlock-protect their anti-embryological stance. *Finally, they deeply-suspect the morphogenetic fields of embryology—i.e., the demonstrable cases of structures migrating toward still-only potential, but not yet actual, structures with which they must eventually connect—to ensure vital developmentally-unfolding functions. This smacks of a teleology that just will not do.* Here we encounter a scientifically-unbecoming dogmatic neo-Darwinian arrogance as stiff-necked as their fundamentalist religious counterparts. Mayr, Gould, Bowler, and company put a foundation under Popper’s diagnosis of the mutually-competing neo-Darwinian paradigms as instances of a “metaphysical research programme.” In his *The Presence of the Past: Morphic Resonance and the Habits of Nature* (New York: Times Books, 1988); Rupert Sheldrake is not put-off by embryology’s “morphic fields”—an instance of what he terms “formative causation.” The problem between evolutionists and embryologists, as he sees it; is the former’s excessively mechanistic concept of cause. Nature—in this case embryological development—is shaped, “not by universal mechanistic laws” “that embrace and direct all systems”; but by a unique “morphic field”, containing a pooled or collective memory. This could conceivably have some implications for Freud’s phylogenetic thinking; which would not necessarily require Lamarckian modes of transmission. But I am not fool-enough to enter this doorway.

Moreover, I had the pleasure of arguing with the late, great S.J. Gould (in his latter-1990s visit to the University of South Carolina); over his notion that it was the sheer luck-of-the-random-draw, that the infinitesimally-minute fraction of our proto-chordate forebears survived against competition with the "zillion" genres of invertebrates in the Burgess shale. I contended that there must have been presently-unknowable factors that necessitated these "crowdads" survival. He responded, "You sound like a determinist"; to which I replied, "I am." He said, "Well I'm not." In short, case closed. This adds fuel to Richards's fire. *In fine, these self-proclaimed protectors of the Holy Writ; will not even allow their pullulating variations to be constrained by causality itself!*

Finally, Richards (p. 179) notes that, like Auden's Freud, Darwin has become "a whole climate of [neo-Darwinian] opinion." He adds that the lines of cleavage among today's evolutionists are strikingly-similar to those in Darwin's day. "The debates today range over the tempo and mode of evolution: whether evolution is gradual and constant or saltatory and occasional; whether it is driven to great contingent branching by proliferating variability or is more narrowly confined by reduction in variability; whether transformation is directed by natural selection alone or also by the structural constraints [including embryological ones] of the organism; whether selection focuses exclusively on minimal hereditary units or on systems of greater comprehension—from individuals through kin groups to populations and species" (ibid).

He notes, however, that neo-Darwinians have reached general consensus on what they are against: (1) "that species evolution should be modeled on individual evolution"; (2) "that embryogenesis recapitulates phylogenesis"; and (3) "that evolution is progressive" (pp. 179–180). *In short, Richards emphasizes, they have rejected their progenitor, Darwin's, very "Bauplan"!* Many of them also reject Dawkins' (1976) genic homuncularism—less because of some of its scientific deficiencies, and consistently teleological language; than because of his social Darwinism (which we have already spoken to). Indeed, Darwin's contention, that natural and sexual selection (which latter neo-Darwinians pay much-less attention to) operate at the level of phenotypically-differing (and hence also genotypically-differing), individuals has always seemed most plausible to me. Kinship-selection glides-gently from this, since phenotypically/genotypically similar individuals will be selected for or against—leading to a more or less gradual cumulative genotypic effect. Any other level of selection—barring precipitously overwhelming environmental changes—smacks of the near-metaphysical. Much-earlier I argued (in hitherto-cited articles on the scientific status of psychoanalysis) that psychoanalytic and evolutionary theories share some features in common—most notably "the consilience of inductions" from a variety of evidential sources: including some prospective-experimental and developmental-observational ones; but also historical reconstructions. I might also add that both remain to some extent "school-bound"—though this appears to be decreasing somewhat in psychoanalysis; and there are good reasons to believe that it will also become less-so in neo-Darwinism.

(8) Return to Paleoanthropology/Human Evolution. By way of transition to the material below; we revert to *gradualism versus saltationism (or Gould's "punctuated equilibrium")*. It has always seemed to me that the "line and bait" of the anglerfish must have resulted from a saltatory leap: from either a felicitous recombination of parental genetic material, or else a mutation. Contrariwise, it is inconceivable that the initial mere "nubbins," of the eventual fully-developed "line and bait," could have had sufficient naturally or sexually selective advantage; to ensure their propagation, over the lengths of time, necessary to produce the enhanced adaptation of the full-scale line and bait. Of course, one could argue that the nubbin-laden varieties selectively mated with one another; or that the early phases in the fully-developed "bait and line" need only have been non-deleterious.

Now back to human evolution, as studied in the discipline of paleoanthropology. To his credit Richard Leakey, doyen of the field, pointed out how far from consensus scholars are on important aspects of human evolution; as well as the slimness of fossil remains on which *full-scale reconstructions* are based—e.g., a couple of molars, a skullcap, and perhaps part of a femur (*The Origin of Humankind*, New York: Basic 1994). Today the evolutionary "missing link" is not so much the absence of transitional ape-like hominids; as it is the absence of continuity in the development toward more-human brain sizes. From intensive

studies of the varieties of *Australopithecus* (ca. 3–1 million B.C.E.); it appears that hominids derived relatively upright postures long before their brain cases (ca. 450–500 cc) became much larger than those of the great apes. “*Homo [sic] habilis*” (ca. 2–1 million B.C.E.), had a more-upright carriage than the Australopithecines, though his endocranial capacity was not that much larger; and his stone “tools” were most primitive.

The first big jump in endocranial capacity occurs with *Homo erectus* (ca. 1 million to 300,000 B.C.E.); whose endocranial capacity peaked at around 900cc—even less impressive, when one considers his gargantuan and heavily-muscled stature, well-over six-feet for males. There is then a huge leap to the 1350–1600cc endocranial capacities of *Homo sapiens neanderthalensis* and *Homo sapiens sapiens*. Such large discontinuities pose evolutionary biology great difficulties on the development of the human brain (and we have already spoken to the bigger limbic system and ventricles of the Neanderthal). Could such tremendous differences be caused by massive saltatory leaps, rather than through gradualistic evolution? Personally, I doubt it—especially if, as some scholars maintain, cultural evolution drove increases in brain size (and more-sophisticated brain architecture): through its novel selection pressures. Barring future intermediate fossil finds; we simply have to remain agnostic on much of the evolutionary process, which produced our large brains. See R. G. Klein, *The Human Career: Human Biological and Cultural Origins* (University of Chicago, 1989) for data on endocranial sizes in the different hominids; as well as N. Chalmers, ed., *Man’s Place in Evolution*, 2nd ed. (Cambridge University Press: Natural History Museum Publications, 1991). See also the fine history of paleoanthropology in Lee Berger’s book, *In the Footsteps of Eve: The Mystery of Human Origins* (Washington: D.C.: National Geographic, 2000).

Before leaving-off this section, I close by mentioning W. G. Kinzey’s 1987 edited book, *The Evolution of Human Behavior: Primate Models* (Albany: SUNY Press, 1987); and S. I. Greenspan and S. G. Shanker’s 2004 *The First Idea: How Symbols, Language, and Intelligence Evolved From Our Primate Ancestors to Modern Humans* (New York: Perseus Books). See also (10).

(9) *Neuropsychiatric/Neuropsychological Models*. A. R. Luria, *The Working Brain: An Introduction to Neuropsychology*, trans. B. Haigh (New York: Basic, 1973). This classic has already been referred to, though not properly referenced. L. S. Vygotsky was another Soviet scholar, whose writings were mostly never translated into English. Hence the value of the following neuropsychological treatise: *Mind in Society: The Development of Higher Psychological Processes* (Harvard University Press, 1978), eds. and trans. M. Cole, V. John-Steiner, S. Scribner, E. Souberman. Vygotsky also stressed the importance of social factors. See K. Goldstein, *The Organism*, with a foreword by O. Sacks (New York: Zone Books, 1995). Elsewhere cited but not referenced. A broadly-based classic, by a phenomenologically/existentially-oriented neurologist/neuropsychiatrist. He began developing holistic models of mental functioning in both Great War brain-damaged and psychosocially-traumatized patients; and from knowledge of normal developmental psychobiology; and subsequent neuropsychiatric work. Yet another example of the impact of military history on the development of psychiatry. R. Carter, *Mapping the Mind* (University of California Press, 1999). Wonderfully-accessible and very well illustrated Baedeker to the human mind/brain; a catholicity of scope, including the latest in brain-imaging findings. D. Shanke, ed., *Human Memory: A Reader* (London: Arnold, 1997). Wide range of neuropsychologically- and neuropsychiatrically-informed writers on normal and pathological memory. D. L. Schachter, *The Seven Sins of Memory (How the Mind Forgets and Remembers)* (Boston: Houghton Mifflin, 2001). Surveys different types of mnemonic problems: ranging from normal to age-related, to both “functional” and neurological sources of impairment; as well as pathological inability to forget or ward-off intrusive unwanted thoughts. By Harvard’s former Chair of Psychology and prolific writer on memory. F. Crick, *The Astonishing Hypothesis: The Scientific Search for the Soul* (New York: Touchstone, 1995). Posthumously published; literally finished on his death-bed. Draws not only on his special expertise in genetics/cell and molecular biology; but also on broader neuropsychological/neuropsychiatric concerns and laboratory data (including computerized EEG studies). Brilliantly provocative and controversial. V. S. Ramachandran, M.D., Ph.D. and S. Blakeslee; Foreword by O. Sacks; *Phantoms in the Brain: Probing the Mysteries of the Human Mind* (New York: Harper Collins, 1998). Moves from neurological and neuropsychiatric disorders to

questions such as how we make decisions, deceive ourselves, believe in God, and so forth. See, again, D. Purves, G. J. Augustine, D. Fitzpatrick, *et al.*, eds., *Neuroscience*, 3rd ed. (Sunderland, MD: Sinauer Associates, 2004); for its wonderfully up-to-date comprehensiveness and clarity.

(10) Scientifically/philosophically-informed approaches. D. Flanagan, *Consciousness Reconsidered* (Cambridge, MA: MIT Press, 1992). Begins with the philosophical aspects of normal and abnormal psychology/neuropsychology; and incorporates a range of neuroscientific concepts and data. A holistic, approach—after the manner of his hero, William James. Chair of Philosophy at Duke. See also his most recent book, *The Problem of the Soul: Two Visions of Mind and How to Reconcile Them* (New York: Basic, 2002). S. Pinker, *How the Mind Works* (New York: W.W. Norton, 1997); and *The Blank Slate: The Modern Denial of Human Nature* (New York: Penguin, 2003). A cognitive psychologist/neuroscientist at M.I.T.; his books are solidly-grounded, very-accessible coverages of otherwise abstruse issues.

See, again, M. D. Hauser, *Moral Minds: How Nature Designed Our Universal Sense of Right and Wrong* (New York: Harper Collins, 2006). Professor of Psychology, Organismic and Evolutionary Biology, and Biological Anthropology at Harvard. He draws on concepts and data from a variety of disciplines (cognitive psychology, linguistics, neuroscience, evolutionary biology, economics, and anthropology), to argue for a universal moral instinct; unconsciously propelling us to render judgments of right and wrong—independently of society/culture, education, gender, and so on. *In short, he abrogates purely reason-based models of moral judgment.* See also (12). It is a provocative and very controversial contention; though he certainly gives it his dead-level best. In some respects, it is yet another variety of neurobiological/evolutionary epiphenomenalism. In fine, despite its array of learning; it is fully as, or more, metaphysical as/than its more traditional opponents. P. M. Churchland, *The Engine of Reason, the Seat of the Soul: A Philosophical Journey into the Brain* (M.I.T., 1995). Updated version of his long-held thesis. His best book to date. Whether or not one agrees with his eliminativism; he is still one of the neuroscientifically best-informed philosophers of mind.

B. Mazlish, a psychoanalytically-oriented historian/biographer turns over a surprising stone in his 1993 *The Fourth Discontinuity: The Co-Evolution of Humans and Machines* (Yale University Press). Surprisingly for an accomplished humanist; he has gone over to the ever-louder band piping: “You are only machines”—or, conversely, “You are splendidly machines.” This curious lemming-race to fall out of our humanity is perplexing—and even more so the almost-fiendish delight in soul-suicide/murder. I seriously doubt that such theorists can live this into truth: when, for instance, encountering their children or spouses at the end of a work-day. Indeed, Jean Baudrillard, my favorite postmodernist; in a book aptly called *The Illusion of the End* (Stanford University Press, 1994); hit the bull’s-eye on one thing: the extent to which a commercially-dominated vulgar mass-media fills us with “simulacra” of genuinely self-determined experience; and conditions us to buy, discard, and buy again, pre-packaged self-images. Of course, affordable *virtual [sic] reality-machines* are just around the corner. Then we can “experience” our wildest dreams and fondest ambitions—become Stalin, Mother Teresa, Einstein, Bill Gates, etc.—and back again to our hearts’ content; no matter that we have no effect, for better or worse, on contemptuously old-fashioned “hyporeality.” It is enough to make A. Huxley’s “Red Indians” among us shout “Enough!”, as Bill McKibben did in his subtitled book, “*Staying Human in an Engineered Age*” (New York: Henry Holt, 2003). See especially the unsettlingly-provocative book by Neil Postman (author of *The Disappearance of Childhood* and *Amusing Ourselves to Death*), one of our profoundest social theorists/critics: *Technopoly: The Surrender of Culture to Technology* (New York: Vintage, 1983). See also R. A. Buchanan, *The Power of the Machine: The Impact of Technology from 1700 to the Present* (New York: Penguin, 1994); as well as related works cited in my Chapter Two. And there are T. Forrester’s balanced analyses of the human costs/benefits of the never-ending computer technological revolution: *High-Tech Society* (MIT Press, 1987). In stark contrast, see the corporate manager/computer scientist’s, J. Bailey’s, flippant *After Thought: Computer Challenges to Human Intelligence* (New York: Basic, 1996). He is wildly overoptimistic about where computer technology is now, and about where it is likely to be soon. There are 100 billion neurons comprising our brain; each connecting via axons and dendrites with hundreds of others. Hence we are talking about trillions upon trillions of informational connections: far more than any conceivable computer for quite some time—and *perhaps ever*.

(11) M. J. Behe, *Darwin's Black Box: The Biochemical Challenge to Evolution* (New York: Free Press, 2006). S. M. Stanley, *The New Evolutionary Timetable: Fossils, Genes, and the Origin of Species* (New York: Harper Colophon, 1981). E. Mayr, *Populations, Species, and Evolution* (Harvard University, 1970). D. J. Depen and B.H. Weber, *Evolution at a Crossroads: The New Biology and the New Philosophy of Science* (Cambridge: MIT, 1985). Each explores certain problems in the various contemporary neo-Darwinian positions.

See J. Weiner's Pulitzer Prize-winning, *The Beak of the Finch: A Story of Evolution in Our Time* (New York: Vintage, 1994). He tells the tale of Peter and Rosemary Grant; who pursued 20 years of detailed observational studies of Galapagos varieties of "Darwin finches." They contended that Darwin had no idea about the strength of his own theory. "For among the finches natural selection was neither rare nor slow. At times it is occurring by the week, the day, even the hour." Their work would appear to give strong support for Darwin's most fundamental ideas. See, however, F. J. Sulloway's serious criticisms of the pertinence of their actual findings—as well as his argument from scrutinizing Darwin's *Beagle* notebooks; that his study of the finches was much-more superficial, and less important for his later theories; than "party-line" Darwin historians maintain. F. J. Sulloway, "Darwin and His Finches: The Evolution of a Legend," *Journal of the History of Biology* 15 (1982):1–53. Too, Jonathan Wells, cell and molecular biologist; disputes the genetic and evolutionary significance of the Grants' work: *Icons of Evolution: Science or Myth?* (Washington, DC: Regnery, 2000).

(12) As early as 1967 the distinguished philosopher and student of mind, Suzanne K. Langer (*Mind: An Essay on Human Feeling*, 2 vols.; Johns Hopkins University Press) was pointing to the pivotal role of feelings as well as (or along with) intellect/reason in any broadly-based evolutionary philosophy of mind. This has continued—along with emphasis on the important adaptational role of feeling, or of reason/emotion, in human survival and evolution. The following are important recent works on the topic; which also deal with the evidence for cross-cultural universals in emotional expression (work initiated by Darwin in 1972): (1) R. S. Lazarus, *Emotion and Adaptation* (Oxford University Press, 1991); (2) P. Ekman and R. J. Davidson, eds., *The Nature of Emotion: Fundamental Questions* (Oxford University Press, 1994); (3) M. Nussbaum, *Upheavals of Thought* (Princeton University Press, 2001)—deals with her neo-Stoic theories of emotion; (4) R. Kirk, *Raw Feeling: A Philosophical Account of the Essence of Consciousness* (Oxford, 1994); (5) M. Donaldson, *Human Minds: An Exploration* (New York: Penguin, 1994); (6) M. Minsky, *The Emotion Machine: Commonsense Thinking, Artificial Intelligence, and the Future of the Human Mind*, (New York: Simon and Schuster, 2006); (7) J. P. Sartre, *The Emotions: Outline of a Theory*, trans. B. Fretchman (New York: Philosophical Library, 1948); (8) A. R. Damasio, *Descartes' Error: Emotion, Reason, and the Human Brain* (New York: Harper Collins, 2000). Criticizes Descartes' continual emphasis on reason and downplaying of the emotions' importance. By contrast Plato, supposedly the quintessential "rationalist"; spoke of the impassioned aspect of hard and serious thinking; and gave the passions a key role in promoting moral behavior: especially sublimated love; which he extolled in the *Symposium*, the *Phaedrus*, and elsewhere. It was the appetites which could get easily and dangerously out of hand—the black steed in Plato's metaphor: the charioteer being reason and the white stallion the emotions. It was the two latter that reined in the unruly appetites. (9) G. Huther, *The Compassionate Brain: How Empathy Creates Intelligence* (Boston: Trumpeter, 2006). A very well-informed developmental, evolutionary, neurobiological, and cognitive scientific tour of the brain. Argues that its fullest development derives from a proper balance of intelligence with love, sincerity, and other beneficent emotions.

Chapter 26

Freud on “Mind”-“Body” II: Drive, Motivation, Meaning, History, and Freud’s Psychological Heuristic; with Clinical and Everyday Examples

Edwin R. Wallace, IV

Prologue

It is *for convenience only* that I am presenting Freud’s more-purely psychological concepts and heuristic in a separate chapter. In actuality, as we have already seen to some extent; the psychoneurobiological/“instinctual” and psychogenetic/dynamic facets of Freud’s thinking went—and were often presented—hand-in-hand. At the outset of this essay, I demonstrate some of the linkages between the two. These are not subsequently reiterated; though the reader should bear them constantly in mind.

Freud’s psychological constructs and heuristic are two-dimensional without methodological exemplifications of them. Consequently, investigative and exploratory/therapeutic vignettes are included. There also are instances, which support core-concepts such as the Oedipus complex, childhood sexuality generally, the latency stage, repression and the return of the repressed, and the impact of childhood/adolescent history on adult personality and psychopathology.

The chapter ends with “The Prehistory of Psychic Causality and Historical Determinism.” This section explores the thinking of precursors who importantly influenced Freud in these ideas—from the seventeenth-century through the early- and mid-nineteenth; and with a short treatment of Freud’s hard determinism.

Motivation, Meaning, and Historical Determinism

Again, it is important to note that the term “instinct,” was Strachey *et al.*’s translation of Freud’s German word “*Trieb*.” While “*Trieb*” can mean “instinct,” more often it denotes “drive” or “impulse.” In short, it is a more experience-near concept than “instinct.” Again, Freud rarely used “*Instinkt*” and, when he did so, it was usually with reference to animal behavior. Recent ethological studies suggest that the concept of “instinct” (in mammals and primates) must be made considerably more complicated than originally conceived; and that it must accord to environmental stimuli (“triggers”) and experience (i.e., learning) a much larger co-determinative role.

Freud more-often considered the drives [“*Trieben*”] in his theoretical divigations; whereas his working clinical causal concept was motivational. (Recall that Freud asserted that we know the drives only through

their psychological manifestations). Such locutions include, fairly interchangeably: “will” and “counter-will”; “idea”; “affect-laden idea”; “wish”; “fantasy”; “striving”; “intention” [*Absicht*]; “goal” or “aim” [*Ziel*]; “motive” [*Motive*]; “purpose” [*Tendenz*]; and of course “cause” [*Ursache*].

Freud also asserted that neurotic behaviors (like all human behaviors, except some of those in advanced-“organic brain syndromes”) have a “meaning” [*Sinn*]; and are hence defensively compromised “communications.” Later we shall see how Freud connected meaning and causation—as well as “functionalism,” “adaptation”/“maladaptation,” and “historical (or ‘psychogenetic’) determinism.”

Freud’s final (1920) drive theory was that of “libido,” or “Eros”; and “aggression” (the questionable “death instinct” turned outward)—to which he at times added “egoism.”¹ “Libido” refers not only to “genital sexuality,” but also to any significantly organ-based pleasure (including eating and other oral activities—such as Freud’s continuous cigar-smoking!). As mentioned, drives are associated with psychobiological tension-states, which motivate the organism to fulfill them; thereby decreasing the tension (i.e., Freud’s “pleasure” or “constancy” principle). *Parri passu* with “intrapsychic” conflict; whose tension is reduced by repression or by ancillary defensive maneuvers—or by symptoms, which are defensively disguised partial gratifications of the otherwise repressed impulse.

“Sublimation” was borrowed by Freud from Schopenhauer and Nietzsche. It refers to the substitutive gratification of socially/superego-ego unacceptable sexual and aggressive drives; by aim-inhibited displacement of them on to socially productive or creative pursuits. Freud’s spare definition of “mental health” as “*Arbeiten und Lieben*,” “working and loving”; is in refreshing contrast to the voluminous, more value-laden definitions of that concept, by dozens of psychiatrists and psychologists in the twentieth century. It is, however, significant that the serious-minded—indeed, rather stoic—and decidedly “workaholic,” Freud, omitted what Huizinga called the “ludic,” or playful, dimension of life. It was the eccentric, though perspicacious, analyst Wilhelm Reich; who formed a triad, by adding the “capacity to play” to Freud’s “loving” and “working.”

One way of connecting the “*Trieben*” (libido and aggression) to the aforementioned “motives,” “wishes,” “purposes,” and so forth; would be to consider the “drives” as the most fundamental and *non-conscious* humoral and neurohumoral influences upon (or from) the limbic system, median forebrain bundle, etc.—and thence to higher cortical activity. It would then be at this last level—that of cerebral central processing—whereof we could speak of unconscious motivation and the mentation tied to it: that is, the unconscious, historically determined, *object-directed derivatives* of the drives themselves. In this regard, again, Freud told us in 1921 (op. cit.): “In the individual’s mental life someone else is invariably involved, as a model, as an object, as a helper, as an opponent; and so from the very first individual psychology ... is at the same time social psychology.” Refer back to the lengthy end-note 81 in Chapter 25.

The neo-Freudians, or “dynamic culturalists,” interacted with psychoanalytically-disposed anthropologists in Manhattan (the “Zodiac Club”): Clyde Kluckhohn, Margaret Mead, Ruth Benedict, Ralph Linton, and others. The former modified Freud’s aforementioned object-relations social psychology; to give additional causal weight to social structural/cultural institutional factors. Apart from Harry Stack Sullivan (also in the Zodiac Club), the M.D. psychoanalyst Abram Kardiner, who later published a perspicacious book on his analysis with Freud; was the most brilliant of the neo-Freudians. He engaged in actual ethnographic field studies, with theoretical elaboration, published by Columbia University Press in 1939 and 1945 respectively: *The Individual and His Society* and *The Psychological Frontiers of Society*. In the first Kardiner maintained that we are not confronted directly by biological forces within the individual, but with “the finished products of the interaction of biological forces and external realities”—including, of course, the earlier “external realities” of childhood. “*Man is not an animal whose needs and behaviors are all phylogenetically fixed ... Variations in social structure [especially, I would contend, insofar as they impinge on the nuclear and extended family structure] will change some needs or create new ones [Kardiner’s italics].*” For example, ambition or the drive to competitively achieve, is a function of constitutionally-based aggression and familial and societal injunctions.

I do not believe that the later Freud would have wholly disagreed with this. He understood, for example, that actual parental or older siblings’ behavior could influence the strength of the child’s object-directed

sexual and aggressive drives. Nonetheless, Freud quite-correctly believed that there were early constitutionally-determined differences among children in the underlying strength of such impulses. This has been borne out in infancy through childhood/adolescence longitudinal studies of temperament by the elsewhere-cited Chess and Thomas, Michael Rutter, and others (e.g., Yale Child Study Center and London’s Hampstead Clinic).

In short, by invoking Kardiner, I am hardly arguing that constitutional factors play no determinative role in psychopathology, character structure or personality type, fantasy formation, and human motivation in general. We have long known that organic disorders such as pellagra and paresis can lead to profound psychological changes: the latter, for instance, can mimic bipolar disorder or, occasionally, paranoid schizophrenia. Many medical and neurological diseases and genetic biochemical lesions produce striking behavioral abnormalities. The evidence for biologically heritable and constitutional factors in, not only the major psychoses, but neuroses and character types as well is strong. See, for example, Buss and Plomin, Loehlin and Nichols, Schwarz, and Floderus-Myrrhed *et al.*² Sociobiology (despite its theoretical excesses) and ethology are garnering impressive evidence for the biological facets of human motivation (Wilson, Dawkins, and Barash). Structuralist (e.g., Levi Strauss), Chomskian, and Piagetian evidence for the transcultural and transtemporal unity of important aspects of human social structure and semiotics, deep linguistic structure and grammatical/syntactic rules, and perceptual/cognitive development, suggest that there are powerful hereditary-constitutional factors in culture and personality. Nor do I deny that there are constitutional determinants of sexual and aggressive behavior, and of the regular developmental unfolding of the different modes of infantile organ pleasure. Rather I contend that our motive fantasies are the epiphenomena of neither purely biological nor purely societal elements, but of the *interaction* between them. In any event, at the level of clinical discourse the analyst is concerned with symbolically mediated and meaningful human behaviors. He is limited to the data of human communication; and has at most very-indirect access to the underlying drives.

One need do no more than pick up any current psychoanalytic textbook or case report to see that the analyst’s working concept of causality is psychological and purposive—the affect laden fantasy or wish. Greenson, for example, equates the causal “forces” in the mind with “purposeful intentions” and Brenner with “wish or intent.”³

In the same breath, as we have seen, in which Freud opined that “all our provisional ideas in psychology will presumably someday be based on an organic substructure”; he (1914) asserted that his present theorizing “tr[ies] in general to keep psychology clear from everything that is different in nature from it, *even biological lines of thought* [my italics].”⁴

Acknowledging that the psychoanalytic concept of causation is psychological does not commit one to an ontological mind-body, spirit-matter, split. What we term “mind” is an abstraction that refers to the organization of those properties, which emerge from the interaction between two species of *matter/energy*—the human body and its environment. Psychic causality, like psychological concepts in general, has risen to explain the psychologically emergent aspects of this interaction. To address these symbolic phenomena psychologically is not to deny their physiological facets, but rather to acknowledge that these functions are not presently completely-explicable biologically. In short, the psychology-biology dichotomy is an *explanatory*, not an ontological, split.

The extent to which the cognitive-conative-affective dimensions of human behavior will be comprehended physiologically, and the extent to which they will continue to require psychological categories of explanation, remains to be seen. Although the analyst is largely uninformed—pending the discoveries of neurobiology and endocrinology—about the biological substrate of human personality structure and motivation, he is hardly indifferent to it. To learn, for example, that there are hereditary-constitutional nuclei for certain character types and syndromes, genetically determined preferences for particular styles of compromise formation and defense, and biochemical or brain factors in aggressiveness, passivity, and other traits could have clinical, as well as theoretical, implications; such findings have already revolutionized our approach to the major affective disorders and to certain categories of the syndrome of schizophrenia. And there is evidence from animal and human studies that amygdalar dysfunction, whether congenital or acquired, can increase aggression.

To put it in other ways, the “psychical,” or “psychological” (including “psychical causality”), is a *partial* perspective or vantage point on, or methodological approach to, the environmentally-ensconced human organism. The *complete* perspective on any aspect of the mentation, motivation, and behavior of the sufficiently-intact human being is always *sociopsychobiological*. “Psychical causality” is hence a methodological tool, applicable to the most integrated (symbolically-mediated and image-laden) level of embodied brain interaction-with-ambience. *In this respect, we must bear in mind that psychological perspectives are applied to many mammals and primates besides man.* These approaches include investigationally-necessitated attributions, for example, of cognitive maps to rats—and even primitive forms of mental imagery. Again, we know that apes use complex gestural and vocal communications, simple tools, and have successfully learned aspects of American sign language and symbolically mediated communication with differently-colored geometric solids.

Do we thereby posit an ontic mind-brain/body dualism in apes—or rats, since they apparently form mental-images and cognitive maps? Of course not. Do we take the fact that psychological vantages and methodologies are necessary to comprehending their molar organismic motives, mentation, and behavior; to argue for a metaphysical mind-body split? Again, of course not. Then why must we take psychological purviews on man (including “psychical” causality and historical determinism) as presupposing a mind-brain/body metaphysical dualism—rather than a heuristic which addresses only certain facets of human (and animal) organismic activity or functioning?

In sum, the psychological perspective is fully compatible with monistic single aspect-dual aspect interactionism, functionalism, and identity theory. Moreover, as exemplified previously, man is not distinguished by the pertinence to himself alone of historical determinism. We now understand that even birdsongs must be learned; that there are critical developmental periods for other types of learning in both animals and man; and that history can influence the apperception/behavior of the more-complex mammals (recall “Lightning” and cigarettes).

Nor does admitting teleology into our causal concept make us unscientific, as Freud feared. The belief that it does so fails to take account of at least two factors: (1) that one’s explanatory framework should be adjusted to one’s subject matter (and not vice-versa) and if that subject behaves purposefully, then one needs concepts that reflect this; (2) science no longer considers teleology acausal or ipso facto unscientific. Teleological explanations, for example, have reentered twentieth-century biology. In regard to teleology, let me quote Bunge, the historian of causality.⁵

It is even likely that teleological laws will not be replaced but will be explained by other laws, that, for example, they will be shown to have emerged in the course of the evolution of organisms and associations of living being. ... Teleological laws will perhaps be explained as a new mode of behavior of material systems, resulting from a long past process of trials and errors in the adventures of adaptation, and stabilized by the mechanisms of heredity. Scientific philosophy does not require the extrusion of teleological explanations in connection with the higher integrative levels; it demands merely the avoidance of obscurantist interpretations of teleological patterns in terms of immaterial and unintelligible entelechies.

A prime reason for scientific antipathy to teleological explanations is the misconception that they violate the fundamental tenet that causes must lie temporally prior to their effects. In other words, it is charged that explications in terms of purpose or goal involve the illogical assumption that the future (the effect) can somehow determine the present (the cause). This accusation, as Hempel⁶ points out, is unfounded.

When the action of a person is motivated, say, by the desire to reach a certain objective, then it is not the as yet, unrealized future event of attaining the goal which can be said to determine his present behavior, for indeed the goal may never be actually reached; rather—to put it in crude terms—it is (a) his desire, present before the action, to attain that particular objective, and (b) his belief, likewise present before the action, that such and such a course of action is most likely to have the desired effect. *The determining motives and beliefs, therefore, have to be classified among the antecedent conditions of a motivational explanation, and there is no formal difference on this account between motivational and causal explanation (my italics).*

Braithwaite concurs that teleological formulations of human behavior are understood as causal explanations, with intentions as causes. See also Mackie’s conceptualization of teleology as a subspecies of efficient causation.⁷

“Historical determinism” in psychoanalysis means that: *the present day configuration of any personality has arisen out of previously existing ones, that any individual’s current (conscious, preconscious, and unconscious) interpretations of self and world, and present desires, fears, inhibitions, and behavior patterns, are causally related to the history of his actual and fantasized interpersonal relations.* By “history” we mean the course of the *interaction* between the individual’s constitution-personality structure and his or her environment.

When we assert that the individual’s history lives on in the present, we do not mean that mental life is “four dimensional”—that there is one aspect of it where the pristine historical *occurrences* are still alive. *All aspects of psychobiological functioning are equally current*, all behaviors are motivated by *present day* wishes and anxieties. When we say that a behavior is determined by “historical,” rather than “current,” factors, what we mean is: that it is determined by present-day (conscious and unconscious) attitudes, desires, fears, and expectations originating in certain historical conditions, and which continue to be bound to the living *representations* of these conditions.

“Genetic” and “dynamic” refer not to differing categories of causation, but to approaches, as Hartmann and Kris (1945) understood: “[Dynamic hypotheses] are concerned with the interaction of the conflicts and forces within the individual and with their reaction to the external world, at any given time or during brief time spans; [genetic propositions] describe how any condition under observation has grown out of an individual’s past and extended throughout his total life span” (p. 11).⁸

The genetic and dynamic perspectives converge in Freud’s (1900) earliest definition of “wish,” the primary causal principle of investigative/therapeutic psychoanalysis—with reference to the infant’s hunger, and its satiation by the mother’s milk:

An essential component of this experience of satisfaction [of the hunger drive, in this instance] is a particular perception (that of nourishment, in our example), the mnemic image of which remains associated thenceforward with the memory trace of the excitation produced by the need. *As a result of the link that has thus been established, next time this need arises a psychical impulse will at once emerge which will seek to recathect the mnemic image of the perception itself, that is to say, to re-establish the situation of the original satisfaction.* An impulse of this kind is what we call a wish; the reappearance of the perception is the fulfillment of the wish ... [pp. 565–566; my italics].⁹

Again, by “historical determinism” we do not mean that history somehow sits outside and determines one. We mean, rather, that the individual remains subject to a set of preoccupations, conflicts, and a self-world view formulated through his or her motivated-interpreted interactions with others. History thus lives on insofar as personality structure is its precipitate; it persists in styles of interpretation and coping, as much as in specific conscious and unconscious images, memories, fantasies, and conflicts.

It is the potency of these constitutionally-historically developed mental-motivational sets that accounts, along with the infinite capacity of human beings to apperceive and build the interpersonal environments they (all too often neurotically) “need”; that accounts for the patterns and continuities in a life cycle. It is the often unpredictable turns of the environmental wheel, linked with a mind moved or prepared by its own desires and capacities, that determine the apparent discontinuities and the possibilities for beneficent or maleficent change.

As mentioned in Chapter 1, psychoanalysts think in terms of the child’s *development as a whole*; rather than searching for a singular trauma from the oral, anal, or phallic periods that polarized the patient once and for all toward psychopathology. Although the earliest years have a determinative importance quite out of proportion to their duration, the foundation for adult character and psychopathology is laid, not by events in any given period of two or three years, but by the *total pattern* of experiences in childhood and adolescence (see, e.g., Hartmann & Kris, *ibid*). In short, it is the *style of interaction* between the child and his parents (and significant others) throughout all the periods that is determinative. Indeed, Erikson,

Levinson, and others have demonstrated that personality continues to be shaped by life history subsequent to adolescence. (If it did not, how could psychotherapy itself stand any chance of working?) Freud (1915–1917) himself acknowledged that though “There are cases in which the whole weight of causation falls on the sexual experiences of childhood,” there are other instances in which “the whole accent lies on the later conflicts and the emphasis we find in the analysis laid on the impressions of childhood appears entirely as the work of regression.”¹⁰

Such a concept of historical determinism is compatible with explanations that proceed backwards in short steps; rather than with formulations that leap directly from, say, effects in a 40 year old to causes in a toddler. In his actual clinical work Freud more often than not proceeded in the former fashion, though he was capable of speculative leaps and of the theoretical insistence upon the importance of the “deferred effect” of childhood experience.

In actuality, there is always continuity between the causes (i.e., parent–child *interactions*) of childhood and their adult effects. The causes of childhood are significant because (1) of their repetitiveness throughout childhood, (2) because of the unconscious persistence of images of them and of the associated feelings and fantasies striving for expression, (3) because the environment serendipitously presents the person with current traumata resembling the infantile ones, and especially, (4) because of a sort of vicious circle (or escalation) in which the historically determined mind-set leads the individual to act in ways that elicit similar “causes” from the current environment. The thesis of historical determinism is thus a proposition of *ongoing causality*.

Again, the aims and methodology of psychoanalytic treatment follow logically from the conception of psychopathology as an atavistic mode of dealing with unconscious, historically determined “intrapsychic”/interpersonal conflict. The analyst’s neutrality, lack of self-disclosure, and *relative* verbal inactivity; are all designed to permit the maximum possible historical, intrapsychic determination of the associations, inhibitions in associating, feelings, fantasies, parapraxes, remembering, forgetting, silences, reporting of dreams (and associations to them), and other behaviors that are the substance of analysis. By influencing the nature of the analysand’s fears and fantasies as little as possible, the analyst allows him not merely to recollect, but to act out a truer picture of his past in the present. The patient transfers, in other words, his neurosis from the past and present outside world to the therapist’s office.

The more the analyst is simply a benign and understanding listener and facilitator, the greater is the contrast between the analysand’s historically grounded expectations of him (i.e., “transference”) and their lack of justification by the analyst’s actual behavior. Being struck by this contrast, as well as by the clinician’s *appropriately-timed* psychogenetic/dynamic and transference interpretations; the analysand slowly realizes that he has been living atavistically, in the “past” not the present. This living awareness that he has been unconsciously imposing historically determined categories of interpretation upon himself and those in his environment—that his fears and fantasies are more appropriate to a child of 3, 5, or 10 than to an adult of 30, 40, or 50—is the most transformative aspect of psychodynamic treatment.

If the balance of forces within the patient’s mind has truly shifted, if his neurotically distorted view of self and world has truly been altered, then he will change as a matter of course, without any prodding or exhortation on the therapist’s part. The analysand will change simply because he no longer needs his old unsatisfactory ways of seeking and avoiding (often simultaneously) gratification. This is because the old dangers are no longer there, now that he is no longer living in the same reality. In other words, since all behaviors (psychopathological ones included) exist for some adaptive advantage (either within the context of the “internal” or “external” worlds, or of both); then when the psychical and current interpersonal realities to which they are adaptive change, the behaviors will too.

Incorporating historical determinism, psychical causality, and “overdetermination” (i.e., multicausality); Freud arrived at the following quite-sophisticated etiological model as early as his 1895 paper on anxiety neurosis.

We may characterize as the *precipitating* or releasing cause the one, which makes its appearance last in the equation, so that it immediately precedes the effect. *Preconditions* are those in whose absence the effect would never come about, but which are incapable of producing the effect by themselves alone. ... For the specific cause is still lacking.

The *specific cause* is the one which is never missing in any case in which the effect takes place, and which moreover suffices, if present in the sufficient quantity or intensity, provided only that the preconditions are also fulfilled.

As *concurrent causes* we may regard such factors as are not necessarily present every time, nor able, whatever their amount, to produce the effect by themselves alone, but which operate alongside of the preconditions and the specific cause in satisfying the etiological equation.

Freud’s Psychological, or Psychogenetic/Dynamic, Heuristic in Action

Below I exemplify Freud’s psychological heuristic with his clinical vignettes, and a few of my own. The correspondence with Fliess in 1897 documents Freud’s growing conviction in the importance of psychical causes of psychopathology. Freud’s analysis of his writing block in that relationship (that it was “aimed at hindering our intercourse”), his interpretation of his paralysis in a dream as the “fulfillment of an exhibitionistic wish,” and his formula that “symptoms are *fulfillments of wishes*” (Freud’s italics); are all in line with his increasing emphasis on the determinative role of purposive ideas in human behavior. In a draft of 1897 Freud invoked fantasy, not instinct, as the causal factor: “If now the intensity of such a phantasy increases to a point at which it would be bound to force its way into consciousness, it is repressed and a symptom is generated through a backward impetus from the fantasy to its constituent memories.” In another draft of the same year Freud spoke of the etiological role of unconscious death wishes in psychopathology. In an 1898 paper Freud explained his forgetting an address as the result of an “unconscious ... intention” to forego visiting the household in question (so that he might be on his way to a prearranged holiday with a friend). The mnemonic falsifications and distortions in very-early childhood “screen memories” were said to be “*tendentious*”—that is, they serve the purposes of the repression and replacement of objectionable or disagreeable impressions” (Freud, 1899, p. 322, my italics).¹¹

In *The Interpretation of Dreams* the phrase “purposive ideas” appears repeatedly in Freud’s explication of psychical causality. The ordering of ideas in a chain of associations was seen, for example, as occurring under the influence of underlying “purposive ideas.” More than to anything else, this book is dedicated to demonstrating that dreams are determined by the interplay between unconscious “wishes” and the defenses against them (i.e., the “dream censor”).

In *The Psychopathology of Everyday Life* Freud (1901, p. 240) defined psychic determinism as the idea that “our psychical functioning [is to] be explained by *purposive ideas* [my italics]”: “*Certain shortcomings in our psychical functioning ... , and certain seemingly unintentional performances prove, if psychoanalytic methods of investigation are applied to them, to have valid motives and to be determined by motives unknown to consciousness*” (ibid, p. 239. Freud’s italics). The prime aim of this book was to demonstrate that this principle extended even to behaviors that were apparently trivial, nonsensical, arbitrary, or “accidental”: “there is a *sense and purpose* behind the minor functional disturbances in the daily life of healthy people” (my italics). This standard view of Freud and psychoanalysis, *of psychopathology as a graded continuum—rather than a sharp either/or—*, undercuts some of Foucault’s contentions that clinical psychology conceives of mental-illness as *the “totally other”*. Moreover, Foucault’s conception of the analyst as “compelling” the patient’s “confessions [sic, Foucault’s word],” with the former’s allegedly *near-total “silence”*; is a *gross misdepiction of the aims and actual methodology of analysis*.

In the 1912 edition of *The Psychopathology of Everyday Life*, Freud borrowed a vignette from Jones to illustrate the methodology by which one arrives at the ideas and preoccupations determining seemingly trivial and arbitrary activities. A young acquaintance of Jones’ spontaneously produced the number “986” and challenged Jones to give a causal explanation of it. The friend’s associations began with his recollection of a newspaper misprint—the day’s atmospheric temperature was reported as “986°F” rather than “98.6°F.” Noting that he often laughed uproariously over this seemingly jejune incident, the visitor went on to remark on the intense heat of the fire in Jones’ room and reflected that it was probably this, which had stimulated his dormant memory of the misprint. Next the man reflected that the concept of heat had always impressed him; he considered it “the most important thing in the universe,” “the source of all life,” and so on. Finally, he thought of the smokestack opposite his bedroom window. He commented that he

often watched the flame and smoke billowing from it, while deploring the chimney's waste of energy. From such associations ("heat, fire, the source of life, the waste of vital energy from an upright tube") Jones surmised that the young man was preoccupied with masturbation—an hypothesis that the visitor himself subsequently confirmed. It may also be significant, in fixing his memory upon it, that 98.6 degrees is the normal temperature of the human *body*.

Much of this book concerns itself with disturbances of memory: "when the reproducing function fails or goes astray, the occurrence points, far more frequently than we suspect, to interference by a tendentious factor—that is, by a *purpose* which favours one memory while striving to work against another" (ibid, p. 45; Freud's italics). The classic example of this is Freud's substitution of the names "Botticelli" and "Boltraffio" for "Signorelli."

Freud was sharing a coach with a stranger, and Freud's flow of conversation moved from the reverence of the Turks in Bosnia and Herzegovina for their physicians and these people's resignation to their fate, to the painter at Orvieto (Signorelli) whose name Freud could not recall. In the interval between talking about the Turks and talking about Orvieto, Freud had (quite consciously) suppressed the desire to tell the stranger about these same Turks' utter despair in the face of sexual disorders, calamities which they view as worse than death itself. Reflecting on this Freud recognized that his train of thought was leading him to a painful recollection—that Freud's impotent patient had recently suicided at a resort called "Traffio." It was, in short, a (momentarily unconscious) "motive" (p. 4) that led Freud to substitute "Botticelli" and "Boltraffio" for "Signorelli": "What I *wanted* [my italics] to forget was not, it is true, the name of the artist at Orvieto but something else—something, however, which contrived to place itself in an associative connection with his name, so that my act of will missed its target and I forgot *the one thing against my will*; while I wanted to forget *the other thing intentionally*" (Freud's italics, ibid, p. 6). "*Botticelli*" and "*Boltraffio*" were hence compromise formations between the repressed *material*—*Signorelli* and *Traffio*—and the forces opposing its recollection.

Note the similar sounds in the associational substitutes on the way to Freud's discovering the repressing motive. He referred to these as "external associations" and felt that their substitutive role for the warded-off conflictual memories was indeed partly determined by similarities in their sounds. However, in contrast to S. Timpanaro (*The Freudian Slip and Textual Criticism*, London: Verso, 1976); who argues that word sounds totally explain parapraxes; Freud argued that similarities in sound are merely co-factors in the more important unconscious conflictual cause of temporary amnesias, paramnesias, and slips of the tongue and pen. They perhaps relate to the unconscious determinants of parapraxes, as the day residue relates to the unconscious conflicts, defenses, and compromise formations constituting a dream.

For scientific and epistemological arguments that the associational method can yield causally-pertinent information, see Wallace (1986/1986//1988/88, 1989).¹²

An example of temporary repression, on my own part, occurred during a visit to my relatives in the town where my sister is buried. I fully-intended, from the outset of my weeklong visit there, to stop at her grave-site on my way out of town. It was only after I had left, and driven for several hours, that I suddenly remembered that I had forgotten to stop at the cemetery. This was only a year after her much-premature (age 38) death from breast cancer. Connected to the sudden recollection of my parapraxis was much grief and guilt: the latter because I was six-years-older and paid her insufficient attention when we were growing up. In her adulthood I, *too-gradually*, came to appreciate her as one of the most wonderful and giving persons I have ever known (she was a Masters-degreed geriatric nurse-practitioner). She truly lived her Christianity with the elderly she cared-for; and with everyone else, for that matter.

In the botched Dora case (1901) Freud also considers the role of "secondary" or "epinotic" gain. This brings both the current interpersonal environment and the concept of "*function*" (p. 43) [my italics] into Freud's notion of causality. Such "motives" (p. 42) arise after the fact of the symptom itself, but may come to contribute to its maintenance as strongly as the more purely historical and conflictual intrapsychic determinants. Freud's formulation below also squares with many contemporary feminists' conception of latter-nineteenth/early twentieth-century neurosis in women!

A little girl in her greed for love does not enjoy having to share the affection of her parents with her brothers and sisters; and she notices that the whole of their affection is lavished on her once more whenever she arouses their anxiety by

falling ill. She has now discovered a means of enticing out her parents’ love, and will make use of that means as soon as she has the necessary psychical material at her disposal for producing an illness. When such a child has grown up to be a woman she may find all the demands she used to make in her childhood countered owing to her marriage with an inconsiderate husband who may subjugate her will, mercilessly exploit her capacity for work, and lavish neither his affection nor his money upon her. In that case ill-health will be her one weapon for maintaining her position. It will procure her the care she longs for; it will force her husband to make pecuniary sacrifices for her and to show her consideration, as he would never have done while she was well; and it would compel him to treat her with solicitude if she recovers, for otherwise a relapse will threaten (ibid, p. 44). [It must be emphasized, however, that all these processes transpire unconsciously. They are emphatically not a consciously-premeditated dissimulative ploy].¹³

Indeed, throughout Freud’s case histories explanations in terms of *purpose, aim, goal, wish, function, and meaning* far outnumber those in terms of instincts.

In *Five Lectures on Psycho-Analysis* Freud (1909c, p. 38) uses the words “motive” and “cause” interchangeably:

Psychoanalysts are marked by a particularly strict belief in the determination of mental life. For them there is nothing trivial, nothing arbitrary or haphazard. They expect in every case to find sufficient *motives* where, as a rule, no such expectation is raised. Indeed, they are prepared to find several *motives* for one and the same mental occurrence, whereas what seems to be our innate craving for *causality* declares itself satisfied with a single psychical *cause* [my italics].

In addition to the dimension of purposiveness, Freud’s clinical concept of causation includes one of *meaningfulness*. The cause of Frau Emmy von N’s stammering and clacking—the “conflict between her intention and the antithetic idea (the counterwill)” —was also termed the “meaning” of the symptomatology (Breuer & Freud, 1895, pp. 92–93). In *The Interpretation of Dreams*, for instance, he shifts back and forth between speaking of the “causes” and the “meaning” of the dream. Dreams were conceptualized both as the effects of underlying causes—that is, wishes—and as disguised communications (see also Freud, 1915–1917, pp. 100–101).¹⁴ The dreamer’s associations were conceptualized as, both leading one to the antecedent causal fantasies and as revealing the meaning of the dream (Freud liked to compare dream interpretation to the decipherment of ancient scripts). Much of the theoretical portion of the 1900 dream book was devoted to elucidating “the lexical rules” by which the grammar of the latent content is transformed into that of the manifest content. To interpret a dream is to elucidate its meaning by discerning its place in a broader causal nexus: “for ‘interpreting’ a dream implies assigning a ‘meaning’ to it—that is by replacing it by something which fits into the chain of our mental acts as a link having a validity and importance equal to the rest” (Freud, 1900, p. 96). Again, in the same work, the concept of “wish fulfillment” is introduced in Freud’s explication of the meaning of the dream (ibid, p. 122).

In the Dora case, Freud (1901, p. 15) continues to use, interchangeably, the concept of the “causes” and the “meaning” of the dream:

after the work of interpretation has been completed they [the dreams] can be replaced by perfectly correctly constructed thoughts which can be assigned a recognizable position in the chain of mental events ... dreams seemed to call for insertion in the long thread of connections which spun itself out between a symptom of the disease and a pathogenic idea. At that time I learnt to translate the language of dreams into the forms of expression of our own thought language.

In *The Introductory Lectures* Freud (1915–1917, p. 36) makes it his explicit aim, in his investigation of parapraxes, “to leave all physiological or psychophysiological factors on one side and devote ourselves to purely psychological investigations *into the sense—that is the meaning or purpose—of prapraxes.*” Again, the “sense of a psychical process” is defined as “the *intention* it serves and its position in a psychical continuity. *In most of our researches we can replace sense by intention or purpose* [my italics].” There the “dynamic view” is characterized by its goal, “not merely to describe and classify phenomena, but to understand them as signs of the interplay of forces in the mind, as a manifestation of *purposeful intentions* working concurrently or in mutual opposition” (ibid, p. 67; my italics). Consonant with this aim, parapraxes are conceptualized as “serious mental acts” which arise from two mutually opposing “intentions” (p. 44). Continuing to elaborate upon causation in *The Introductory Lectures*, Freud (pp. 61, 107) uses words such

as “purpose,” “meaning,” “motive,” and “goal” [my italics]. In a moment we shall delve more deeply into the relationship between “purpose” and “meaning.”

Even *Three Essays* (1905), the manifesto of “instinctivism,” acknowledges the dimension of meaning in psychopathology and the consequently exegetical elements in the analyst’s task.

symptoms are substitutes—*transcriptions* as it were—for a number of emotionally cathected mental processes, wishes, and desires, which, by the operation of a special psychic procedure (repression) have been prevented from obtaining discharge in psychical activity that is admissible in consciousness ... [the treatment consists in] systematically turning these symptoms back [retranslating] ... into emotionally cathected ideas—ideas that will now become conscious [my italics].

In *The Introductory Lectures* Freud (p. 284) elucidated the “meaning” of the symptom with reference to “its ‘whence’ and its ‘whither’ or ‘what for’—that is, the *impressions* and *experiences* from which it arose and the *intentions* which it serves [my italics].” “Symptoms have a sense and are related to the patient’s experiences,” he continues (p. 257). This is exemplified in the case of the obsessional woman whose repetitive ritualistic behavior—showing her maid a stain on a tablecloth and running into the bedroom and sending the maid on a trivial errand—was a “representation” of the wedding night trauma of her husband’s impotence, his continual returning to her bed to try unsuccessfully, and his clumsy attempt to cover up his embarrassment *vis-à-vis* the maid by pouring red ink on the sheets. It expressed, furthermore, the patient’s (unconscious) “intention” to undo the past mishap and to deny her continued, albeit repressed, discontent with her impotent husband (pp. 262–263). In his 1927 paper on fetishism Freud discoursed on the “meaning” and “purpose” of the perversion. In 1933 he spoke, in one breath, of the necessity to understand the “meaning” and the “causes” of psychopathology (p. 219).¹⁵

Freud was correct to consider the facet of meaning, as well as of purpose, in his explication of psychic causality. It is man’s possession of language, the fact that his behavior is symbolically mediated and—of course image-laden—that forces one to do so. Meaning is determined by the conscious and unconscious, current and historical interpersonal context of our desiring and fearing. To restate this more precisely, raw sexual and aggressive drives do not sit about waiting to attach themselves to, or be pulled out by, any object that presents itself; rather, our sexual and aggressive impulses are directed, from the outset, to the psychical representations of important persons in the environment. The original objects of these impulses were, of course, the central figures from childhood; and these desires remain bound, to a significant degree, to representations of these prototypical objects. However, they can become displaced onto important persons in the current environment—including the analyst or psychotherapist (i.e., “transference”). *We humans cannot help but desire in an object-directed fashion; nor, since important aspects of the superego and the ego’s defensive functioning, are the fruit of identifications, can we check our desires in other than an object-related mode.*

That which causes our behaviors—*affect-laden fantasies*—are both *purposive* and *meaningful*. Each behavior is simultaneously caused and is a compromised communication. Meaning and causation are simply two different facets of the same thing.

The communicative aspect of “drives” and symptoms was grasped by Freud as early as the mid-1890s. In *The Project*, for example, he notes that “At first the human organism is incapable of bringing about the specific action [designed to discharge the tension of the drives]. It takes place by *extraneous help*, when the attention of an experienced person is drawn to the child’s state by discharge along the path of internal change. In this way this path of discharge [i.e., crying] acquires a secondary function of the highest importance, that of *communication* [Freud’s italics].” In a letter to Fliess in December, 1896, Freud asserts that “[hysterical] attacks of giddiness and fits of weeping” are all “aimed at *another person*—but mostly at the prehistoric, unforgettable other person who is never equaled by anyone later” [Freud’s italics]. Years later, in “Mourning and Melancholia,” Freud (1917) writes of the disguised communicative value of the patient’s self reproaches—veiled reproaches toward current and historical others.¹⁶

Freud’s idea of psychic causality was thus an assertion that (1) *all observable or (potentially) self-reportable behaviors are the result of antecedent mental events*; (2) *these events are purposive*

strivings; (3) they are meaningful communications; and (4) they serve some function within the individual’s mental economy and current interpersonal environment. The theorem of psychic causality is simultaneously the theory of psychic meaningfulness, purposefulness, and functionalism. The idea that a human behavior could be meaningless or serve no purpose troubled Freud quite as much as the idea that it could be uncaused. The words “motive” and “meaning” often occur in tandem with one another and are used synonymously.

Without a concept of psychic causality much that transpires within the therapeutic sessions would seem meaningless. For example, a patient with a lifelong history of extreme discomfort with anger, stemming from his upbringing in a home where expressions of anger were taboo and brought ostracism, gingerly expressed a bit of irritation at me. He then closed his eyes and silently looked down. After several minutes he opened them and looked up out of the fleeting fantasy (fear) that I had left the room. I had to do no more than point out the connection between the two behaviors—expressing anger and fearing I had left the room—for him to divine the intrapsychic danger and causal connection. On another occasion I reminded this man of my impending summer vacation. This was followed by silence and, eventually, a glance at the air conditioner: “I hate that damn thing. It’s too cold in here. Will you cut it off?” At that moment he was unconscious of the connection between my announcement and his reaction, though he gradually became able to acknowledge his hurt and anger at my leaving.

In 1926 Freud posited that the interaction (conflict) between opposing unconscious intentions leads to the equally-unconscious apprehension of an imminent danger situation, to which the ego responds with the generation of unconscious “signal anxiety.” Developmentally, the danger situations move from loss of the loved object, through loss of the object’s love, physical or verbal punishment, and finally to fear of super-ego condemnation. This anxiety itself becomes an important causal factor in Freud’s “reconceptualization” of symptom formation. Unconscious signal anxiety is the motive for the individual’s construction of a variety of defensive maneuvers and compromise formations.¹⁷

It is important to appreciate that Freud is here discarding the last vestiges of his mechanistic theory of anxiety. It is no longer conceptualized as an automatic, reflex-like response to the “damming up” of libido, but as the result of intentional and meaningful activities: “whereas I formerly believed that anxiety invariably arose automatically by an economic process, my present conception of anxiety [is that it is] a signal given by the ego *in order to affect the pleasure-unpleasure agency*” (my italics) (op. cit.). This reproduction of (unconscious) anxiety is explicitly declared an “intentional” one. The concept of interpretation is also incorporated more fully into Freud’s notion of causality. In other words, signal anxiety is generated because of the individual’s historically-constitutionally determined unconscious interpretation of his impulse and situation as a dangerous one. Defenses against the unconscious impulse are then set in motion. Thus we see that Freud began proposing significant functions to the unconscious ego. The ego psychologists Hartmann, Kris, and Lowenstein added a number of other adaptive ego functions which they also deemed unconscious—including reality-oriented problem-solving activity. In this they adumbrated aspects of contemporary cognitive psychology and cognitive neuroscience; which suggest that 90%–95% of our reasoning activity is nonconscious/unconscious.¹⁸ In this context, see Freud’s 1911 seminal, but short (6 pages), “Two Principles of Mental Functioning” (SE 12:216–221); where he relates the “reality” and “pleasure” principles, and speaks about the importance of unconscious cognition.

From 1920 to 1923 onward the development of ego psychology accorded to ego ideal and superego functions an increasingly important determinative role in human behavior. Since Freud conceptualized these structures as largely the fruit of identifications (the precipitants of abandoned object cathexes), he was opening the door to still-further consideration of the place of societal factors in motivation.

The “ego ideal” was first posited in 1921 (*Group Psychology and the Analysis of the Ego*);¹⁹ and it was followed two years later (*The Ego and the Id*, 1923) by the more comprehensive formulation of the “superego” (the unconscious conscience with conscious derivatives, or its unconscious manifestations as guilt-ridden self-punitive behavior, such as habitual “accident-proneness,” or depressive or suicidal feelings). Freud continued, however, to use both terms on different occasions. The “ego ideal” is probably best conceived as a set of unconscious subfunctions intimately related to the “superego.” The former consists more of one’s internalized “positive” parental injunctions—to live up to certain ideals of achievement,

constructive social/moral behavior, and so forth. To the degree that the unconscious ego feels that it has done so; there is a calm contentment with oneself. The “superego,” by contrast, can be understood as the locus of internalized prohibitions or “Thou shalt nots.” Again much of its operation is unconscious. When there is an easy relation between unconscious ego and superego—that is, a sense one is avoiding prohibited intentions or impulses; the relationship between ego and superego is a peaceful sense of truce.

As we are trenching closely on Freud’s final (1923) model of mind, or “the psychic apparatus”; the “structural theory”; let us elaborate the rest of it.²⁰ Again, Strachey prevailed on his fellow translators to use more scientifically/technically high-sounding Greek, or “Greekish” terms; for Freud’s folksy, graphic and experience-near ones. “The ego” instead of “*Das Ich*” [“the I”]. To their credit, the French call it “*le moi*” and the Spanish “*el yo*.” “*Das Es*” [“the It”] becomes the “id”; and “*Das Uberich*” [“the *over, or above I*”] “the superego.” The id is the repository of the—especially libidinal and aggressive—primal-other directed drives. These drives may be excessively stimulated by seductive or aggressive parental behavior. Too, the drive intensities are a function of constitutional/temperamental factors of the infant/child himself/herself.

The superego, as mentioned, comprises the internalized parental prohibitions, as well as internalizations of subsequent important parental “imagoes”—that is, authorities. Freud posited that superego aggressiveness is a function of: (1) the actual psychological or physical aggressiveness accompanying introjected parental commands, and (2) the reactive aggression the child defensively projects upon the parents (and then introjects). A “double whammy,” if one will.

There is an infantile constitutional matrix for the subsequently-unfolding ego functions, in addition to the co-formative role of identifications with parents. Piaget’s theories of perceptual and cognitive development aptly capture important aspects of this. Piaget generally held that his child developmental findings and theories were compatible with Freud’s. And, I suspect, Freud would have agreed. If this aspect of Piaget’s work was an elaboration of Freud’s notion of “ego functions” (reality testing, cognition, perception/interpretation of ambience, defense mechanisms, and so on); then Piaget’s discourse and theories of moral development were also compatible with Freud’s “ego ideal/superego”—as well as with the ego-aspects of morality. One of Freud’s therapeutic aims, I argue, was to substitute “ego morality” for the archaic “superego morality.”

When it comes to addressing a patient’s defenses (motivated by the aforementioned unconscious “signal anxiety” generated by the ego); timing is all-important. The warded-off material to be approached should be *preconscious*, not *unconscious*. Freud always held that repression and the other defensive maneuvers prevented the movement of conflict-laden motives, memories, and mentation from unconsciousness to preconsciousness; for in the latter state they could rise much-more easily to painful or tension-laden awareness. Through (1) supervised training and personal analytic treatment; (2) empathetic rapport with the patient; (3) cognizance of important patterns in his/her history and their manifestations in the ongoing transference; and (4) closely following his/her verbal/nonverbal communications over the course of many sessions; the psychoanalytic therapist gets a good sense of *when* a particular conflictual issue is addressable—and even then he/she couches his/her intervention in such a way as to facilitate the patient’s doing as much of the work as possible (and to minimize any suggestion of content). The following vignette, from my practice, illustrates this; as well as other features of the analytic exploratory method. Without such exemplifications Freud’s psychological heuristic would seem two-dimensional and intellectualized. In short, reader, please bear with me!

Mr. Z, a 34-year-old man, entered analytic treatment for “marital problems”—as well as, it emerged later, out of concern with his much-increased drinking (an ancillary defense, as well as self-medication). He only gradually disclosed, with much anxiety-laden “dysthymia,” that he was involved in an “affair” and was considering leaving his wife and children. When asked why it had been so difficult to bring this out; he replied that he felt very guilty about it, and feared I would scold him and command that he “cut it out.” I pointed out the transference aspects of this, suggesting that he was already scolding himself and projecting part of his own ambivalence about the affair onto me. He acknowledged that he was “*tearing [himself] apart over it*”; and that he was totally-incapable of making a decision about it one way or the other. He went on to say that, as a devout Catholic, he hated himself for secretly betraying his wife and three children; and for the damage he would inflict upon them by wholeheartedly committing to his lover.

It became clear that he had been unable to come to terms with the manifold and conflicting feelings about his parents’ divorce during childhood; and was completely unconscious of the role those events were *still playing* in his

current distress and behavior. He had mentioned their divorce only once or twice, months earlier; in a matter-of-fact way, when giving me a rough outline of his personal history. I knew from that history that his father, who had been “cheating on” his mother, deserted the family *at the patient’s age ten*. I silently hypothesized that the patient was recapitulating the behavior of his own father—i.e., “acting it out,” rather than coming to painful terms with it, and working it through (including its manifestations in the transference). At one point, after several more sessions—during which he had begun to touch gingerly on parental issues and the divorce—; he said: “you know, I think my nervousness and school problems started when I was in the fourth grade”. So I asked,

“What else was going on then?”; and he replied, “My father left home!” After recovering his breath, he stammered, “Gee, Doc, I feel like I’ve just been hit by a ton of bricks!” Thus the real work had finally begun.

Gradually, the issues became less *intrapsychically* and *transferentially* dangerous—i.e., he had feared that I too, would leave or else transfer him to another therapist—because of the rage and disappointment he began expressing about his father; *who made no attempt to contact the children after he left, although he still lived close-by*. He had several other children by his new wife; and seemed to totally forget about his first ones. The patient knew where he lived; but was afraid to visit him—because of the rage, guilt, hurt, and lifelong sense of deficiency as a son, he would feel even more severely if he did so. Nor could he bring himself to talk with his mother about the turbulent final years of the marriage—which he increasingly affectively/cognitively remembered—; out of fear of hurting her, being “guilt-tripped” by her, and especially becoming enraged at her—for her post-divorce unavailability (it appearing that she had gone through a depression during this time). He began to painfully see that what he was doing to his wife and children (one of whom, incidentally, *was a boy about 10*); was what his father had done to him. Through this—as well as through his increasingly empathic identification with his children, and with the wife whom he professed to still love; and by working through his progressively-recovered memories and feelings about these childhood events; he became able to make a decision, after his tortuous months of ambivalence, guilt, and conflict. He broke-off the extramarital relationship; and decided to make the best of it with his wife and children, and to be a better father than his own.

He became much-more at peace with himself, the anxious dysthymia ceased, and his alcohol use considerably declined. He experienced a compulsive desire, out of guilt, to precipitously “confess” to his wife. I suggested strongly that we first spend some time discussing this! As we did so it emerged that although she was a loving woman; she had her own career, as well as a certain “no-nonsense” side. He eventually decided it was best not to do so, as it would be a cruel way of “getting the monkey off” his own back. Too, he feared that she might actually divorce him for it. Thus he worked-out those final issues with me as best he could, as well as utilizing his Church’s confessional.

In such cases of painful indecision the clinician tries to be as neutral as possible. This involves laundering his or her countertransference feelings and responses. In short, the psychoanalytic therapist’s function is to facilitate the patient’s exploration of his/her problems. The analyst comes in only when the patient has hit an uncomfortable stopping point, or seems to be drifting away from a difficult issue he/she has begun to discuss. The analyst does his or her best *to limit any suggestions to encouragement of the analysand’s exploratory enterprise*; and to avoid any suggestions of content, much less of solutions to the client’s life-quandaries.

Would that all my cases had turned out as well as Mr. Z. Exploratory psychotherapy or on-the-couch analysis places a high-premium on certain qualities in both the analyst and the patient. The latter must be not only motivated and introspective/psychologically-minded; but just well-enough to tolerate an—at times emotionally difficult—exploratory approach. We have already looked at some of the requirements of the former, and will not repeat them here. Let me close by saying that psychoanalytically-based supportive/expressive therapy (often with adjunctive pharmacotherapy), with sicker patients; is much harder to do than is a more-purely exploratory analytic therapy.

The Oedipus Complex: Direct and Derivative Manifestations

This complex has been observed for decades in centers for the psychoanalytically/family systems-based longitudinal observational and clinical studies of individuals from infancy/childhood through adolescence: such as the Yale Child Study Center and the Anna Freud and Dorothy Burlingham-founded Hampstead Clinic (London). Too, most cultural anthropologists deem it universal; and there are many tribal sociocultural institutions both manifesting—and defending against—it.

Apropos Freud's own developmental thinking, it is important to recall, from the prior chapter, that Freud had a significantly phylogenetic (what could today be called "sociobiological") vision of the form and content of the psychosexual stages—including especially that of the Oedipus complex. He attempted to tie that to the child's actual historical experience—and, later the adult's—through the aforementioned "aetiological equation." Recollect also the intimate connection between Freud's "instinct" [i.e., "*Trieb*"] theory and phylogeny/the biogenetic law. This even manifested in some of his case histories; and in a fairly-recently uncovered, hitherto lost, metapsychological paper (ca. 1915). See Sulloway's *Freud: Biologist of the Mind* (*op. cit.*); and Wallace's *Freud and Anthropology* (*op. cit.*); to see just how much this permeated his psychological and sociocultural thinking. With a few important exceptions, most contemporary analysts would not follow Freud down this path. Indeed it is clear that Freud's staunch disciple and master-biographer, Ernest Jones, was much-embarrassed by it; and often tried to turn an unswerving Freud from it.

Below I provide both direct and derivative evidence for the complex and childhood genital activity generally: during the period (ages three/four to five/six) in which it is strongest.

From ages 4 to 6 my niece—let us call her "Sally"—was facing her mother's (my younger sister's) downhill course, and intermittent hospitalizations, with breast cancer. At age 5 she was visiting my mother for a couple of weeks. The three of us were sitting in her den. Sally pointed toward a picture of her long-deceased grandfather, "Pop," (my father, whom she never knew) and said, "That's Pop." She then pointed toward a picture of her mother as a child about Sally's age; and said "that's Mama." She then looked at my mother ("Nanny") and me; and blurted out: "Nanny, when Pop died; you and Uncle Ned [myself] made another baby, my Mama. If something happens to Mama, then Daddy and I will make a baby, just like you and Uncle Ned did." (I must emphasize that her parents were extremely religious. They knew little to nothing about Freud and psychoanalysis). During the final phase of her mother's illness and for several months after her death; Sally saw a psychoanalytically-oriented social worker and child therapist, who worked with her through verbal and play therapy. In addition to as much grief-work as so young a child could manage; they dealt with her explicit sense of oedipal triumph, fear that she had somehow caused her mother's death, and the associated sense of guilt.

Today, at 18 and a senior in high school; Sally is healthy and very well-rounded. She loves her stepmother (who is very-much like my sister) and her two stepsisters (her father remarried when she was 10). She has many close friends, dates some; and, throughout school, has been a high academic achiever—as well as being in the school band; and a cheerleader, soccer-player, and editor/writer on its newspaper. She will be entering a prestigious private college, whose faculty is oriented toward top-notch teaching. Her father (a lawyer), toward whom she has remained close; has helped keep alive the good memories of her mother. By contrast, she recalls very little of the much-earlier Oedipus complex and her child therapy. This is not simply a function of adaptive repression; but also of the "smashing" of much of the complex and its associated guilt; through the highly-skilled treatment she received. (Reedless to say, she is unaware of this look.)

Moreover, part of the normal child's repression of the Oedipus complex is a function of the ensuing "latency phase"; during which the sexual drive (and the associated aggression toward the same-sexed parent) subside. This period runs from circa age 6 through 12, and has also been much-observed by anthropologists in nonliterature cultures. The sexual/aggressive strivings are "sublimated"; such that their energies are available for the child's enculturation or schooling. Latency ends around age 12 or so. With the onset of puberty, a (mostly unconscious) re-edition of Oedipal strivings occurs ("crushes" on teachers and other opposite-sexed authority figures or friends of the parents). The transformation from latency age to puberty (12/13) may well be an evolutionarily ingrained, heritage of the eons in which we were hunter/gatherers—as such societies today ritualistically mark adulthood around 12/13. Whereas Oedipal-age children often have close friends of the opposite gender; with whom they may even engage in sex play (as I did around 5 or 6 with an age-mate, the daughter of family friends); in latency their friends become same-sexed, and they often "throw-off on" the opposite gender. Finally, it is not at-all-uncommon for the adolescent's initial sexual experiences to be incestuous—with cousins, for example; or for adolescents in treatment to eventually disclose *frankly* Oedipal dreams and even masturbatory fantasies.

Derivative examples of the complex are many; and can often be observed in children's play, as well as in a certain flirtatiousness toward the opposite-sexed parent. During her oedipal years my daughter had a good many Fisher-Price toys and family figures (her brother was two-years younger). When playing with the cars she would put the daughter and father in the front, and the mother and son in the back. After

awhile, she would then throw the latter from the still-moving car! Likewise when she played with the boat and family figures in the tub. She also had a “boy-friend” (her words); as well as other male friends at the time—in all of whom she lost interest around 6 to 7; thence turning to all-girl cliques—as well as moving closer to her mother, dressing-up in her clothes, and so forth. This last represents the identification with the same-sexed parent, and the incorporation of her/his mores (the foundation for the superego/ego ideal), that is a signal part of “resolving” (never totally) the complex.

The complex (pretty-much repressed or otherwise defended against) can surreptitiously express itself in adults in various ways: chronic conflicts with same-gendered authority-figures; choice of mate (e.g., the old song, “I wanna marry a girl, just like the girl, that married dear old Dad”); recapitulation of parental marital problems in one’s own marriage (as with Mr. Z); and so forth. In Latin American cultures oedipal conflicts and guilt often manifest in men in the so-called “*Madonna-puta*” complex: in which the wife is elevated to the “preoedipal” nurturant/virginal plane (the “Madonna”); and the girl-friend or “mistress” is the hypersexual “*puta*” [“whore”]. He thus deals with the oedipal guilt that would otherwise result from directing his dependent/affectionate needs, and his genital needs, toward the same woman: that is, by splitting each set of needs from one another and gratifying them with two different women. Finally, swear-words such as the particularly insulting—when expressed by one man to another—“mother fucker”; and the ubiquitous English-language slang use of “old lady”/or “old man” to refer both to one’s opposite-sexed parent and one’s spouse; further evidence the complex. And there are of course many instances from literature and popular culture generally.

It is also important to grasp that the theory of psychosexual development is an “epigenetic” one. That is to say the manner (and degree of success) in which the earlier stages are weathered; beneficently or maleficently affects the unfolding of the later ones. Freud overfocused on oedipal stage issues; to the detriment of equally, if not more, important preoedipal developmental tasks—especially around the toddler’s separation-individuation from the mother–child matrix. It remained for his child analyst daughter, Anna; and many later developmental investigators (e.g., Margaret Mahler); to flesh-out the problems and possibilities in the preoedipal phrase—and their impact on adult character formation and psychopathology (e.g., Otto Kernberg). I believe that Freud’s unresolved issues, *vis-à-vis* his own mother, were key determinants of these theoretical blind-spots.

Indeed Freud’s mother, Amalie, ruled his boyhood roost. As the oldest, and a son; he was much the favored child—though with strong-strings attached: he had to become the great one—for her; since her own gender had denied this to her, given those days and times. Once a very beautiful woman; she was described by relatives and others who knew her as regally domineering and vain to the end (age 95). By contrast, Freud’s father was passive and ineffectual (almost a prototypical “*Klutz*”!). Freud worked six long days a week; so it was quite a concession to mother that he and his family paid court on her *every Sunday afternoon until her death at Freud’s age 73*. He rationalized his self-relief at her death—by claiming he could then die at peace; since she would not be there to mourn the loss of her “*goldener Sigi*.” Freud never came to terms with her narcissism and his preoedipal issues. This caused him to defensively overemphasize both his father-conflict; and oedipal issues generally, as opposed to preoedipal ones. Moreover, it contributed to a certain theoretical and personal misogyny, which many have noted.

Freud on Hard Determinism

In closing, Freud was firmly-committed to the universality of causation. He was a hard determinist; believing that there were good philosophical and scientific/investigative reasons to be so. This stance is well-captured in *The Introductory Lectures* (1915–1917), where Freud equates the “deeply rooted faith in undetermined psychical events” and “free will”; and argues that they are “unscientific and must yield to the demands of a determinism whose rule extends over mental life.” Earlier in this work Freud takes to task the libertarian counterfactual conditional—that is, the idea that the agent is ever in a position to say, after an action, that he “could have done otherwise.”²¹

Imagine that someone had undertaken the chemical analysis of a certain substance and had arrived at a particular weight for one component of it—so and so many milligrammes. Certain inferences could be drawn from this weight.

Now do you suppose that it would ever occur to a chemist to criticize those inferences on the ground that the isolated substance might equally have had some other weight? Everyone will bow before the fact that this was the weight and none other and will confidently draw his further inferences from it. But when you are faced with the psychological fact that a particular thing occurred to the mind of the person questioned, you will not allow the fact's validity: something else might have occurred to him (*ibid.*, pp. 48–49).

In previous treatments of free will (e.g., “Determinism, Possibility, and Ethics,” *op. cit.*), I brought forward a number of reasons why I believe free (i.e., to say, “nonnecessitated”) willing is erroneous. I argued that every human behavior is determined, in the sense that the necessary and sufficient conditions for its occurrence are the *intersection* between (1) the antecedent state of the actor, with his particular constitutionally and historically determined *preconscious* and *unconscious* desires, fears, inhibitions, and mode of interpreting the world; and (2) the immediately precedent situation (i.e., current environment). I concluded that history and constitution determine: the range and intensity of one's desires and the particular unconscious and conscious fantasies through which they express themselves; the nature of one's anxieties and aversions; the pattern of one's defenses and compromise formations; the degree to which one can restrain or divert one's impulses (*and the extent to which one wants to*); one's style of preconscious and unconscious cognition and interpretation; one's capacity for reality-oriented operations on the environment (as well as the situations in which one is capable of exercising these functions); the degree to which one is cognizant of, and satisfied or dissatisfied with, one's character structure; and the extent to which one is motivated to, and capable of, engaging in a psychoanalytic dialogue.

I can recall only one quote in Freud's entire corpus that might seem to support a notion of contracausal freedom (1923, p. 50n): where he spoke of a successful analytic treatment “giv[ing] the patient's ego *freedom to choose one way or the other*.”²² From the context it is clear that Freud was not abrogating determinism. He was referring to patients such as my “Mr. X”; who was literally tearing himself apart over his incapacity to decide: either for his mistress, or his wife and children. Like a helpless teetotum; he would lean now in one direction and then in the other. *He literally could not “choose one way or the other.”* Freud's “Rat Man” is a similar instance of such painful oscillation and inability to make any choice that would exclude the other. *It was only through Mr. X's ever-deepening affective/cognitive awareness that he was repeating—or about to repeat—his father's desertion of him and his mother; rather than painfully remembering it and its associated memories and other feelings, and dealing with its emergence in the transference; that he finally became able to behaviorally choose one way rather than the other.* And he had to subsequently work-through his guilt—both toward the girlfriend he left, and toward the family he had secretly betrayed.

I suggested, moreover (*op. cit.*), that, except in cases of overwhelming external duress, the human being is invariably self-determining, and the free will-determinism dichotomy is a false one. Insofar as our behavior is not externally compelled or constrained, it is free; as a function of our constitution, history, and personality structure, it is determined. The valid dichotomy is not “determined” versus “free,” for psychoanalysis comprehends all behaviors as determined; but pleasure principle versus reality principle, primary process versus secondary process, *relatively* conflict-laden versus *relatively* conflict-free, atavistic versus adaptive, and unconscious versus conscious. In other words, I argued that the adaptive ego functions about which analysts write are consistent with a deterministic universe—the reality oriented, adaptive sphere being no less determined than the maladaptive, atavistic one. Psychoanalytic treatment operates not by moving the individual from a sphere of determinism to one of free will, *but by altering his mode of self-determination.*

It changes the will by changing its unconscious psychobiological seat. Moreover, the new mode of self-determination will be in every respect as necessitated as the old.

From the point of view of logical consistency, parsimony, and compatibility with what is, at least outside subatomic physics, the still prevalent causal image of science; a hard, universal determinism is clearly preferable to either an untrammelled libertarianism, or a limited libertarianism posited to arise in some mysterious way from a deterministic universe. Furthermore, if a nonnecessitarian concept of causation is invoked (and logic does not appear to permit such a thing—see below), the claim that free association leads to information about antecedent determinants would be vitiated. In short, as Freud asserted, the whole method is based on the assumption that the patient *cannot do other than* spin out his associations as

he does and that, consequently, these are instances in which it can be said, unconditionally, “one could not have done otherwise.”

“Free willists” contend that a person is “morally responsible” for what he has done, *only if* “he could have done otherwise.” If unconscious psychobiological processes and history determine one’s motives, if one’s constitutional endowment and early environment are not freely chosen, if one’s thoughts, feelings, and desires begin unconsciously, and if one’s personality structure and situation invariably necessitate one’s choices; then, it is argued, one cannot be held praise-or blameworthy in the traditional moral sense. Freud himself would seem to have concurred: “Ethics, disregarding the fact that such differences [in human behavior] are determined, classifies [them] as ‘good’ or ‘bad’ ” (1930, p. 111).²³ As with other facets of the determinism-free will controversy, each position involves its interpretive commitments. For example, there is no decisive test, after an action has transpired, of whether it might have been otherwise, of whether (to state what is really at issue) the agent, at the instant before his action, possessed the genuine capacity to choose one way or the other. Determinists and libertarians each make their assumptions—the determinists’ “if you could have done otherwise you would have” countering the libertarians’ “I could have chosen differently had I wished to—and it was within my power to wish otherwise.”

On the matter of responsibility both libertarians and determinists hold persons responsible—but on different grounds. The former hold people responsible on the ground that they possess free choice and hence could have acted differently, in any given situation, from the way they actually did. The latter base responsibility on the concept of *intersectional and mediate causation*—that is, that each individual is part of those interactions which have determined him, and that his personality structure is the proximate cause of his behavior (“causal responsibility”). Determinists contend that it is only because the individual’s behaviors are determined by his personality structure—rather than being purely whimsical or arbitrary—and because he is self-determining in certain relatively enduring ways that reward, punishment, and education can affect his behavior. And, at the interpersonal level, the notion that persons can, through their actions, participate in causing distress and untoward reactions in others is considered indispensable to society’s regulation of the conduct of its members.

Moreover, determinism undercuts our self-righteous judgmentalness toward others—that is, “There, but for the grace of God, go I.”

Nevertheless, this purely deterministic conception of responsibility, while logically permitting both reward and punishment, is unlikely to satisfy the traditional moralist. If every decision and action—and not merely externally compelled or psychopathological ones—is always necessitated, then our moral discourse, as well as much of our everyday language and mode of viewing ourselves, would have to change considerably.

Where an issue is as knotty (and perhaps unresolvable) as the free will-determinism controversy; it seems prudent not to build our system of moral valuation on one pole or the other. When morality is viewed as a vantage point for assessing the beneficence or maleficence of one’s intent toward and impact on others, then moral appraisal can proceed quite independently of the truth value of determinism or free will. What is then decisive is, as so many jurists have held, whether the agent was reality oriented, appreciated the difference between right and wrong, and understood the likely consequences of his behavior. Whether he could have acted otherwise is beside the point.

On these matters Freud’s (1925) brief essay on the “moral responsibility of the dreamer” repays serious study:

Must one assume responsibility for the content of one’s dreams? Obviously one must hold oneself responsible for the evil impulses of one’s dreams. What else is one to do with them? Unless the content of the dream (rightly understood) is inspired by alien spirits, it is a part of my own being. If I seek to classify the impulses that are present in me according to social standards into good and bad, I must assume responsibility for both sorts; and *if, in defense, I say that what is unknown, unconscious and repressed in me is not my ‘ego,’ then I shall not be basing my position upon psychoanalysis*, I shall not have accepted its conclusions—and I shall perhaps be taught better by the criticisms of my fellow men, by the disturbances in my actions and the confusion of my feelings. *I shall perhaps learn that what I am disavowing not only ‘is’ in me but sometimes acts out of me as well* (all italics Freud’s).

Moreover, if I were to give way to my moral pride and tried to decree that for purposes of moral valuation I might disregard the evil in the id and need not make my ego responsible for it, what use would that be to me? Experience shows me that I nevertheless *do* [Freud's italics] take that responsibility, that I am somehow compelled to do so.

The ethical-narcissism of humanity should rest content with the knowledge that the fact of distortion in dreams, as well as the existence of anxiety dreams and punishment dreams, afford just as clear evidence of his *moral* [Freud's italics] nature as dream interpretation gives of the existence and strength of his *evil* [Freud's italics] nature. *If anyone is dissatisfied with this and would like to be 'better' than he was created, let him see whether he can attain anything more in life than hypocrisy or inhibition* [pp. 132–134; my italics].²⁴

Prehistory of Psychic Causality and Historical Determinism

Medicine has long possessed a primitive concept of psychic causality—of the influence of ideas and emotions on health and disease. Consider, for example, the following case history from Galen—which must count as one of the earliest explicitly psychodynamic formulations:

She was suffering from one of two things: either from a melancholy dependent on black bile, or else trouble about something she was unwilling to confess. ... After I had diagnosed that there was no bodily trouble and that the woman was suffering from some mental uneasiness ... somebody came from the theatre and said that he had seen Pylades dancing; then both her expression and the color of her face changed ... and I noticed that the pulse had suddenly become extremely irregular ... Thus I found out that the woman was in love with Pylades, and by careful watch on the succeeding days my discovery was confirmed [by testing her pulse on occasions when Pylades was mentioned as compared with occasions on which other topics or other dancers were being discussed] (Galen, in Siegel, 1973, p. 208).²⁵

Let us shift now to the nature of causation in psychoanalysis. What is the history and prehistory of the idea?

Any discussion of the determinants of Freud's idea of psychic causality must take account of the intersectional and interactional nature of determinism, which I have previously discussed. Freud's idea was neither *à priori* nor *à posteriori*; there was a complicated interaction between prior reading, clinical experience, and creative synthesis.

To begin with, Freud cut his intellectual teeth on the mechanistic determinism of his teacher and mentor, Ernst Brücke. He adopted wholeheartedly the self-confident oath of Brücke and DuBois-Reymond.

No other forces than the common physical-chemical ones are active within the organism. In those cases which cannot at this time be explained by these forces one has either to find the specific way or form of their action by means of the physical mathematical method or to assume new forces equal in dignity to the chemical- physical forces inherent in matter, reducible to the force of attraction and repulsion (in Jones, 1953, pp. 40–41).

But Freud was also a student of philosophy, history, and anthropology. Each of these fields furnished Freud with a concept of causality in the psychical sphere.

Freud took three semesters of philosophy under Franz Brentano at the University of Vienna, and even considered following his M.D. with a Ph.D. in that subject. The phenomenological Brentano probably influenced Freud's inclusion of intentionality in his object-relations theory, as well as his concept of cause. The major works of Hobbes, Hume, Locke, Mill, and Kant sat on his shelves (Trosman & Simmons, 1973); and he had studied Spinoza in the final years of *Gymnasium*. Locke's *Essay on Human Understanding*, Hume's *Essays Literary, Moral, and Political*, and Kant's *Critique of Pure Reason* are signed and dated by Freud, respectively, in 1883, 1879, and 1882.²⁶ While still a student, Freud translated a volume of Mill's essays. He would have been exposed to the deterministic Herbart and Schopenhauer in Brentano's lectures; the former was cited in *The Interpretation of Dreams* and Freud owned works by Schopenhauer. Each of these philosophers, as we shall see, furnished Freud with various concepts of psychic determinism.

Thomas Hobbes was one of the most staunch and consistent determinists who ever lived. He was, as well, the source of Spinoza's hard determinism and robust associationism. He was also a materialist on mind-body. In the *Leviathan* he tells us:

When a man thinketh on any thing whatsoever, his next thought after is not altogether so casual as it seems to be All fancies are motions within us, relics of those made in the sense: and those motions that immediately succeeded one another in the sense, continue also together after sense: insomuch as the former coming again to take place, and be predominant, the latter followeth, by coherence of the matter moved, in such manner, as water upon a plane table is drawn which way one part of it is guided by the finger (Hobbes, 1651, p.28).²⁷

Like Freud, Hobbes (p. 29) made a point of demonstrating the relevance of this principle to even the “wild ranging of the mind.” By way of example he offered the following explanation of a seemingly non-sensical question—“What was the value of a Roman penny?”—posed by an individual during a discussion of the English civil war.

For the thought of the war, introduced the thought of the delivering up of the king to his enemies; the thought of that, brought in the thought of the delivering up of Christ; and that again the thought of the thirty pence, which was the price of that treason; and thence followed that malicious question, and all in a moment of time; for thought is quick (ibid).

Hobbes also spoke of trains of thought directed by desire. His example of this, mentation governed by the desire to recover a lost object, is an excellent instance of free association. “Sometimes a man seeks what he hath lost; and from that place, and time, wherein he misses it, his mind runs back, from place to place, and time to time, to find where and when he had it” (ibid).

Just as Freud conceived of symptoms, parapraxes, and other observable behaviors as the effects of antecedent mental acts, so Hobbes (p. 47) asserted that “imagination is the first internal beginning of all voluntary motion [my italics].” These acts of imagination were termed “endeavors” and subdivided into “appetites or desires” and “aversions.” “Will” is defined as “In deliberation, the last appetite, or aversion, immediately adhering to the action, or the omission thereof” (ibid, p. 54). On the free will-determinism issue he was a convinced determinist.

Liberty and necessity are consistent, as in the water, that hath not only liberty, but a necessity of descending by the channel; so likewise in the actions which men voluntarily do: which, because they proceed from their will, proceed from liberty; and yet, because every act of man’s will, and every desire, and inclination proceedeth from some cause, and that from another cause, in a continual chain, whose first link is in the hand of God, the first of all causes, proceed from necessity (ibid, p. 160).

Locke (1690) emphasized the determining role of the passions in human behavior.²⁸ He propounded a notion of their driving power not unlike that of Freud’s pleasure-unpleasure and constancy principles: “The motive for continuing in the same state or action, is only the present satisfaction in it; the motive to change is always some uneasiness: nothing setting us upon the change of state, or upon any new action, but some uneasiness ... which for shortness’ sake we call determining of the will” (p. 49). This “present uneasiness” is equated with desire.

Earlier, in his 1677, posthumously-published *Ethics*; Spinoza had expressed similar ideas.²⁹ Moreover, he had a concept of unconsciousness, expressed in his notion that “*appetites*” are *unconscious*—“desires” being their conscious derivatives. His emphasis on “*conatus*,” as man’s fundamental driving-force; is similar to both Freud’s earlier-posed “self-preservational drive,” and to Freud’s later “libido” concept. Spinoza’s theory of the affects, and the means of overcoming excessive ones; is not without affinities to Freud’s notions of “affect,” and of the psychoanalytic process itself. Finally, Spinoza developed adumbrations of both Freud’s “constancy” and “pleasure” principles. But beyond all this, there are important overall tones, which are quite similar in both men. In short, while Freud never paid his due to his important Dutch-Jewish predecessor; I feel strongly that he was influenced by him. Spinoza’s philosophical psychology is so rich, and so pertinent to many latter-day ideas; that it’s a pity we can’t pursue him further here.

Hume (1777) provided Freud with both a causal explanation of the association of ideas and of the determination of the will. And this was despite his elsewhere-treated (Chapter 1) skepticism about the very notion of causation itself! “Even in our wildest and most wandering reveries, nay, even in our very dreams,” says Hume (p. 57), there is a meaningful connection between the various ideas.³⁰

Were the loosest and freest conversation to be transcribed, there would immediately be observed something, which connected it in all its transitions. Or where this is wanting, the person who broke the thread of discourse might still

inform you that there had secretly resolved in his mind a succession of thought which had gradually led him from the subject of conversation (*ibid.*).

Hume (p. 108) saw the conjunction between motives and voluntary actions as being “as regular and uniform as that between the cause and effect in any part of nature.” Thus the concept of universal causation in human behavior is inferred in the same way as that in the physical world—from observed regularities in the temporal sequence and correlation of events. Of course Hume is here continuing to deny any possibility of direct perception of causal relationships.

Hume’s concept of psychic determinism seems wedded to a notion of predictability in principle: “however we may imagine we feel a liberty within ourselves, a spectator can commonly infer our actions from our motives and character; and even where he cannot, he concludes in general that he might, were he perfectly acquainted with every circumstance of our situation and temper, and the most secret springs of our compulsion and disposition.”

Although Freud neither cited nor owned (so far as we know) works of Hume’s Scottish contemporary, Thomas Reid, it is probable that Freud had direct or indirect acquaintance with him—especially given his infatuation with British thinkers and his statement to Martha Bernays (in Jones, 1955, p. 179) that all his real teachers were either “English or Scotch.” In any event, Reid deserves mention as a forerunner of the psychoanalytic concept of psychic causality.

Reid (1813–1815, p. 63) maintained that “in all determinations of the mind that are of any importance, there must be something in the preceding state of mind” and that “every action, or change of action, in an intelligent being, is proportional to the force of motives impressed, and in the direction of that force” (p. 284). Even so, Reid’s principle was not universal; it allowed for exceptions in the case of “trifling” behaviors, which were conceived to be without motive; furthermore, he explicitly rejected the possibility of unconscious motives (p. 285).³¹

Immanuel Kant postulated a realm of freedom of the will in the noumenal sphere—mostly on moral grounds. Nevertheless, in the empirical realm of phenomena, where man lives out his day-to-day life and the psychiatrist works, he cleaved to determinism. Insofar as man is part of nature and the space-time continuum, Kant held him to be determined by antecedent causes. Besides Hume, Reid, and Kant, a host of other Enlightenment philosophers—such as Voltaire and Holbach—were preaching behavioral determinism and may have influenced Freud as well.

Herbart, the philosopher–psychiatrist whose *Psychologie als Wissenschaft* (1824), and other pedagogical and psychological works, strongly influenced nineteenth century German thought, is, as already mentioned, a remarkable anticipator of dynamic psychiatry. The parallels between his ideas and Freud’s, as Maria Dorer pointed out in 1932, are too numerous to be coincidental—the unconscious, conflict, mental forces, constancy principle, repression, and the economic point of view. Herbart’s causal principle was that of mental representations (*Vorstellungen*), each possessing a certain charge and rising and falling from consciousness in accordance with its intensity.³² *Probably he influenced Schopenhauer (below).*

Schopenhauer is another philosopher whose ideas furnish, as Freud himself acknowledged, striking parallels to Freud’s. Schopenhauer espoused a determinism in the psychological sphere identical to that in the physical, and the following passage could well serve as that philosopher’s credo:

Every man, being what he is and placed in the circumstances which for the moment obtain, but which on their part also arise by strict necessity, can absolutely never do anything else than just what at that moment he does do. Accordingly, the whole course of a man’s life, in all its incidents great and small, is as necessarily predetermined as the course of a clock.³³

Essentially, his line of reasoning was: character determines our motives and motives our behavior; since we do not freely choose our characters, our behaviors are wholly determined. In line with this, he preached a fatalistic resignation to the facts of one’s character since they were, in his view, unalterable—in stark contrast to Freud (*and Spinoza*), who took psychic determinism as grounds for therapeutic optimism! Like Hume (and Freud, as we shall see), Schopenhauer subscribed to the notion that human behavior is predictable in principle, but not in practice—because we never possess knowledge of all the relevant

antecedent conditions. Schopenhauer’s influence on Nietzsche’s concept of unconscious motivation and defenses was very powerful. We have already alluded to Nietzsche’s direct and indirect impact on Freud.

John Stuart Mill subscribed to a causal view of human nature and the following is characteristic of passages, which would have influenced Freud in his view of psychic causality and the psychic unity of mankind:

Human beings do not all feel and act alike in the same circumstances; but it is possible to determine what makes one person, in a given position, feel or act in one way, another in another; how any given mode of feeling or conduct, compatible with the general laws (physical and mental) of human nature, has been, or may be, formed. In other words, mankind have not one universal character, but there exist universal laws of the Formation of Character (Mill, 1969, p. 14).³⁴

Mill (1874, 272–290) saw the will as wholly determined by our desires and aversions. He also had a concept of multiple causality that may well have influenced Freud’s idea of overdetermination.³⁵

Two other Englishmen, whose ideas must be counted among the *à priori* determinants of Freud’s concept of psychic causality, are the historian Henry Thomas Buckle, whom Freud (1873–1939, p. 379) tells us he read in adolescence, and the cultural evolutionist Edward Tylor, whom Freud respectfully cites in 1899 and 1913. In a passage reminiscent of Hume and Schopenhauer, Buckle (1862, p. 14) asserts:

That when we perform an action we perform it in consequence of some motive or motives: that these motives are the result of some antecedents; and that, therefore, if we were acquainted with the whole of the antecedents, and with all the laws of their movements, we could with unerring certainty predict the whole of their immediate results.³⁶

Freud (1920, p. 168), too, would account for our inability to predict future behavior with reference to our inadequate access to knowledge of the determining factors and their strength relative to one another.³⁷

Tylor (1874, Vol. I, p. 2), who became a powerful influence on Freud’s view of culture, maintained that “human thoughts, wills, and actions accord with laws as definite as those which govern the motion of waves, the combination of acids and bases, and the growth of plants and animals.” Tylor’s concept of psychic causality seems wedded, like Mill’s, to an implicit notion of covering laws.³⁸ Similarly, Herbert Spencer and other cultural evolutionists Freud read, propounded doctrines of psychological and sociological determinism. Indeed, analysts who really know their patients can often predict their behaviors or responses.

Turning now from psychical causality to the related principle of historical determinism, the strongest *à priori* factors appear to be Freud’s exposure to Darwin and the cultural evolutionists. Darwin’s influence on Freud is by now widely known and was frequently acknowledged by Freud himself. By the end of medical school Freud had acquired Darwin’s major books; indeed, Freud (1925, p. 8) had counted Darwin’s work as one of his reasons for choosing a medical career.³⁹ In *The Expression of the Emotions*, Darwin applied the principle of atavism to the explanation of human behaviors, group and individual. Emotional expressions were conceptualized as ontogenetic and phylogenetic survivals—explained, in other words, by reference to the history of the individual and the race. Freud too would come to view neurosis as (ontogenetic and phylogenetic) atavism; and he (Breuer & Freud, 1895, p. 181) explicitly cited Darwin in support of his own journey into the patient’s past to discern the meaning of the apparently senseless current neurotic symptom.⁴⁰

We have already treated the extraordinary impact of cultural evolutionism on Freud’s psychological and anthropological thinking. As we have seen, Freud adopted their basic principles—psychic unity, the comparative method, the biogenetic law and Lamarckism, the equation of contemporary “primitive” with primeval man, the idea that cultures can be rated along an evolutionary scale, and the doctrine of survivals. Like Spencer (1898) and Morgan (1907), the evolutionists believed that cultures were determined by their antecedent conditions and that their development proceeded lawfully through fixed and immutable stages.⁴¹

The doctrine of survivals was a clear parallel, in the cultural sphere, to Freud’s historical, atavistic explanation of neurosis in the psychological. Tylor (1874, p. 16) defines “survivals” as “processes, customs, opinions, and so forth, which have been carried on by force of habit into a new state of society different from that in which they had their original home, and ... [they] thus remain as proofs and exemplars of an

older condition out of which a newer has evolved.”⁴² In short, both Darwin and the cultural evolutionists looked to history to explain contemporary biological, psychological, and sociological phenomena.

The empirical determinants of Freud’s theorems of psychic causality and historical determinism are well known to every psychoanalyst. They include: his conversations with Breuer about Anna O., his experiences with Charcot and the French hypnotists, the impotence of his somatic treatments of neurosis, and his early psychotherapeutic investigation and self-analysis; among a host of other things.

I wish to make it clear that I am arguing neither for purely *à priori* nor purely empirical determinants of Freud’s concepts. Rather, I see them as growing out of an inextricable interaction between the two. His early exposure to theorists of psychic causality and historical determinism left him with a certain mental set which then interacted with his clinical data. *A priori conviction in the causality, hence meaningfulness, of human behavior led him to look for order in behaviors his psychiatric contemporaries saw as the chaotic and senseless manifestations of brain lesions or “hereditary neuropathic taint”; to one receptive to the data, the themes, patterns, configurations, and regularities of sequence would become apparent enough.* In short, Freud’s theoretical preconceptions did not impose themselves on the data. Rather, the psychoanalytic theories of psychical causality and historical determinism emerged from the interaction between a prepared mind and its data. Furthermore, there were important differences between Freud’s concept of causation and that of his predecessors. With the exception of Schopenhauer, Nietzsche, and Herbart, none of Freud’s precursors had a *systematically* developed conception of *unconscious* motives (though Spinoza came close). Furthermore, their causal concepts were often too mechanistic to do justice to a purposeful organism. Freud’s genius lay in synthesizing an investigational and therapeutically operational concept of unconscious and purposeful causation from his reading and experience.

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Chapter 27

Psychosomatic Medicine and the Mind-Body Relation

Historical, Philosophical, Scientific, and Clinical Perspectives

Herbert Weiner

Preface

The Mind/Brain/Body Problem

This chapter traces the development in the twentieth century of a conceptual model of health, ill-health and disease, alternative to the traditional biomedical one. The content of the new model is not captured by the phrase: Mind/Body Medicine. Some justification is needed for calling it so. Some readers will complain that the name is merely an anglicized version of Psychosomatic Medicine. And they are correct. In turn, much controversy has surrounded the term, “psychosomatic,” because it perpetuates the (“dualistic”) split between mind and body.

However, no matter how hard the best minds in the neurosciences and cognitive psychology, and in philosophy have tried to close the split, it continues to exist, for reasons to be enunciated. At the same time, our concepts about bodies have radically changed in the past 400 years, but these revisions are not reflected in the traditional biomedical model.

The reasons for perpetuating the split between mind and brain, and mind and body, is that the problem of how to relate mental things—experiences, intentions, thoughts, feelings, self-awareness and the awareness of outside objects (all qualities)—with physical, material things such as brains, and bodies—has not been solved.¹ Physical things are not just structures, but matter and energy, forces and fields, which are explained by causes-and-effects. Are mental things also just matter and energy? Do they do things? If they are not, what is the relationship between mental and physical events? But mental things do not seem to be material objects. So how could the feeling of fear produce an increase in heart or breathing rates, blood pressure, a dry mouth, and the secretion of epinephrine? Or, as some contend, vice versa.

The best we can say is that fear is correlated with these bodily changes. But a correlation is not an explanation. The correlation may be in time, but not causal, or it may occur by chance, or be spurious, or both may result from a third, unknown set of variables.

In order to solve the mind/body problem, we must seek an explanation as to the manner in which the correlation is causal. Are feelings, or thoughts forces? How do persons will a movement? Limbs move and

muscles contract because we will them to, about that we can agree. But beyond our agreement, there is no explanation.

Many students of the problem take the easy way out. Mental things are merely brain things—their products. Brains are like every other material organ, the manifestations of matter and energy—or their functions.

However, the mystery of how to explain feelings functionally remains unsolved. If we could solve it, they would be compatible with the matter-energy explanation. But we cannot. Thus we may record the firing of neurons in the motor cortex of the brain during a movement, but where is the will to move?

Why does fear or pain feel like something? Fear can be understood biologically as a signal of danger to survival, and thus, to reproduction. Animals and human beings learn to avoid dangerous situations occurring in the future. When afraid, they run away from the danger, or fight it, freeze, submit to, or negotiate with the threatening opponent. Fear is correlated with the physiological changes already outlined, which, in turn, can be understood as mobilizing bodily resources to carry out the defensive behaviors. So we can describe and understand the behaviors and physiologies of the frightened individual, and the computations in the brain that do the learning and remembering, but none of these explain *that fear feels like something*. The functional explanations of the physiology, behaviors, learning and remembering, leave out the feeling of fear. We are not only feelingless automata as some of the writers on the subject would have us believe. Other authors take up the feeling of the self by inferring from its pathologies (sleepwalking, automatism), the feeling.² But such inferences lack conviction: can one understand a feeling by its absence?

Still other recent authors contend that functional neural networks are correlated with feelings,³ or intentions, and are just those. No further explanation is required for the correlation.

So we are left with the conclusion that feelings just are. They do not allow for functional explanations, as material things do. It is impossible to understand how they move matter—do things. They lack causal power, and resist explanation. *So the mind/body problem remains with us.*

The feeling of fear is fundamental to self-preservation. But we cannot explain it. When we come to more complex levels of mental functioning—the ability of both animals and humans to understand another's intentions by observing their actions, the puzzle deepens further. How is such an attribution made? It partly depends on a perceptual discrimination between the postures and bodily movements of other creatures, their emotional (facial) expression, and the sounds (e.g., growls, yelps, barks) they emit. An animal's survival depends on its ability to identify and interpret these signals, and to tell them from other types of movement, expressions, and sounds produced by predators, prey, competitors and mates, in order to predict their future actions, the consequences of which differ, and could in some cases be fatal if not correctly interpreted.⁴

Not even the invention of new techniques to image brain activity has resolved the mind/brain conundrum. The development of positron emission tomography (PET) and functional magnetic resonance imaging (fMRI) has made it possible to measure changes in oxygen uptake and blood flow in identifiable regions of the brain while subjects are confronted with simple and complex stimuli, and tasks, or while they solve problems, experience pain, and fear or anxiety. Many unsolved problems remain in establishing the meaning and validity of PET and fMRI studies. Nevertheless, they have been applied to studying the brain regions, which are activated when an observer recognizes meaningful movements, the gender, personality traits, and emotions, displayed by another person, by their particular configurations. The location of these neurons are on the ventral bank of the posterior part of the superior temporal sulcus (STS), bilaterally but more on the right than on the left side of the brain, while neurons on the left intraparietal sulcus are activated by the hand, eye, and mouth movements of another person.⁴ So far, so good.

It is recognized that the visual perception of movement relies on specialized groups of neurons, whereas others respond to shapes, colors, edges, etc. of perceived objects. But that information does not tell us how the awareness of the intentions, and attributions of movements come about. It is said that the perception of movement is constrained by an observer's knowledge of, and experience with his or her movements—and by other forms of mental acts—experiences, intentions and attributions. How do material objects such as

neurons, infer, attribute, and be aware of the intentions of the movements made by another person? And, having made the attribution that the movement may be malign, how do his/her neurons translate their own intention into action? Here we are also back to the question whether a mental act can do something. *Once again, we have correlated neuronal activity and actions but have no proof of their causal relations.*

Even more mysterious is the evidence that when human observers are confronted with videos of moving geometric objects (such as triangles), they tend to attribute mental states—intentions, or simple actions—to them. The STS, but also the medial prefrontal cortex is activated during this experimental procedure.⁵ Interestingly, medial prefrontal cortical neurons are consistently activated in human subjects when they think about their own, or other peoples mental states, regardless of kind.

Does that mean that these neurons are the mental states? The answer is once again that they are correlates thereof; we can go no further. (See “Glossary” at the end for additional definitions of abbreviations).

The Body

When Mundinus, Leonardo da Vinci, and Vesalius carried out their anatomical studies on dead bodies, they saw a dense, mechanical structure, full of receptacle-like organs such as the heart, and pulley-like tendons and muscles, a skeletal framework, and pipe-like arteries, ducts, and veins, carrying fluids. *The mechanical analogy pervaded anatomy.* Changes in anatomy became the basis of the clinico-pathological conceptualization and the “first causes” for all diseases. As the germ theory of disease achieved prominence, the simple concept of a disease agency became irreplaceable, despite its inadequacy. But only a small percentage of a population exposed to viruses, bacteria, and parasites fall sick. No simple, linear-causal relationship exists between the agent and the disease. The notion of a simple agency must be replaced by a more complex model, which takes into account host resistance, previous exposure of the host to the infectious agent, communication between the host and agent, nutrition, housing, poverty, and ecology. Therefore, the agent-host relationships cannot be isolated from the larger social, physical, and political environment. Causal explanations cannot be confined to the activities of isolated agents.⁶

The concept of multi-factorial influences in ill-health and disease can be traced back to psychosomatic medicine, circa 1950. The body is not only an intricate machine, a physical substance, or an object isolated from the world about it. The body and the environment are inseparable. It relies for its sustenance on atmospheric oxygen, nutrients, minerals, and on ambient temperatures, and other persons, etc. It senses changes in these by specialized surface and other receptors. It is constantly exposed to potentially infectious agents and toxins, and defends itself against them by specific, highly complex immune, and enzymatic systems, respectively, which do not function in isolation but interact and are influenced by other subsystems of the body.

Thus a refined medical model needed to abandon the study of isolated structures and functions in mechanistic terms, for a systems-theoretical, integrative and dynamic way of conceptualizing health and disease, while retaining the most realistic aspects of mechanistic thinking.⁷ The fact remains, however, that the traditional biomedical model has not abandoned its way of thinking that the body is merely the sum of its discretely functioning (and autonomous) parts. The fact remains that the body is made up of a vast network, consisting of chemical signals whereby cells communicate with, and regulate themselves, each other, and cells at a distance. For example, the brain is “informed” that some part of the body is infected with a bacterium. As a result, pain, fever, the desire for sleep, fatigue, malaise, loss of appetite and the desire to work occur.

The body is not merely self-contained and self-sufficient. It is a self-regulating system, but is also dependent on, and regulated by the context in which it functions. Its behavior is also regulated by the environment and by others’ behavior. It can exist, and functions only in continuous interaction with a complex field of environmental, social, cultural, and historical conditions.

As the twentieth century progressed, the emphasis on medical thought and conceptions about health, ill-health and disease, shifted to a synthesis of data, derived from studying not only individuals interacting with this field, but also from the study of populations. At the same time, measurements were made of

the patterned physiological correlates of these interactions, which in turn were affected by the nature, duration, intensity, timing and controllability of changes in, and demands, challenges, and dangers emanating from the environment, and from the burdens of ill-health and disease. These experiences and their vicissitudes alter the organisms' behavior and physiology.

This essay will describe not only the power of analytic, and mechanistic thinking; but also its limitations. A new way of thinking about medicine is emerging, which is integrative, and more organismic as Biology should be.⁸ It emphasizes interrelated processes, and molecular and system interactions, more than structural and functional explanations, conceived of in mechanistic terms.⁶ It recognizes that the experiences of animals and human beings have meanings, and are correlated with bodily changes, including changes in structure. The body is not only a physical substance but its form and functions are designed to subservise its fitness and survival.

Purpose of the Chapter

To review the evolving body of data, and the conceptual changes central to, and relevant for a holistic medicine during the twentieth century. Because of the large body of literature on this, and closely relevant, topics, the review has had to be selective.

Method

This historical review suggests that the principal focus of psychosomatic observation and research began to shift in about 1950 from the search for specific intra-personal conflicts, along with other risk factors, as determinants of a disease and ill-health, to the role of acute and chronic stressful environmental factors of a number of different categories in their inception. The adverse influence on health of acute experiences such as bereavement, divorce, sudden unemployment, injury, and of natural, and manmade disasters, (e.g., war) were then studied. The critical roles of poverty, social disruption, revolution, incarceration, torture, etc. in enhancing morbidity and mortality were documented. The long-range effects of sexual abuse and violence, especially when experienced in childhood, on later behavior and health became an important and contentious topic. Harmful habits, such as smoking tobacco and drug abuse, and certain diets have short- and long-term serious consequences for health.

At the same time, social stability, traditional ways of communal living, and strong, supportive family and other social relationships protect health, and diminish morbidity, despite the concurrent presence of known risk factors.

The environmental factors for the onset of disease are interpreted by some as being stressful. In order to preserve health, they have to be coped with, and adapted to behaviorally, psychologically and physiologically. The tasks of coping and appraisal are made more difficult when the events are unexpected, uncontrollable, unavoidable, ambiguous, or chronic. Coping is enhanced when specific and appropriate to the stressful task, danger, challenge, or change.

When coping is partly, or completely unsuccessful, ill-health and disease ensue. Individual differences have been recorded in both the manner of coping and the variety of ways health has been impaired. Because unmastered stressful experiences may alter or impair sleep rhythms, menstruation, appetite, the desire for work and love, as well as digestion, cardiovascular function and respiratory rhythms, and promote pain, an increased understanding of patterns of ill-health⁹ without alterations in anatomical structures has been achieved.

A large observational and experimental literature has accumulated about the specific and general behavioral and physiological correlates of dealing with stressful experience and how these might develop into ill-health and disease, especially when a variety of genetic and other risk factors are present. Many of the hypotheses derived from studies of human beings have been tested in animals.

The relationship between diversely endowed individuals and their ever changing environments began to be reexamined in the 1960s, guided by the principles of Organismic and Evolutionary Biology, and of adaptation. Individuals can change themselves, or their environments in their never-ending task of adapting

to, and achieving control over them. Thus, health is promoted by successful adaptation, and ill-health and disease by partial or complete adaptive failures in many sub-complaints that sick people have, and which physicians often disregard. I have defined illness (ill-health) another way: consisting of, as noted, a large variety of complaints and symptoms without signs or anatomical lesions. Many more persons are in ill-health than have diseases. Many people also have minor anatomic changes that do not explain their symptoms. However, some symptoms can be accounted for by identifiable physiological changes. The fact remains that one may have any of a number of diseases and have no symptoms; one remains in good health. One may have any number of symptoms, that is, be in ill-health, but have no disease. But one cannot be both in good and ill-health at the same time. Systems very often cause the psychological consequences in human beings of despair, hopelessness, helplessness, the necessity for support by others, and frequently fear, and a depressed mood.

An additional task of coping is to maintain control over the feelings just mentioned. Coping mediates adaptive failure or success; it is a dynamic regulatory process.

The new adaptive perspective has enhanced our understanding of ill-health, which affects a large percentage of populations, without discernible structural alterations in organs, tissue and cells, which are the main focus of the traditional biomedical model. The conceptual shift has led to a more comprehensive model of health, ill-health and disease than either the traditional biomedical, or the initial psychosomatic ones.

The current focus of an integrated, biologically based medicine is on the dynamic functions of persons in their interaction with the environment, on adaptation and its failures, control of the stressful experience, and on successful, or altered regulation of physiological sub-systems.

Conclusion

Hippocratic medicine began with a focus on patients, the context in which their disease began, and its impact on them, and their families. This approach was swept away in the eighteenth and nineteenth centuries by the clinico-pathological, and then by the infectious disease models, and their synthesis: the biomedical model. Psychosomatic medicine attempted to restore the focus on patients, as well as trying to explain how some of their personal aspects could contribute to their diseases and ill-health. Neither the biomedical nor the psychosomatic models incorporated the roles of the physical and socioecological environments as distal and proximate factors in ill-health and disease so as to synthesize our knowledge of genes, organisms, and environments into a more comprehensive model.

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9. Bodily disease is defined in terms of an identifiable viral, bacterial or parasitic infection often characterized by inflammation, tissue destruction, or programmed cell death, or by an identifiable change in anatomical structure, congenital or acquired, due to infection, injury, or metabolic changes, fibrosis, or malignant growth. Illness has been defined as subjective suffering, or as symptoms and complaints without anatomical changes.

Introduction

The principle of "reductionism" is ... interesting, in that it emphasizes a particular way of investigating, analysing and eventually depicting the natural world. Methodologically, it is often very effective, but epistemologically it is inadequate. Every science has to admit that compound entities are more than the sums of their parts and may behave in ways that cannot be inferred from the properties of those parts ... reductionism is a "busted flush", still prevalent among physical scientists, but dangerously misleading (especially in biology) when followed dogmatically.

John Ziman. Nature 2000; 404–811

For over 200 years, the predominant models of bodily disease have been clinico-pathological, and its derivative the biomedical ones. They seek to explain patients' symptoms and signs, and to classify diseases according to structural changes in organs, cells, and more recently in genes. G. B. Morgagni (1682–1771) and H. Boerhaave (1688–1738) are given the credit by medical historians for instituting this line of thought, which was carried forward with great effect by the members of the Paris school of medicine, working just before, during and after the French Revolution.¹ They developed the clinico-anatomical-pathological method, combining observation of patients, the course of their diseases, classifying them, and relying later on postmortem examination of gross organs and tissues to verify their diagnoses, and to refine their classifications.

We owe much of modern medicine to A. L. J. Bayle (1799–1858), J. L. M. Alibert (1768–1826), M. F. X. Bichat (1771–1802), J. N. Corvisart (1755–1821), M. J. Cullerier (1758–1827), G. Dupuytren (1777–1835), R. T. H. Laennec (1781–1826), P. C. A. Louis (1787–1872), and P. Pinel (1745–1826). The use of L. Auenbrugger's (1722–1809) percussion, and the institution of auscultation by Laennec, brought together signs and symptoms of some diseases, further refining diagnosis, and allowing signs to be correlated with structural changes in organs identified at autopsy.

Bichat, however, pointed out that disease was not only a local process but could be accompanied by widespread changes in tissues such as the pleurae and peritoneum. He also suggested that anatomy needs to be supplemented by physiology. Pinel went further: in many symptomatic patients no gross anatomical changes could be found; and, in particular, there were none in the brains of most mentally ill patients: psychological symptoms and behavioral signs could be present without lesions. Pinel also carefully recorded the social context in which the patients first became sick.

Laennec² was puzzled about the fact that patients might have (pulmonary) lesions and signs, but were asymptomatic: The correlations between symptoms, signs, and structural changes in organs were not absolute.

For the next 200 years, the clinico-pathological method was pursued with great success in refining diagnosis and classification. New diseases and syndromes were described. General signs such as fever were specified. With the discoveries of L. Pasteur (1822–1895), R. Koch (1843–1910), D. R. Ivanovski (1864–1920), F. R. Schaudinn (1871–1906), H. Noguchi (1876–1928), etc., the infectious origin of many diseases, and the lesions infection produced, added further validity to this model and to our knowledge of pathogenesis. One consequence of the triumphs of bacteriology, and later, virology, was that the remarkable advances in physiology, promoted by the French, German and English schools in the nineteenth and early twentieth centuries, were downgraded as explanations of symptoms, signs, and disease.³ Pathology and Bacteriology reigned.

The clinico-pathological model and germ theory of disease, renamed the biomedical model, relentlessly searched for linear, structural and/or infectious explanations of diseases in ever greater detail. But it could not explain frequently occurring symptoms with, or without signs (such as analgesias, pain, fainting, fatigue, functional blindness, and paralysis) for which no structural alterations or infectious correlates have, until the present time, ever been found. Such symptoms, therefore, are called "unexplained." Some of these clusters of symptoms, with or without signs, exemplified by hysteria, were described by Hippocrates. Other clusters have puzzled great clinicians ever since. These commonly occurring symptoms have gone by constantly changing names, such as neurasthenia, hypochondriasis, psychasthenia,

soldier's heart, chronic fatigue, and effort syndromes; functional disturbances of the gut, respiration, musculoskeletal systems, and sleep; changes in appetite, mood, feelings, pain perception, consciousness, memory; and sexual desire, enjoyment, and performance.

Persons with these symptoms (and signs) are in ill-health. They cause truancy, absenteeism from work, and may lead to changes in relationships. Physicians relentlessly seek out the putative lesion(s), and when they do not find them they resort to surgery, unnecessary laboratory tests, or prescribe medication, often with disastrous iatrogenic effects. Patients with these syndromes frustrate physicians, in part because they regale them with never-ending complaints. Doctors may even addict them to narcotics to quell their bothersomeness.

On the other hand, persons may have an infectious disease, or a structural lesion, and be without symptoms or signs. This fact alone raises the questions whether the biomedical model's definition of health as the absence of disease, is correct; another definition is called for. The functional disorders of ill-health require a different explanatory model, and are a silent and radical critique of the clinico-pathological or biomedical one.

A different explanation for some functional symptoms (especially hysterical ones) is owed to S. Freud.⁴ On his view, they were the symbolic and veiled expression of conflict, unconscious anxiety, or guilt-provoking impulses and (most frequently, sexual) desires by an inferred (tautological) process of conversion. But, as we shall see, this model could not possibly explain how structural bodily lesions could come about.

A much closer correlation obtains between symptoms, signs and changes in physiological function, not only in bodily structure, especially when that function is challenged. We owe this formulation to Richards.⁵ He demonstrated that the symptoms of cardiopulmonary disease were not necessarily present at rest but were elicited by exercise, anoxia, high altitude, anemia, or bodily injury. Besides, many examples exist in medicine in which changes in function lead to structural changes, and not only vice versa.

While the biomedical model had become predominant, another model of ill-health and bodily disease had existed: It began with Hippocrates (480–375 B.C.E.).⁵ He stated that the patient, not only his sickness (or diseased organ) must be the principal focus of the healer's concern. On his view, sickness and disease were abstractions—they would not have occurred independently of the patient. The physician, Hippocrates enjoined, must be concerned with the context in which the patient became sick, and must follow the course—the natural history—of the sickness. The psychological state of the patient, and the impact on family members of his/her sickness should also be observed.

Hippocrates' concept of health and disease was based on his belief that Man was intimately related to Nature; they were interdependent. Health consisted of a balance of forces, and disease resulted from an imbalance in the interaction of Man and Nature. Hippocrates' inclusive approach to medicine lost its influence under the impact of the clinico-pathological model. However, Pinel's approach to medicine was Hippocratic, and his treatment method was, what is now called, "psychosocial." Central to that approach is the doctor-patient relationship whose therapeutic value was known to all good physicians who have ever practiced medicine. However, the detailed study of that bilateral relationship was left to S. Freud, who made it the centerpiece of his psychotherapeutic method.

In the first quarter of the twentieth century, influenced by S. Freud, and by the need to care for and treat the victims of World War I—the battle fatigued and psychologically impaired—"shell-shocked,"—a number of Central European, British, and American physicians began to study the psychology of patients in ill-health and with diseases, giving rise to what became known as psychosomatic medicine.

Initially, its investigators and practitioners paid little attention to the role of socio-ecological, socio-economic, political, familial, ethnic, geographic, historical, and physical factors in maintaining health, or promoting ill-health and disease. The roles of work conditions, poverty, economic depression, and unemployment, etc., were neglected. The emphasis was on the personalities and the intra-personal conflicts of patients, as risk and pathogenetic factors in disease, to the exclusion, other than those brought on by war, of environmental factors. As a result, the initial concepts failed to provide a comprehensive account of health, ill-health and disease.

If one is to transcend the linear-causal and proximate explanations of disease put forward by the biomedical model, in order to arrive at a more comprehensive definition and model of health, disease and

ill-health, one also should incorporate the study of their ultimate causes. One needs to explain why persons may remain well, or become ill, or diseased while living in ever-changing environments. Medicine has focused on individuals while largely excluding the insights obtained by studying the health, ill-health, and diseases of populations. The separation of medicine from epidemiology and public health came about in the USA in 1916 with the creation of separate schools of Medicine and Public Health,⁶ and that division continues to this day.

The accomplishments of Public Health in the past 200 years have been achieved through preventative measures: vaccination, the purification and fluoridation of water, the pasteurization of milk, the control of infectious diseases, better nutrition, and sanitation, transportation safety, the reduction of tobacco use (and thus of, heart disease, stroke, and lung cancer), the promotion of exercise, and the health of mothers and babies, and the encouragement of family planning. These measures have much to teach Medicine not only about risk factors for disease, injury, ill-health, disability and death, but they also tell us that some of them are behavioral. In fact, two leading causes of disability, disease and death, other than war, are the use of alcohol, and the abuse of drugs. They contribute in adolescents and young adult American men to automobile accidents, murder and suicide. Thank God for the 12 steps of Alcoholics Anonymous.

Thus any comprehensive model of health, ill-health, disease, and death should incorporate data based on the study of populations, not only individuals. It must take into account the changing environment, persons, their behaviors and their variable adaptive capacities, genetic and physiological make-ups. And in order to do so, it needs to link into a uniform scheme the environment, the organism, and genes. They are not separate entities.⁷

Population studies inform us about the incidences and prevalences at any one point in, but also over, time. They tell us about how these vary in different geographic locations, ethnic, socio-economic and cultural groups, occupations, and according to gender. They document the roles of how new technologies raise or lower the rates of ill-health and disease. They identify new viral (e.g., Ebola, Hanta, human immunodeficiency), bacterial, and prion diseases. They point to important behavioral risk factors, which heighten morbidity and mortality at particular ages and in different populations. As the age of populations increases, the incidence and prevalence of certain diseases [e.g., coronary heart disease (CAD), stroke, dementias, and malignancies] rises, or falls.

The prevalence of infectious diseases (e.g., tuberculosis) has reemerged in the western world for complex reasons, not only because of resistance to antibiotics, but also because of the relaxation of controls over them. Rapid transportation rapidly moves high-risk or infected persons from one part of the world to another. New agricultural practices spread food-borne diseases.

Social unrest, revolution, and war vitiate public health measures. Prolonged hospitalization, irradiation and chemotherapy for malignancies carry with them specific dangers—infections, and immunosuppression.⁸ The agents of infectious diseases, co-evolve with human beings, and are aided in doing so by the effort to eradicate them by antibiotics, elimination of their insect vectors, sociopolitical factors, and new therapies.

Specific chronic diseases, starting in childhood, have become more prevalent. For example, in the twentieth century, a marked increase in the incidence of bronchial asthma, especially in children, has occurred. It is most prevalent in Western Europe, less so in Central Europe, and almost unknown in rural Africa. In the USA, African-American children living in the inner city are most likely to suffer from it. There is a strong family tendency to develop it. Most childhood asthma has an allergic basis, but in older persons it does not, suggesting that it is a heterogeneous and multifactorial disease. A diversity of other risk and inciting factors, such as pulmonary infection; exercise and hyperventilation; exposure to cold air, tobacco smoke, and chemicals, ingestion of aspirin, and stressful experience play variable roles in bronchial asthma.

This example, among many others, underlines the fact that the etiopathogenesis of disease is multifactorial and complex, and that most diseases, not only bronchial asthma, are heterogeneous. No linear-causal model can explain this fact.

The epidemiological data attest to the fact that each historical and political period, with changes in socio-economic, socio-ecological and technological conditions, is associated with changes in health, and

the incidence and prevalence of ill-health and disease. These changes have an impact on the mind of the perceiver and are associated during adaptation to them by changes in physiological systems, which also respond variably.

These observations and many others attest to the fact that the biomedical and initial person-centered models were incomplete and oversimplified. A more comprehensive model was needed to incorporate data from population studies, and how and why complex environmental (broadly defined) factors place variously adapted groups and individuals at risk for ill-health and disease. In order to do so, the bases of the biomedical and the patient-oriented models needed to be broadened.

Dissatisfaction with the incompleteness of the biomedical model has been voiced by internists (e.g., note 9, and, in the past 40 years, a number of authors of different disciplinary backgrounds have called for alternative, more comprehensive ones, which integrate environmental, personal, physiological and genetic factors in health, ill-health, and disease.^{10–21} Other authors have stated that medical models should be based on Evolutionary Theory.^{22–24}

Contributions of Psychosomatic Medicine

This essay attempts to give an account of the contributions of psychosomatic medicine as a stage in the development of a comprehensive medical model. From its formal beginnings in the USA in 1939 with the initial publication of the journal, *Psychosomatic Medicine*, and the founding of the American Psychosomatic Society, it has been an interdisciplinary field. The members of the first editorial board of the journal appointed as its first editor H. Flanders Dunbar. The journalist board represented a variety of fields ranging from experimental psychology, neuroanatomy, internal medicine, dermatology, endocrinology, neurology, neurophysiology, pediatrics, psychiatry and psychoanalysis. Dunbar intended the journal to be a forum for the publication of articles representing a “scientific and experimental approach” to the mind-body problem in health and disease.²⁵ The solution of that lofty goal has not yet been achieved. The central concern of the first American participants in this endeavor was the role of emotional and personal factors in altering bodily function, and as correlates of disease. They were strongly influenced by the psychophysiological investigations of I. P. Pavlov, W. B. Cannon, H. S. Liddell, and H. Selye in animals, while the predominant initial influence on clinical observation was psychoanalytic inference and theory, represented by F. Alexander, and many others.

However, by the 1960s, the focus of psychosomatic observation and research had shifted to the role of stressful experiences, emanating from the environment, and individually interpreted, in altering bodily functions and in impairing health.

From its beginning, the level of analysis of the role of intrapersonal conflict and stressful experience in altering bodily structure has been physiological, rather than anatomical, and it remains so. A central question has been: How do changes in function alter structure, rather than vice versa?

The answer today is that both can happen. One reason for this change in focus from intrapersonal conflict to stressful social-environmental factors in psychosomatic research was to enhance the reliability and the validity of observations.

At the same time, new and vexing issues arose: The number of factors placing persons at risk for a disease multiplied. It also became apparent that virtually every definable disease was not an “entity”—it was heterogeneous, variously defined.

Nonetheless, significant empirical advances have answered or clarified (and complicated) many central questions. It has become increasingly evident that the brain regulates every bodily function as well as behavior. And cells regulate themselves, each other nearby, and at a distance.

As the twentieth century ended, it was possible to trace pathways from the brain (e.g., the amygdala nuclei) to the transcription of some genes in cells. Neuronal circuits can be activated by a visual or an auditory signal of a future painful stimulus, and modulated by the context of the experiment, to incite “freezing” behavior, autonomically-mediated and hormonal responses by separate and discrete brain circuits.²⁶

At the same time we have learned how the catecholamines and many (growth and other) hormones, acting as communication signals, bind to their specific cellular receptors, and how these signals are transduced by a cascade of intracellular messengers, to activate transcription factors, which promote either the transcription, or the repression of genes. Much has been learned about the molecular basis of circadian and other biological rhythms, and how they may be disrupted in ill-health and disease.

The complexity and the vast amount of data in biology and medicine, accumulated in the past 50 years, have underlined the need for new integrative concepts. Simple linear-causal, and oversimplified, reductionistic thinking do not do justice to biological complexity.

Psychosomatic medicine has also moved away from simple ideas. To its credit, it has tested clinically-derived hypotheses, and contentions about ultimate and proximate factors in the inception of diseases in animals.

This essay will try to document the changes in data, directions, and concepts which support the claim that it has contributed to a comprehensive model of health, ill-health and disease.

The Initial Phases of Psychosomatic Medicine (1920–1950)

Many accounts of the first phases of psychosomatic medicine have been written (e.g., notes 20, 25, 27). Therefore, a detailed retelling of this story is unnecessary. Four major trends in this period were evident. They were:

The description by Dunbar²⁸ of the behaviors and emotional reactions of patients in order to develop different personality profiles, which correlated with many different diseases;

The application of the conversion hysterical model of symptom-formation to bodily diseases by M. Balint, F. Deutsch, A. Garma, G. Groddeck, E. Simmel, and M. Sperling (reviewed in note 27) leading to metaphorical formulations about fantasies that were postulated to be pathogenetic;

The specific, unconscious conflict model of a variety of diseases by Alexander and his colleagues.²⁹ It was a multifactorial one, incorporating the role of specific emotions in pathogenesis, and it postulated the mediating pathways to the diseased organ. His formulation attempted to answer the question of why one person develops a particular disease and not another—a key question in Medicine.

The non-specific psychological characteristics of many patients with a variety of diseases, or who were in ill-health.^{30–36}

1. To exemplify: Dunbar demonstrated that the “driven,” ambitious “executive-type” of person was prone to CAD, while the reserved, perfectionistic person, who would break out in strong, angry feelings when contending with unreasonable authority, was likely to be hypertensive. Therefore, these outbursts were context-dependent and indicative of a characteristic interpersonal conflict.

Although these descriptions have been criticized on many grounds,³⁷ the fact remains that over the years these and similar themes appear over and over again, in the description of these patients.

In retrospect, the main criticism of Dunbar’s observations are:

- (a) methodological;
- (b) the failure to provide any hypothetical links between these profiles and the occurrence of the specific diseases; and
- (c) the observation of the patient after disease onset, which raised the question of whether these profiles anteceded, or were the consequence of the disease.

Dunbar’s descriptions of patients with CAD closely accorded with those of a large group of working men, described by Friedman and Rosenman,³⁸ and named the Type A personality. These men pressured themselves to be productive, were impatient, competitive, irascible, and ambitious to succeed at work. They were tense, vigilant, and talked rapidly. And they showed altered blood lipid and lipoprotein profiles, and a tendency for more rapid blood platelet aggregation, which, together, are known risk factors for CAD and coronary thrombosis.³⁹

Reliable questionnaires were developed for the Type A personality profile,⁴⁰ and repeatedly validated. However, the results of many studies were not always in agreement with each other. In retrospect, these disagreements occurred in part because certain critical variables—social status and occupational climate, ethnic origins, and the gender and ages of subjects and patients—were overlooked. Furthermore, it is now recognized that CAD is not a homogeneous disease entity⁴¹—only 50% of all patients have the typical risk factors for CAD. The remaining do not. The disease also seems to differ in men and women. Yet, to date, almost all studies of the Type A personality, or its derivatives, have been carried out on men.

Nor is there any final resolution of the debate as to whether this profile was a stable trait of patients liable to CAD, or a psychological adaptation, for example, to particular employment situations, in which the demands for performance on the job were high, job-security was not assured, and the rewards were low.⁴² In this situation, the subject was trying his hardest to meet the demands of the job.

To summarize: the validity of the type A construct, or one aspect of it (*viz.* hostility),⁴³ has been used to predict, or to establish the relative risk for several outcomes: all cause mortality, cardiac death, CAD, or myocardial infarction (MI) in healthy subjects.

In 10 published studies of thousands of subjects, no association between chronic anger or hostility and these outcomes was found in five, while in the other five it was. In four other studies, however, of patients who had proven CAD, the relative risks for angina pectoris, MI, sudden death, restenosis of a coronary artery, or new lesions were positive in the hostile ones. Hostile patients also smoked more, drank alcohol, ate poor diets, and were often overweight. They tended to have higher ambulatory blood pressure (BP) levels.⁴⁴

2. The conversion hysterical model of symptom formation applied to bodily disease⁴⁵⁻⁵⁰ is now only of historical interest.²⁷ In retrospect, it remains unclear whether it resulted from retrospective attributions made by patients about the meanings of their symptoms, or inferences made by the observer.^{51,52} These formulations were unhelpful because they could not possibly explain the “choice” of the disease, and they could not lead to an understanding of the translation of fantasies and metaphors into end-organ lesions: they were devoid of pathogenetic meaning.

However, there is no doubt that many patients do describe their symptoms in terms of similes, metaphors, analogies, or euphemisms. When these are noticed, the observer should be on guard that the symptoms have not been elaborated upon by the patient. An explanation of this phenomenon, characteristic of implicit memory, is that bodily experiences are stored in memory, and became associated with memories of analogous and previous experiences. When reactivated, they are expressed in symbolic terms, and their expression is associated with changes in bodily function.^{53,54}

3. Beginning in 1932, Alexander turned away from the conversion-hysterical model of the pathogenesis of several bodily diseases and syndromes of ill-health, and from personality profiles, both of which he believed lacked explanatory power. On the basis of extensive observations, he and his many colleagues formulated a more comprehensive and verifiable set of hypotheses, which, with the publication of his book²⁹ in 1950,⁵⁵ began the modern era of psychosomatic research. In fact, his contributions, and those of Wolff⁵⁶ and his many younger colleagues, set into motion the development of a more inclusive and empirically-based, theory of health, illness and disease.

Alexander formulated the hypothesis that: (a) each disease was correlated with an inferable, specific, “dynamic” unconscious conflict which was not, however; (b) the only etio-pathogenetic factor. He postulated additional (X-, or unknown) factors, which were later specified; (c) the conflict was activated by external situations, leading to: (d) normal (not excessive) emotional accompaniments, which were then discharged linearly by autonomic (especially parasympathetic), neuromuscular, and hormonal outflows from the brain to target organs, resulting in physiological and/or structural changes.

Notable in this formulation was the inclusion of a contextual, proximate, precipitating factor, to which the unconscious conflict had sensitized the patient. A frightening situation, or a change in a relationship, were amongst these factors.

Alexander’s formulations of specific conflicts, and correlated X-factors were later validated in patients at risk for hyperthyroidism,⁵⁷ thyroid adenoma,⁵⁸ peptic duodenal ulcer (PDU),⁵⁹ borderline hypertension,⁶⁰ and

rheumatoid arthritis.^{61,62} (In the two studies on thyroid disease, however, the validity of the physiological criteria—the rates of disappearance of I¹³¹ and of the presence of thyroid “hot spots” were questionable.)

Nonetheless, these studies were either predictive, “blinded,” or well-controlled for the chronicity of the disease.⁶² Alexander and his colleagues⁶³ also carried out a “blind” observational study by using the specific hypothesized conflicts to diagnose correctly 50% of one of seven diseases in groups of patients—a rate which was three times higher than that achieved by several internists, who were not as expert in inference-making as the psychoanalysts were.

In retrospect, it is likely that the failure of the psychoanalysts to achieve more complete, diagnostic accuracy was that the concept of disease heterogeneity was not appreciated at that time, and that they did not control for the duration of the disease in each patient. Therefore, one may conclude that in some forms of at least seven diseases the specific conflictual, psychological factors play a role as Alexander had postulated.

Alexander and his colleagues did not control for the socio-economic status of their patients. For example, he postulated that the specific conflict in his adult patients with PDU consisted of longings for care and love by others, which led to feelings of shame, and for which they over-compensated, with the result that they acted as if they needed no other person—they appeared to be excessively independent. However, his patients were middle or upper class men. When Kapp *et al.*⁶⁴ observed patients with the same disease, hospitalized in a municipal hospital, they were overtly dependent on others.

Nonetheless, time has borne out Alexander’s most important postulate that the diseases he studied were multifactorial. Not only do social and psychological factors play a role in all diseases (except possible monogenic ones) but a variety of risk factors combine to define most diseases. For example, about 50% of all patients prone to CAD either were overweight, smoked tobacco, were hypertensive, suffered from Type II diabetes mellitus, ate high-fat diets, were poor, or socially isolated, and did not exercise. Several blood coagulation factor levels were often raised.⁴¹ In women, low postmenopausal estrogen levels were a unique, gender-specific, risk factor.

As already noted, several categories of risk factors combine to incite attacks of bronchial asthma.⁶⁵ Multiple factors place persons at risk for PDU; they consist of elevated serum pepsinogen (Pg)-I and -II levels, plus a shift in the balance of numerous protective and injurious processes, affecting the gastric and duodenal mucosa. The injurious ones are the back-diffusion of protons into mucosal cells, and the digestion of mucus by pepsin. The protective ones are the quality and quantity of mucus, of hydrogen bicarbonate secretion, the rates of proton exchange, the membrane potential of mucosal cells, the secretion of prostaglandin (PG) E₂, adequate mucosal blood flow, and the rates of gastric cellular regeneration. The presence of gastric (antral) cells in the duodenum is another risk factor for PDU. Each of the two groups of factors is influenced by additional ones: mucosal injury by excessive gastric acid secretion (e.g., in the Zollinger–Ellison syndrome); by stressful experience; or, by reduced protection against the presence of *Helicobacter pylori* (*H. pylori*), the ingestion of non-steroidal anti-inflammatory drugs, and the reflux of bile salts into the stomach.⁶⁶ Edwin Wallace reports several cases of asthma and migraine successfully treated with psychoanalytic therapy—although their presenting complaints were character neurotic.

The role of *H. pylori* in the etiopathogenesis of PDU exemplifies a recent reversion to the biomedical model. The fact is that 50–80% of populations are infected with this bacterium by the age of 65 years, yet the population incidence of PDU is 1.0–1.5%—a ratio of 50:1. Therefore, one must conclude that factors additional to the infection incite the disease.⁶⁷

However, Alexander also proposed a linear hypothesis about the pathogenesis of the diseases he studied. To exemplify: he postulated that increased secretion of thyrotropin stimulating hormone (TSH) occurred in frightened patients who became hyperthyroid. But our ideas about the pathogenesis of hyperthyroidism have been radically revised. A variety of autoimmune stimulating and inhibiting antibodies, some directed at the TSH receptor, preempt the regulation of thyroid cells by TSH. Another example of Alexander’s linear hypothesis was that unconscious, shame-inducing, conflictful wishes of the adult PDU patient to be cared for, were linearly translated by the vagus nerve to induce the hypersecretion of gastric hydrochloric acid. In actuality, large groups of PDU patients demonstrate a broad distribution of basal and stimulated gastric acid secretion.⁶⁸ Currently, the non-linear concept of a disturbance of the regulation of the back-diffusion of protons into mucosal cells of the stomach by protective factors is the preferred one.⁶⁹

In summary: Alexander's four-part theory appears to have been correct in some instances, in at least two of its parts. But, his concept that the emotional correlates of the activated conflict are linearly translated into physiological changes, is not. This is evident from the foregoing review of the complexity (non-linearity) of the regulation of gastric acid secretion, initiated by vagal efferent activity, and the many factors involved in PDU formation.

In fact, linear concepts have disappeared from our understanding of physiological processes. Instead, systems approaches have come into fashion. Every subsystem is organized into a regulated network of cells and their constituents, of which the brain and the immune system are prime examples. Cell physiology provides abundant examples of signal transduction pathways, once thought to be linear, but now known to be extremely complex, arranged in networks,⁷⁰ which are also context-dependent.

For over 50 years, biology has consisted of studying genes and their protein products in isolation, with an emphasis on their structural characteristics. But the transcription of a gene entails the participation of many proteins and enzymes, and the translation of messenger RNA (mRNA) by ribosomes also does. At the present, a strong scientific movement is occurring to study genes and proteins in the context of their network interactions—between gene and gene, protein and protein, protein and DNA, protein and RNA, and cell and cell. Once known, these interactions will require new concepts probably based on mathematical modeling.

To Summarize

Alexander's pathogenetic, physiological model is outdated and has been replaced by a far more complex one, in which many diseases and ill-health are conceived as the product of disturbances in the regulation of physiological networks, and of rhythms.

Already at the end of the first decades of the twentieth century, internists and psychiatrists were treating bodily symptoms, in addition to hysterical ones, by hypnosis and psychotherapy (see Ref. 215 in note 27). In the course of treatment, they observed certain common psychological features regardless of the medical diagnosis.

While debates about personality profiles, the conversion, and conflict-specificity models of pathogenesis were going on, the theme of common psychological features of many patients resurfaced. Many adult patients with bodily diseases displayed behavioral and psychological features, which were inappropriate to their age—that is, they were “infantile,” and depended on others. Their social skills were impaired, and they could not easily learn them; they relied on, and imitated other people; were passive; their thought process were childlike; their moral standards and aspirations were high, unrealistic and fixed; they sought, but could not reciprocate, love and affection; they did not benefit from experience; nor could they adapt to changes in their lives.³⁰ In short, they were grown-up children living in an adult world to which they were poorly adapted.^{71–73} Some might consider them “borderline personality disorders.”

Several other psychoanalysts writing at this time (1953) emphasized that many of their patients with various diseases, were arrested not only in their adaptive and learning capacities, and in their interpersonal relationships, but also in their “instinctual” development. But, it was never made clear whether these several characteristics were not the response of patients to being sick.

The inability to fantasize, and to describe feelings, a lack of imagination, and limited ability to describe events in other than mundane and operational terms, characterized a cohort of physically-ill French patients.³¹ Somewhat later, and independently, Nemiah and Sifneos³² recorded interviews with 20 sick patients. The tapes were then rated independently. Sifneos³³ called these patients “alexithymic” (lacking words for feelings). These patients also relied on others, while avoiding close personal relationships. They were passive, or obstructionistic. They bored their doctors by endlessly regaling them with the minutiae of their symptoms. Physicians found it impossible to elicit the context in which their ill-health and diseases began. Attempts at psychotherapy were made difficult. Since that time, identical characteristics have also been described in patients with several kinds of functional illnesses, and in several cultural groups.^{34–36} To non-psychiatric practitioners, these patients are a source of frustration and irritation. Perhaps they would respond best to cognitive behavioral therapy, as Wallace suggests.

The prevalence of alexithymia in the general population is not known, but it is a common phenomenon in patients with many different kinds of functional syndromes, and diseases. It cannot possibly explain why one alexithymic patient has a particular disease and not another. We do not understand the nature of the impaired awareness of, or inability to, describe feelings in words. This seems particularly common in certain South Asian cultures, as Wallace has pointed out. For example, Sri Lankan major depressives exhibit the vegetative signs minus severe dejection.

Given that alexithymia was described by psychiatrists and psychoanalysts in four different countries, one might ask whether their patient samples were biased towards those referred to them.

The functional syndromes have repeatedly been associated with anxiety and depressive symptoms,⁷⁴⁻⁷⁶ hypochondriasis,⁷⁷ and various forms of personality disorders.⁷⁸ Recently, these associations have been supported by the report that alexithymia did not play a more significant role in patients with the functional syndromes of ill-health when compared with patients with disease diagnoses, who attended an internal medicine outpatient clinic in Holland,⁷⁹ suggesting that only in a minority of patients in ill-health were their symptoms associated with alexithymia; it occurred rather in concert with a variety of psychiatric syndromes.

The first set of observations on non-specific patient characteristics clearly suggested that many patients were arrested in their psychological development, and could not master, or were poorly adapted to, their adult environment while relying on other persons.

The second set focused on a particular, and apparently common, style of interpersonal relationships, and a failure on the patient's part of becoming aware of, or being able to, articulate feelings. But this deficit may only be present in a sub-sample of patients in ill-health and with diseases.

Leaving aside for the moment the question of the role of specific or general psychological factors as playing predisposing, or precipitating roles in the onset of disease and the syndromes of ill health, the fact remains that they are still relevant to the care of patients, and to the doctor-patient relationship, unless the physician holds to a strictly reductionistic, technical, or linear-causal medical model of disease.⁹ Sick patients manifest a large variety of behaviors and psychological responses. The physician should not neglect these. Or, the patient may comply, or not, with the physician's recommendations.

Patients may be anxious, depressed, submissive, passive, plaintive, provocative, or combative. They may be demented, or delirious and, therefore, may not understand or remember the physician's or nurse's instructions. These, and many other issues in patient care have resulted in the emergence of liaison-consultation psychiatry as a branch of patient-oriented medicine during the latter half of the twentieth century. The task of such specialists is to work with, and advise, other specialists and nurses in patient care.

The Heterogeneity of Ill-health and Disease

In retrospect, one of the main sources of the disagreements in the literature about the personal features of patients with various diseases, and the failure of one study to replicate another, is that diseases are not discrete entities, nor do they constitute distinct categories. In fact, if one defines a particular disease, such as PDU, by its genetic characteristics, phenotypically expressed as a risk factor, one finds that it is a heterogeneous disease, characterized in one form by elevations of serum levels of Pg-I, and another of Pg-II. In fact, there may be 29 different forms of PDU.^{80,81} This would also explain why the psychological characteristics of such patients, albeit hospitalized ones, were not uniform.⁸²

Forty epilepsy variants exist. At least three forms of borderline hypertension have been described.⁶⁰ Diabetes mellitus occurs in at least four subforms. And, rheumatoid arthritis is not a uniform entity either.⁶² Breast cancer in women may be defined in terms of mutations in two genes, BRCA1 and 2,⁸³ and by estrogen sensitive and insensitive tumor forms. Four different genes and their products have been implicated in prostatic cancer. (A mutation on chromosome 1 p 36 accounts for only 5% of all patients.)

But once this issue is confronted, the problem of genetic heterogeneity is not solved. Elevations of serum Pg-I levels are more frequently associated with PDU, and of serum Pg-II levels with gastric ulcer. However, if one is to define the disease phenotype by its genotype, the matter becomes very complex,

because the same genotype, even in monogenic diseases, may be expressed differently; while two mutations may modify each other⁸⁴ to result in another phenotype.

On the other hand, borderline hypertension has been defined by high, medium and low serum renin activity, and these three forms differ psychologically.⁶⁰

Much more data is needed to resolve this complex issue. Is genotypic variation expressed in psychological variation, or not; and under what circumstances? Is genotypic variation to be used to define subforms of a disease, or not? Or, should variations in a physiological “phenotype” be used? The answers to such questions remain for the future.

The Shift in Focus to the Stressful Environment

The initial focus in psychosomatic investigations was on individual, or small groups of patients, studied after disease onset. Such postdictive studies raised serious questions about the direction of the causal relationships between the psychological descriptions, and inferences made about them, and the onset, course, response to treatment, and prognosis of the disease, or of the syndromes of ill-health. Admittedly, later prospective studies, already reviewed, circumvented this major methodological issue, but they have been few and far between.

The focus on individual, and small groups of patients only provides partial insights into a truly integrated model of medicine. Neglected, but buried in the data, was the fact that persons could be at risk for a disease but did not develop it, begging the question why this should be so.

A socio-ecological approach needed to be added to answer the question of differential risks to health, studied at the level of populations. The roles of gender, age, social and economic status, and ethnicity had to be assessed and incorporated into any comprehensive medical model.⁸⁵

The task of conceptually integrating the two disparate approaches—the study of individuals and of populations—has not been an easy one. Guided by the concepts of (especially chronic) stressful experience imposed by the physical and social environment on groups and individuals, and by their differential psychobiological, adaptive capacities and responses to them, we are at the end of the twentieth century better positioned to arrive at a more inclusive theory of health, ill-health, and disease than before. The model is more complex than the traditional biomedical, or the individual psychological, one.

The historical fact remains that the concepts of stressful experience, and variations in individual adaptive capacities, which determine relative (adaptive) success or failure and thus health, ill-health or disease, can be traced to Darwin’s great Theory of Evolution.

The Stressful Environment

Darwin⁸⁶ completely reassessed the relationship of the organism to its environment, incorporated in the dynamic concepts of natural selection, variation, and variable adaptive success. Adaptive failure is relative, and judged by a reduction in overall fitness. Death ensues if the failure is complete.

Darwin explicitly stated that the environment was “stressful”: the physical environment changes constantly, or may be dangerous; it is altered by its inhabitants, by the weather, fires and floods, etc. Its resources are limited. Animals of slightly divergent abilities and forms compete for them, and for mates. The less capable are killed, or are forced to flee to make room for the more successful. Predators and other dangers are potentially everywhere.⁸⁶ Organisms are exposed to infectious agents, which also evolve continually. Strife and wars erupt, and bring pestilence in their wake. The environment becomes polluted with toxic agents. New and potentially dangerous technologies are invented. New tasks present new challenges.

Organisms have many ways of adapting to climatic changes, danger, competition, infection, poisons, heat, cold and injury. They fight, flee and hide from predators and competitors, or learn to avoid, submit, or negotiate with them. They may control and master many stressful experiences. They mount adaptive physiological responses that underwrite these behaviors by mobilizing bodily energy resources, or specific behaviors and physiological responses. During starvation and infection, the energy requirements of the body are lowered.

Two immune systems protect them against infection. Hemostatic and growth factors repair injury, and specific enzyme systems are designed to detoxify poisons. All of these subsystems are intimately interconnected to insure survival.

One of the most evident advances in our understanding of the biology of organisms is that no one subsystem in the body functions autonomously. Each subsystem, or its cellular components, may serve specific functions, but by means of a vast number of communications, signals and receptors, monitors and responds to signals emanating from the other. The brain not only monitors, processes, and integrates signals from the environment, but also from every bodily subsystem, which in turn it regulates. Adaptive responses are, therefore, not only the product of the brain, or any particular subsystem, but of an integrated network in which any or all subsystems may participate.

The Study of the Emotions and Their Signaling Function: C. R. Darwin and W. B. Cannon

One of Darwin's seminal contributions to the study of adaptive behavior was his book, *The Expression of the Emotions in Man and Animals*, published in 1872.⁸⁷ In it he described the facial expressions, bodily postures and movements during 36 different emotional states from suffering, grief, despair, anger, disgust, helplessness, fear, and surprise to shame and shyness, in children, normal and insane adults, cats, dogs, wolves, and apes. He believed that these emotional expressions were conserved during evolution, and he paid the price for this idea by being accused of anthropomorphism—ascribing to animals what human beings think and feel—instead of simply describing specific emotional behaviors, and the contexts in which they occurred.

(The importance of the emotional expression and behavior of an animal is that they are not only communicated, but they also signal its intentions to another animal. The visual perception of motions and postures and the auditory perception of growls, howls, and yelps, etc., allows the recipient to predict the future actions of another animal. The animal's survival depends on its ability to identify the movements, postures, and emotional expression of predators, prey, and mates, infer from them their intentions, whose consequences differ, and could in some cases be fatal.)

Darwin was also later subjected to the criticism that emotions should not be related to (inferred) physiological states, but were predominantly communication signals. But, above all, he was accused of describing and reporting on phenomena that were considered to be “subjective”—in other words, not worthy, or capable, of “objective” scientific study. In fact, it has only been in the latter quarter of the twentieth century that the study of the emotions has again become the subject of serious scientific study^{26,88} and a central feature of research on stress and adaptation.

Another argument used against Darwin's thesis was that emotions and their expression in behavior were not conserved during Evolution: that they were not innate, nor universal, but rather were learned phenomena constructed by culture.⁸⁸

For these and other reasons, Darwin's book was virtually forgotten for about 100 years, and certainly had little discernible influence on most medical thought. And yet, as already noted, the psychophysiology of the emotions, or, at least, a limited range thereof (anxiety, fear, grief, depression, anger, hostility, pain, shame and guilt) or their absence, has been, and were central themes in psychosomatic medicine. The question has remained how they are translated by the mind/brain into changes in physiological functions, so that they might also on occasion be involved in a pathogenetic role. (However, it is unlikely that emotions, being non-material, could “cause” such changes in material, functions and structures. For this and other reasons, the mind/body problem remains unsolved.)

The studies carried out by Cannon^{89,90} had a profound influence on the initial thinking of clinicians in psychosomatic medicine. He described a physiology of pain, fear and rage, and of hunger, by documenting that an angry dog's intestinal movements stopped. He went on to study the physiological correlates of these three emotional behaviors, and of hunger. He conceived of their accompanying physiological changes as

“emergency reactions,” during which blood was redistributed to body parts, such as muscle, requiring energy supplies to fight, flee, or seek out food. This “fight or flight” response was an acute, integrated, adaptive response in anticipation of, or in response to danger, pain, and hunger.

According to Cannon, the bodily changes were mediated by the brain: the activated, sympathetic, nervous system; and the secretion of epinephrine (E), acting in a uniform, indiscriminate way, regardless of the situation, or the emotion with which it was correlated.

To the delight of those interested in the psychology of danger and emotion, Cannon described a process, which acted as a model for them. Cannon, the physiologist, was not, however, interested in health, ill-health and disease.⁵ Perhaps he cannot be faulted for regarding the action of the sympathetic nervous system in a global manner. He is to be credited for holding to an organismic view of acute, emotional arousal, and of considering it worthy of study. But on several other scores he was wrong—he wrote about “emotional stress,” rather than the generation of a specific emotion, such as fear acting as a signal of danger. He also over-generalized⁵ his concept of homeostasis⁹¹ and went as far as writing a paper on the “stress of homeostasis.”⁹² And it has taken many years to abandon the idea that E is privileged as a “stress” hormone.

The Influence of H. Selye on Psychosomatic Medicine: The Effects of “Trauma”

In addition to Cannon, the extensive investigations of Selye^{93,94} also profoundly influenced psychosomatic research and concepts. Selye demonstrated that a wide range of actual, or potentially damaging procedures—jections of toxins, drugs, and bacterial extracts; fracturing limbs; restraining and starving animals; exposing them to heat or cold, etc.—all produced a triad of bodily lesions—shrinkage of, and hemorrhage into lymphatic tissues, gastric erosions, and adrenocortical hyperplasia.

Actually Selye’s original intention was to study the ubiquitous (“functional”) symptoms that accompany many different human diseases—malaise, fatigue, lethargy, loss of appetite and weight, sleep disturbances, anxiety, loss of interest in work, decreased enjoyment of various activities, and diminished sexual desire.

But he was soon diverted from his quest of understanding the physiology of “functional” symptoms to his wish to explain the pathogenesis of this invariant set of three lesions, produced by the damaging, and inferably painful, procedures, which he called “stresses.”

He later defined stress as “the non-specific response of the body to any demand made upon it.”^{94,95} And, he placed the entire burden of the pathogenetic effects on the action of the adrenal cortical steroids. He postulated that all the procedures he used aroused his rats, and incited an “alarm” phase, which was counteracted by a stage of “resistance,” only generally described, followed by a stage of exhaustion, and death.^{94,96}

He speculated that a number of diseases—PDU, essential hypertension, rheumatoid arthritis, other collagen and allergic diseases—were “diseases of adaptation,” implying that they were due to the direct action of the adrenal cortical steroids.⁹⁵ This hypothesis was disproven by the demonstration that the adrenocorticotrophic hormone (ACTH) and the glucocorticosteroids (GCs) suppress the manifestations of rheumatoid arthritis,⁹⁷ the collagen diseases, and allergic reactions. In fact, experimental arthritis in Lewis rats is related to a failure to mobilize the hypothalamic-pituitary-adrenal axis (HPA) on antigenic challenge.

For these, and the following reasons, Selye’s stress concept was seriously questioned. In addition, Selye did not study the behavior of his animals: for example, a rat when restrained (one of his procedures) was not aroused but fell asleep.⁹⁸ Also, restraint, and many of Selye’s other procedures prevented his animals from mounting an adaptive, behavioral response. And as Mason,⁹⁹ and Gibbs¹⁰⁰ later pointed out so cogently, behavioral and physiological responses were specific to the challenge such as heat or cold, or to pain, restraint, and injury. If they were not, the organism would not survive. The physiological responses to burns, stab wounds, and/or hemorrhage differ in human beings.¹⁰¹ Most importantly, also, the reconceptualization

of the functions of the GCs has occurred. They are modulators of many physiological processes, rather than being pathogenetic agents of disease,¹⁰² unless administered in large doses.

Finally, the argument that both general and very specific autonomic, hormonal and/or immunological changes occur in response to changes in the environment, dangers, tasks and challenges has been settled. Both occur but their functions differ: almost immediate heart rate (HR) and BP increase and regional blood flow is redistributed in most instances, the catecholamines and GCs are released, and blood glucose and free fatty acid levels rise. Some do so even in anticipation of the challenge or event.

On the other hand, very specific, behavioral, physiological (e.g., to blood loss, high altitude), and immunological (e.g., antibody production) are tailor-made to adapt to threats to survival imposed by anoxia, and infection, respectively.

These responses are acute. Only recently have they been studied in chronically stressful situations, or in acutely stressful ones, imposed on chronically stressful burdens (see below).

Stressful Life Situations and Bodily Responses

Amongst the most influential contributors to the psychobiology of stressful experiences in human subjects were H. G. Wolff^{56,103} and his “school.”¹⁰⁴

Wolff conceived of stress as the result of the interaction of the organism and its environment; and the past experience of subjects was also a major factor in the outcome of the interaction. As a result of it, behavioral and physiological changes occurred in the organism. Borrowing a term from classical mechanics, he considered these physiological changes as “strains.” The organism either withstood them, or if not, disrupted function, and death ensued.

He and his colleagues identified a patient’s adverse life situations, and the attitudes and emotions engendered by them. These events provided the contexts in which the patients’ symptoms or disease began, or recurred.

Wolff could also demonstrate that his patients responded not only to actual dangers, but also to their symbolic meanings. The physiological changes that were elicited in these two situations did not differ.

The main categories of stressful experiences that Wolff studied were social changes; threats; dangers; disruptions of customary habits, and of personal relationships; the deprivation of needs; and failures to realize opportunities in life. While these identified personal situations and the feelings they elicited were discussed with the patient, physiological measurements were taken of cardiac output (CO) peripheral resistance, BP, blood flow in various organs, blood sugar levels, mucosal secretion, urinary output, antibody titers, etc.

Wolff and his colleagues conceptualized the short-term changes in bodily function as either adaptive, and/or defensive. In their view, disease was a failure to adapt to adverse life situations, and not a direct consequence thereof (except in the case of direct injury to body parts). The change in organ function was considered to be appropriate to the adverse experience. And, the relative success or failure of the adaptive/defensive change was a product of “endowment,” past experience, and the individual perception of the event or situation, and deemed by the patient to be stressful.

The individual psychological responses to the stressful situation invoked in the laboratory were directly observable. The observations made by Wolff and his colleagues, accorded remarkably with those specific dynamic conflicts, inferred by Alexander²⁹—a fact that, curiously, has been overlooked in the literature.

Wolff’s and his colleagues’ many reports were influential in changing the focus of psychosomatic research to the study of the personally stressful context in which bodily changes occurred, verifying them in the laboratory, while measuring physiological changes, thus allowing others to conclude that stressful experiences did indeed alter bodily functions in human beings.⁵⁶

Two of Wolff’s colleagues¹⁰⁵ began to study the socioecology of changes in health status of workers—the distribution of disease, ill-health, and absenteeism from work—in a division of the New York Telephone

Company. Twenty-five percent of the women employees contributed 75 percent of the absenteeism during one year due to ill-health, obesity, hypertension, and upper respiratory infections of all kinds. These complaints were accompanied by fatigue, anxiety and changes in mood, and were the same complaints as those which had impaired their work performance in previous years.

In contrast to well-employees, those who were frequently absent from work were also chronically dissatisfied with their life situations, employment, chances for job advancement, marriages, or single marital status. They were considered difficult to get along with by others, and had few friends.

On the basis of this and other studies, Hinkle concluded that most sickness was unevenly distributed in a population. It occurred in only one segment, and occurred for a variety of disparate reasons. The sick lived in circumstances that, from the outside, were not unusually adverse, but were considered by them as highly unsatisfactory, threatening, ridden with conflict, deprivation and burden. Their interpretations of their life situations made them prone to sickness.

Conversely, good health was enjoyed by many others—very poor people, living lives of physical hardship, and uncertainly in a disrupted society, or who had been displaced. Most people seem to adapt to such adversities; yet, in others they heighten morbidity and mortality.

Socioeconomic status (poverty), migration, social mobility, changes in various forms of social acculturation and status, are also demonstrable risk factors for ill-health and disease. Each of them is a complex event, perceived and adapted to in a different manner by each individual.

One might conclude that these statements are contradictory; unless it is recognized that individuals perceive and appraise their life situations differently. These perceptions are also influenced by shared customs, habits, values and attitudes, ways of adapting, and modes of thought about many diverse topics—religion, education, friendships, marriage, politics, ethnicity, expectations, morality, sexuality, etc. All of these influence the individual's unique experience growing up in a cultural group, and responding to potentially stressful experiences.

Based on his many observations of different groups of subjects, Hinkle²² reconceptualized the role of stressful experience in terms of the Theory of Evolution and its central ideas about adaptation and variation. He stated that the biological reality was that no organism would survive if its integrated psychobiological responses were not exquisitely attuned, adequate, specific, and appropriate to many different kinds of stressful physical or social situations.

Inappropriate, inadequate and maladaptive responses, he believed, ended in injury, ill health or disease.

Hinkle's reconceptualization of stress, Mason's original experiments,^{99,106,107} and the development of a quantitative empirically-derived, scale for measuring different stressful experiences in human beings,¹⁰⁸ ushered in the modern era of stress research, and its relevance to an integrated medical model.

The Environment

Explicit in Hippocrates' medical thought were the roles of changes in the natural and social environments as the contexts in which health decline. Halliday¹⁰⁹ provided the first truly comprehensive account of the many factors, which play roles in the etiology and course of diseases, including the physical, socioeconomic, and family environments; the patients' responses to them, and to the manifestations of their ill-health or disease—that is, to their signs; their complaints, and their meanings—which warned them that they were sick. The physician's responses to their patients, and explanations of their complaints to them, and the patients' psychobiological reactions to these transactions, were also to be taken into account. Halliday's recursive non-linear concepts were designed to explain why ill-health and disease are only one parameter in a matrix, and not the linear end-result of any one single factor. They also accounted for the reasons why interpersonal social and cultural factors play a significant role in the etiology and the treatment of ill-health and disease. Since that time, the roles of socio-ecological and interpersonal factors have been a major focus of psychosomatic research, both in animals and man.^{42,110–115}

Vicissitudes of the Concept of Stress

Partly as a consequence of Selye's experiments, his critics contended that stressful experiences could not impair health and bring about ill-health, disease, and death, unless they overwhelmed the organism. They also asked why it was that there was no linear relationship between a particular stressful experience, and a specific form of health impairment. The answer is that many intervening variables (including various other risk-factors) affect the response to stressful experience and determine whether health is, or is not, impaired. Persons are diverse; they vary in their evaluation and interpretation of the meaning of the experience, and its implications. (Some seek out danger and are thrilled by it, others become afraid.) They also vary in their ability to adapt to, and in their previous experience with a particular single, or set, of event(s), and in their adaptive capacities, which allow them to predict, control, plan for, or master it, or not. Besides, some are predisposed to certain functional disturbances, and diseases, but do not develop them. Organismic biologists recognize that stressful experiences do not merely have to be harmful, or diminish overall fitness; such experiences may actually leave it alone, or improve it.^{7,116}

The expectancy, timing, predictability, preparation for, lack of ambiguity, intensity or magnitude, acuteness, chronicity, repetitiveness or duration, of potentially stressful changes, challenges and dangers, etc. are additional determinants of their outcomes (e.g., note 42).

Therefore, the conclusions that only the intensity of, and the inability of the individual to escape the experience could be harmful to health, was incorrect. Changes, tasks, challenges, sickness, injury, and dangers, occur throughout the duration of each person's life: children have siblings, hurt themselves, are abused, or parents divorce. They grow up and go away to college, take examinations, court, marry, divorce, become parents, have to earn a living, move, are promoted, or fired from their jobs, and retire. Success or failure attends every step in their lives. Each stage in life has its own set of potential challenges. Stressful experiences are ubiquitous in every person's life, and are usually adapted to. They are often not singular, but consist of constellations of events.

It is the function of the mind/brain to anticipate, perceive, evaluate, and respond to these events with the appropriate behaviors and correlated physiologic responses, which also vary.

To test the role of the variability of stressful experience and its role in disease production, much laboratory (experimental), stress research (especially on animals) has been carried out in order to analyze, or control irrelevant variables. But it has frequently entailed the study of artefactual, inappropriate, or biologically irrelevant situations carried out with animals housed in impoverished social contexts or prevented from performing their usual activities. Many experiments have used inescapable, unnatural (often painful) stimuli, such as electric shocks, carried out in daytime on nocturnal animals. The overt agenda of the investigator is to be scientifically rigorous; the hidden agenda is to produce an effect—such as an anatomical lesion, BP elevations, or “learned helplessness”—at all costs. The meaning of such experiments is suspect. On the other hand, studying animals in their natural habitats, interacting with members of their groups, establishing social hierarchies, competing, foraging, swimming, and mating has provided more meaningful data, although such observations are often criticized for being uncontrolled.

Selye's definition of stress was global—stress was everything or anything—as we have already seen. Without specifying the inciting stimulus or situations and the context in which they were embedded, the behavioral responses of the organism were considered to be invariant when studied at all. Or, stressful experiences were defined exclusively in terms of the physiological responses.

A precise analysis of the components of the situation, or experimental procedure, and the physiology of the adaptive behavioral responses, was called for.^{22,99} As a start to this analysis, a classification of the nature of stressful experiences in human beings, into natural and man-made disasters, and personal experiences has been attempted,¹¹⁷ but its usefulness remains to be determined (Table 1). Its aim was to draw attention to the need rigorously to define the situation, or context.

However, any such classification must also take into account whether the stressful experience is acute and quickly resolved, or has long term consequences, or is chronic, repetitive, resolvable, or not. Furthermore,

Table 1. Stressful experiences: humans

Naturalistic
Daily hassles
Earthquakes
Exercise
Hurricanes
Novelty
Medical
Disease
Hospitalization
Notification of disease
Pain
Surgery
Occupational
Examinations
High demand; low rewards
Nursing and care giving
High noise levels
Parachute training and jumping
Practice of medicine
Public speaking
Soldiering:
Aircraft landings
Underwater demolition training
Space flight
Personal
Bereavement; loss (actual or threatened)
Disease of spouse
Divorce and separation
Loneliness
Mental conflict
Migration
Retirement
Socioeconomic
Homelessness
Poverty
Unemployment

both general and individual psychological, behavioral and physiological responses need to be accounted for, and the multiple factors (already mentioned) that maintain, or not, health.

In the subsequent sections, the vast literature on these topics will selectively be reviewed to document the real advances made. Both human and animal studies will be cited.

Some Stressful Experiences and Their Attenuation: Reponses to Natural Disasters

Despite the repeated emphasis, which has been made on individual variability in the response to stressful experiences, recent observations on the survivors of earthquakes, fires, floods, hurricanes, volcanic eruptions, etc. have allowed certain general conclusions to be drawn about the manner in which groups of individuals responded when a disaster struck, and how they recovered from it. Initially—the phase of impact—was characterized by extreme fear, disbelief, horror, and a sense of unreality on almost everyone's

part. Some fled. Some remained to save what they could. A stage of heroic endeavor set in to ensure their own and others' survival, often followed by a feeling of exhaustion. But, social order often broke down, and looting occurred. Within a month, often with outside help, hope returned to the stricken community. But as (outside) interest and help dwindled, members of the community lost interest in helping others, collegiality waned, and disillusionment set in. Eventually, the affected group reorganized and rebuilt the community.

Even when an earthquake or volcanic eruption occurred at some distance, the incidence of mild forms of the post-traumatic stress syndrome (PTSD), anxiety and depressive reactions were greater than 50%, and these symptoms lasted months or years.¹¹⁸

Socio-Ecological Factors

Table 2 lists some of the main socio-ecological determinants of stressful experiences. Almost every form of ill-health (except anorexia nervosa), has been associated with poverty^{112,119,120}—an aggregate of poor housing; nutrition and sanitation; family, marital and social disruption; large households; poor educational opportunities; unemployment; and in the USA, no health insurance, and inadequate access to medical care. Poverty has also been cited as a consequential antecedent of major depressive disorders in population samples.¹²⁰

War

The horrors, cruelties, devastations, and pestilential consequences of war are recorded in the Old Testament, and by Homer, Thucydides, and Beowulf, and in every subsequent war. DaCosta's descriptions of functional syndromes in the American Civil War were richly supplemented by Lewis and Osler in World War I, and by Wolff,¹⁰³ Grinker and Spiegel,¹²¹ and others in World War II.

The Spanish Civil War, Abyssinian War, and World War II, and those that followed, were "total." They differed from previous ones because they devastated civilian populations by intentionally starving them; by incarcerating, and forcing them to labor; and by massively bombing them.

The previous literature of the morbidity of wars, therefore, mainly records the immediate effects on soldiers and sailors. In the British civilian population, during and following the German aerial assault in 1940–1942, a marked increase in perforations of PDU occurred.¹²² While in Denmark and Norway, the incidence and prevalence of thyrotoxicosis increased markedly, during the German occupation, as long as food supplies were adequate.¹²³ In many occupied countries where food supplies were short, an upsurge in the incidence of pulmonary tuberculosis occurred.

The maltreatment of prisoners of war (POW's) by the Germans, Japanese, and Russians, was another gruesome feature of World War II. The long-term adverse consequences on the health of American POW's captured by the Japanese in World War II, and by the Chinese and North Koreans in the Korean War, were

Table 2. The main social and personal risk factors for morbidity and mortality

Abuse
Bereavement and loss
Income discrepancy
Poverty
Social disruption
Social support; lack of
Socioeconomic status
Specific work situations
Forced unemployment
War

greater than those captured by the Germans in World War II. The combination of malnutrition, torture, and incarceration had consequences still observable after 15–20 years. Every category of psychiatric and medical morbidity, requiring excess hospitalization (over those not captured), was diagnosed. And, the ex-German POW's had greater difficulties in readjusting to civilian life than those who were never captured. They were chronically anxious and depressed, drank more alcohol, and complained of functional symptoms.¹²⁴ The rank order of frequency of psychological symptoms in all military personnel during and after the wars of the twentieth century, consisted of feelings of demoralization, chronic fatigue, the desire for revenge, fear of political authority, various degrees of depressed mood, and PTSD. Family conflict frequently occurred, and various forms of other psychiatric disorders, including schizophrenic and dementing disorders, have been reported.

A sub-group of ex-military personnel were at particular risk for a large variety of bodily symptoms and diseases. In a well-controlled study excluding, for example, hypochondriasis, reported by Boscarino,¹²⁵ the histories of 332 Vietnam U.S. Army veterans in a randomly chosen sample of 1,399, were studied 20 years after the war's end for the prevalence of a lifetime history of PTSD. Only the PTSD subgroup had statistically reliable increases in the incidence of circulatory, digestive, musculo-skeletal, nervous system, and respiratory symptoms, and non-sexually transmitted infectious diseases (not further specified). The study excluded confounding factors such as differences in income, education, ethnicity, the over-reporting of symptoms, and the abuse and complications of addictive substances (including tobacco). In order to interpret further the meaning of this survey, one would have to know more precisely the nature of the specific symptoms and signs in the various disease categories.

Human Relationships: Disruption, Bereavement, Separation and Loss

Human relationships, and especially the doctor-patient^{126,127} one, are critical in the maintenance and restoration of health, in morbidity and mortality, and in the prognosis of ill-health and disease. The study of their roles has been a central focus of all of medicine ever since antiquity.

These observations have been borne out in animals by separating young animals from their mothers. Harlow's¹²⁸ and Hofer's¹²⁹ investigations in infant monkeys and rats, respectively, highlight that the mother-infant relationship is critical for the development and maintenance of later relationships, and for the regulation of behavior and bodily systems; its disruption was a risk factor for certain later diseases.¹²⁹ Additionally, disruption of the mother-infant relationship permanently affects the latter's ways of relating with peers.

The usual, emotional response to bereavement, separation and lost relationships in human beings is grief,^{130,131} whose central feature is the often painful feeling of sadness (or sorrow), which readily communicates itself to others. Although it is said that grief usually unfolds in three identifiable stages, actually it is a highly variable process. In some circumstances, it may last a lifetime—for instance, when a young couple loses an only child. Grief may occur in anticipation of a bereavement, or separation, and be over by the time of their actual occurrence. It may take unusual forms, which protect the mourner from the “pain” of sadness, by being overlaid with hatred, bitterness, anger, and feelings of revenge, admixed, or not, with feelings of longing and need for the departed.^{130,132–134}

Grief and depression are often confounded in current medical practice. They have, however, been reliably differentiated,¹³⁵ at least, after women suffered a spontaneous abortion¹³⁶; their incidences and natural histories differed in 125 such women. The anxiety and depression scores on standard questionnaires were significantly higher in these 125 women when compared with pregnant and age-matched non-pregnant women, living in the same community. Following the abortion, 48% showed no measurable change in feelings or moods; 20% were grief-stricken; another 20% were both grieving and depressed; and 12% were exclusively depressed. Only the depressed women complained of neck and shoulder pains, and sleep disturbances. These women were then reassessed six and twelve months later. The depressed women, and those with mixed grief and depressed reactions remained so for one year. Both of these groups

manifested bodily complaints at that time point. But the scores on grief had declined after 12 months, although they remained higher than in the women in the two normal comparison groups. Therefore, grief and depression could be discriminated, even on questionnaires. And, grief reactions did not exclude depressed moods.

In other groups, such as middle-aged and older widows, grieving was a long drawn-out process, lasting two years or more.¹³⁴ It consisted of repetitive crying; feelings of loneliness; dreaming of, seeing, and talking with the departed; and holding on to his belongings. Many widows developed the bodily symptoms of their spouse's terminal disease. A beneficial, adaptive outcome of the process was for the widow to find new partners. But in 25% of the widows, chronic grief reactions evolved into depressive disorders, the abuse of alcohol, and/or PTSD (especially, when the spouse's death was sudden, unexpected, or culminated in a suicide).¹³⁴

These observations again supported the contention that individual differences occurred in reaction to such an event, which in part may be due to the age of the bereaved, and in part were due to its particular nature. Furthermore, differences were apparent in the manner in which the widow adapted to her loss over time.

The unresolved question remains why bereavement is the context for the onset of so many different illnesses and diseases.¹³⁷ The empirical demonstration of this relationship has been owed to the development of the Social Readjustment Rating Scale (SRRS),¹⁰⁸ based on the reports of 5,000 patients of events in their lives shortly after they became sick with a variety of diseases and syndromes of ill-health. Some of the 43 representative events were undesired, but some were not; both kinds required that the patients make adaptive readjustments in their lives. The scale was then rank-ordered, allowing judges to weigh the events, according to their emotional impact on the patient. Bereavement topped the list as the most undesired event.

The development of the SRRS led to an explosion of studies,¹³⁷⁻¹⁴⁰ which continues to this day. The context in which ill-health and disease begin has been studied extensively.^{135,139} Many different conceptual models have been built to link such stressful and undesired events and experiences with various disorders.^{138,140}

Life event research, initially asked patients what the event meant to them, but this question was later eschewed. Yet, its meaning is a critical variable: for some, an event is a catastrophe, or source of heart-break; for others, it is a burden or challenge, even if desired; and for still others it is a relief. And, this line of research did not explain the large variety of diseases and syndromes of ill-health with which bereavement has been associated (Table 3).

Table 3. Bereavement as the context for morbidity and mortality

Abdominal pain
Anorexia nervosa
Autoimmune disease
Bronchial asthma
Bulimia nervosa
Congestive heart disease
Diabetes mellitus
Enhanced mortality
Essential hypertension
Hyperthyroidism and thyrotoxicosis
Gastric ulcer
Leukemia and lymphomas
Major psychiatric illness
Malignant disease
Myocardial infarction
Peptic duodenal ulcer
Pregnancy complications
Tuberculosis
Ulcerative and granulomatous colitis

With very few exceptions, very little is known about the physiological correlates of bereavement, sorrow, and grief. And, when they have been described, the outcome in terms of changes in the health status of the subjects was often not determined. Therefore, it is not yet possible to interpret why bereavement should be associated in some persons with the onset, or recurrence of so many different diseases, or syndromes of ill-health, some of which may (must) be specified by other risk factors.

Social Support

Human relationships play significant roles in the maintenance, the care of patients, and the restoration of their health. Cobb,¹⁴¹ markedly broadened the scope of interpersonal and socioecological knowledge, while placing it in a development framework. He named this topic, social support. This concept has had a major impact on our understanding of the resistance to stressful experience, the onset, course, recurrence, occurrence of complications (e.g., of pregnancy), and, therefore, of the prognosis of ill-health and disease. Lack of social support enhances “health care seeking” behavior, the experience of symptoms, and the compliance to, and responses of patients to treatment. Cobb defined social support as the sick person’s belief in being cared for, loved, esteemed, and belonging to a network of social communication, and of mutual obligation.

Caplan¹⁴² carried Cobb’s ideas further by demonstrating that social support enhanced mastery over stressful experience. It reduced the impact of loss on subsequent symptoms of major depression,¹⁴³ and of the occurrence of chest pain in anxious men with angina pectoris.¹⁴⁴ It improved the chances for survival after MI.¹⁴⁵ The mortality of elderly persons was reduced by the size and scope of their social networks.¹⁴⁶

Social Isolation

Whereas social support has salutary effects, buffering persons against stressful experiences, social isolation has adverse ones. In population studies, it is an independent risk factor for all-diseases and illnesses, especially cardiovascular mortality in men in the USA.¹⁴⁷ It has been demonstrated that men have much-smaller close social networks than women; and are less likely to see doctors.

Social Stability

The role of the social environment is attested to by the fact that social stability—the continuity of cultural and religious traditions, and close, mutually-supportive personal relationships, communal rule-following behavior, and defined roles for members of the community—protected against CAD and MI, despite the fact that members of a stable community were overweight, and their diet was high in saturated fats.^{148,149}

These observations have been confirmed in many different ethnic groups, and in both genders, who lived in stable communities, in which daily life was predictable, and there were few adaptive demands made on its members.^{150,151}

In other stable communities, in which daily life was “prescribed,” its members were protected against what is usually presumed to be an inexorable increase of BP levels with age.¹⁵² If social stability and close human relationships protect health, social disruption and interpersonal violence should incite (some) diseases.

Social Disruption

The potent effects of specific disrupted urban settings in the USA were described by Harburg and his colleagues.¹⁵³ They compared BP levels in African–American men, living in inner-city neighborhoods, to levels in African–American and white men, residing in middle-class, relatively stable, neighborhoods. The

highest group levels of BP occurred in the inner-city dwellers. These men had few socioeconomic resources; were single, separated or divorced; and were exposed to violence, and police brutality. They never had the opportunity to express their resentment at racial discrimination.

The highest BP levels were also recorded in those men with the darkest skin color, suggesting that intra-ethnic discrimination also played a role. This study implied, but did not conclude explicitly, some of the reasons why (poor) African-American men have a four-fold greater prevalence of high BP than do white American men and black West African men.

Sexual, Physical and Emotional Abuse

One of the major recent topics in public health has been the adverse effects on the health of abused women (and men). In the USA, about one-third of adolescent women have reported that they had some form of unsolicited sexual experience with an older person.^{154,155} About 20–27% of adult women had been raped at some time in their lives.¹⁵⁶ The list of the immediate and long-term consequences on the health of women seeking primary medical care is long (Table 4).^{157,158} Notable, is that most of these complaints were of a functional nature—of ill-health (especially PTSD)—markedly increasing health care utilization, and costs. Less is known about whether the kinds of reported abuses (which usually combine sexual and physical assaults) were risk factors for disease (other than possible sexually transmitted diseases and bodily injury).

The topic of sexual abuse is a contentious one, and has been, for at least 100 years. Critics of these recent reports argue that they were unreliable, impossible to verify, fictitious, exaggerated, or suggested by physicians or psychotherapists. Lost sight of in this debate is the likelihood, given the power of the human imagination, that it may not matter whether abusive experiences, especially in childhood, were actual, or imagined—currently an unfashionable argument.

In summary, the observations on some socio-ecological factors (e.g., of poverty^{159–161}; work conditions¹⁶²; unemployment,¹⁶³) the consequences of bereavement, and of sexual abuse are paradoxical because they are either the antecedents, or are the temporal correlates of a wide variety of syndromes of ill-health and diseases: they do not specify them. As previously noted, the possible reasons for this are that we do not as yet know most of the other, putative risk factors, which specify adverse health outcomes.

Table 4. Sexual and physical abuse

Anorexia nervosa
Anxiety syndromes
Bulimia nervosa
Depressive syndromes
Drug abuse
Fibromyalgia
Functional bowel syndromes
Hyperventilation syndrome
Hysterical and dissociative syndrome
Multiple personality syndrome
Pain syndrome
Pelvic pain syndrome
Post-traumatic stress syndrome
Prostitution

Work Conditions

On the other hand, the seminal work of Karasek and Theorell,¹⁶² and Siegrist and his coworkers⁴² has taught us that a specific, uncontrollable work situation—the discrepancy between high demand for productivity and low reward—markedly increased the relative risk for a disease, MI, by 6.15, over a span of a 6¹/₂ year period in middle-aged men. Seemingly, this specific, chronically stressful situation was associated with a clearly defined disease outcome. However, Peter and co-workers¹⁶⁴ have recently reported that it also increased the prevalence of fibromyalgia, functional bowel disorder, and “burn out” in both women and men transport workers. Most of the risk-factors for one form of CAD and MI are known, but for the three functional disorders, they are not. And, the data suggests, once again, that the specific work-condition does not specify the morbid outcome.

Adaptation to Stressful Experiences

Adaptation is the most useful concept linking stressful experiences with the integrated behavioral, psychological, and physiological responses of organisms.¹⁶⁵ It takes many forms.

The concept of adaptation is derived from Evolutionary Biology. The ability, or not, to adapt varies from individual to individual—an insight that was also gained by Darwin, and that is central to his theory. His great achievement was to describe Evolution as Nature’s ability to select the fittest (the best adapted) for reproduction from among a heterogeneous, yet closely-related, population of organisms. With the development of modern genetics, Darwin’s theory of Natural Selection was extended—randomly occurring mutations also created genetically heterogeneous individuals in a population of organisms. Selective pressures chose among them, favoring the survival and reproduction of those organisms that carried the most favorable constellations of genes and phenotypes—those best adapted to a particular environment.^{7,116}

However, speciation, and variation in the adaptive capacities of individuals are never merely the products of genes and chromosomes. They also result from the natural and geographical location of populations, in which genetic changes occur: both genetic changes of populations and geography affect the speciation process (i.e., diversity) at the same time. Together, they determine the suitability of the organism’s structures, functions, and behaviors for its particular environment, and the manner in which it lives—its adaptedness—which in turn results from past natural selection(s), and individual experiences.⁷ Natural Selection can also act in the maintenance of existing adaptations.¹¹⁶ As the environment or populations change over the short term, these adaptations may, or may not, succeed; therefore, adaptation is a continuous dynamic process. Yet none of this answers the question of phenotypic plasticity and evolution—topics that are completely neglected by molecular geneticists. The same organism has the ability to express different phenotypes depending on the physical and biological environment. And, such plasticity often has a genetic basis, while being adaptive.

Adaptive success or failure are both individual and relative. They reside in the phenotype. Experiential, individual, and relative behavioral and physiological differences exist in how individuals perceive, appraise and respond to challenges, new tasks, change, danger, etc., and whether these are physical or social. For that reason, the topic of stressful experience is inextricably tied to that of adaptation, and of phenotypic plasticity.

The genetics of adaptation remains a neglected topic in Biology: for example, a particular genotype may give rise to different but adaptive characteristics in different environments,⁷ which are produced by epigenetic effects such as early experiences in life. Nothing presently known about genetics, for example, explains the very specific sensitivities individuals display in personal relationships, or to changes in their lives, and to demands in their work situations, etc. They are currently best understood as the learned product of social experiences during maturation and development.

The concept of stressful experience is also relevant to an inclusive theory of health, illness and disease; it is implicit in Evolutionary and Organismic Biology, thus making medicine truly biological, rather than a truncated branch thereof. Darwin's edifice is built on two pillars: variation—especially within species, but also between species—and Natural Selection. Variants are not selected for improved health, but rather they are more or less adapted to resist the vicissitudes of the environment, which in the form of viruses, bacteria, protozoa, fungi, societies, cultures and the climate, are co-evolving in many different ways at the same time.¹⁶⁵

The effects of Natural (selective) pressures are opposed by cooperation, support, and harmony between related members of a group, as already described, and by altruism.¹¹⁶ That is why social animals (including human beings) are at a selective advantage, making them the most successful taxa and species in terms of numbers and varieties. Cooperation enhances the inclusive fitness of group members, and improves the chances of survival, and reproductive fitness.

The Concept of Adaptation in Medicine

Why Darwin's seminal ideas about adaptation were not taken up immediately by the psychological, behavioral, and medical sciences is not apparent. It emerges in the 1930s in the writings of A. Freud¹⁶⁶ and H. Hartmann,¹⁶⁷ both psychoanalysts, who turned away from the preoccupation with unconscious processes, conflict psychology, and symptom formation, to ways in which patients could use regulatory, psychological processes ("defenses") to remain unaware of, control threatening experiences, excessive feelings, or deal with their own sickness, or loss of relatives (e.g., by identifying with them). Hartmann went further: he defined adaptation as a mutual, interactive, recursive relationship between persons and their environments. They could change themselves, or alter the environment in the adaptive process. The aim of adaptation was self-preservation. A person's manner of defending himself/herself was directed not only against internal, but also external, dangers, and was designed to control the potentially disruptive effects on behavior of uncontrolled feelings, such as extreme fear. Hartmann¹⁶⁸ also applied his concept of adaptation to redefining health as a relative matter.

As already noted, Wolff⁵⁶ considered the psychological and organ-specific physiological responses to personally stressful experiences as adaptive and/or defensive. And, Hamburg and Adams¹⁶⁹ studied the psychological and behavioral processes, used by seriously burned military men, to adapt by coping with their injuries.

Appropriate and effective coping processes mediate between an actual or potentially stressful experience and adaptive success. They contain cognitive, emotional and behavioral components. The systematic study of coping was carried out by Lazarus and colleagues.^{170,171} As already mentioned, a requirement for understanding the process was to define its components, first by describing specifically the nature of the potentially stressful experience; that is, its novelty, onset, intensity, duration, magnitude, controllability, and expectancy, meaning, and connotations.

What are the behavioral and psychological resources available to the individual in dealing with them? Highly conserved, evolutionary ways of coping with acutely stressful experiences consist of avoiding, fighting, fleeing, negotiating, or giving-in and submitting. But in human beings these behaviors become more complex and discriminated: planning for change and challenges, joining, or identifying with the threatening human other; preparing for, or solving the challenge, problem, task or danger intellectually, and carrying out the appropriate solutions.

However, some persons exaggerate, others euphemize, or minimize the threat or challenge. Others avoid, or give into it. Others still, exercise, go to sleep, drink alcohol, or smoke tobacco.

Thus one can summarize several categories of coping: passive (giving-in), or avoidance; or active - resorting to experience; seeking information and help from others; focusing on the task or problem; and regulating the internally generated feelings (especially, of fear and distress).^{172,173}

One of the other conserved aspects of adaptation is that environmentally imposed challenges, dangers, and tasks, are internally signaled by emotions—previously described in the presentations of Darwin’s and Mason’s ideas. They alert, and orient the organism to take action, and result in additional coping maneuvers and strategies. Furthermore, successful or unsuccessful coping also has emotional consequences. Success is accompanied by hope and pride; failure by further fear, shame, disappointment, apathy, fatigue, despair, giving-up, hopelessness, depression, and helplessness.¹⁷¹ These three latter mood states are the ultimate criteria of adaptive failure.¹⁷⁴ Helplessness has also been induced in animals by uncontrollable electric shocks. It is followed by a decline of attention and learning, and increased avoidant behavior.^{175,176}

Lazarus further specified “indirect” (emotional) regulatory coping processes. The emotional responses described by Darwin, which signal potential danger, challenge, or change, etc., and the responses accompanying adaptive success or failure are also regulated. If not, fear may grade into behaviorally disruptive panic. By self-reassurance, denying fear, self-deception, prayer, or seeking the help of others, the person may avert the feelings associated with adaptive failure.¹⁷⁰

The many vicissitudes of coping/adaptation, including the failure of some people to surmount, or be aware of their feelings, has consequences for their health status.¹¹⁷ Suffice it to say that much of our knowledge of adaptation and coping derives from its failures. The manner in which stressful experiences are coped with seems to correlate with the individual’s health status. In general, passive (avoidance), or acceptance (resignation) have a negative impact on health, whereas active coping methods are less likely to impair it.^{172,174}

Stress research, and in particular life event research, accords with the adaptational point of view. It has been summarized by Siegrist⁴³:

- Unwished-for, unexpected, uncontrollable events, or those that have harmful consequences, and which interrupt daily living, exact heightened adaptive efforts;
- Particular events in a person’s life—e.g., threats to socio-economic status, bereavements, divorces, physical and sexual abuse, work conditions, or the accumulations of daily challenges in a short period of time—may be experienced as stressful, because the usual ways of adapting do not suffice;

As a result, as in the case of chronically stressful experiences—behaviors and their neurohumoral (and immunological) correlates are altered, or fail (see below). If other specific risk factors for particular diseases and ill-health are present, the probability of their onset is enhanced. To cite but one example: the many forms of immunodeficiency limit the capacity of the organism to mount a humoral, or cellular immune response to infectious agents.

Experimental Stress Research: Animal and Human Subjects

In the ensuing sections, some paradigmatic experimental studies of the past 30 years will be reviewed in order to support some of the previous contentions. The many procedures which have been used are summarized in Tables 5 and 6. Later, the results of investigations which have demonstrated how stressful experiences can terminate in bodily disease, both in animals and human beings, will be described (Tables 7A & 7B). The review will also briefly allude to the fact that specific strains of animals have been bred to be stress-prone or -resistant due to genetic differences; for example, the Lewis rat did not respond to antigenic challenge by mounting a GC response, was less responsive to novelty, adapted more rapidly to stressful challenges, and the glucocorticoid receptors (GCRs) in its neural cells and immunocytes were less zresponsive to stress-induced increases in GCs levels.¹⁷⁷

Many earlier investigations were designed to measure the physiological correlates in single subsystems after acutely stressful experience. More recently, patterns of physiological responses in several

Table 5. Experimental stressful procedures

Naturalistic: Animals
Cold and heat exposure
Food deprivation
Noise
Novel environments
Predator threats
Social hierarchies
Formation
Maintenance
Disruption
Conflict
Swimming
Experimental
Anesthesia
Bleeding
Conditioning:
Classical e.g.,
Avoidance: aversive, fear
Operant, taste
Electric shocks
Expected; unexpected
Controllable; uncontrollable
Food deprivation
Grouped housing
Handling
Novelty
Pain induction
Restraint
Surgery

Table 6. Experimental laboratory stressful procedures: humans

Exposed to feared objects
Frustrating, difficult or unsolvable tasks
Mental arithmetic
Noise
Sleep deprivation
Viewing films

subsystems have been measured simultaneously. Only in the last 30 years have the differences in organisms' responses to chronic experiences also been studied, while at the same time some of the physiological changes in a subsystem (e.g., hormonal) are now being related to other subsystems, such as the immune system.

Chronically stressful, or excessive negative experiences lead to persistent fear, vigilance, helplessness, or pain in animals. Yet despite these, more arduous conditions, adaptation may remain intact, and behavioral and physiological subsystems may stay regulated without major disruptions of health.^{178,179}

Table 7A. The development of coronary heart disease, myocardial infarction or sudden death (from refs. 42, 218–221)

I. Chronic Risk Factors	Behaviors	Physiology	Cardiac Effects	Pathology	Outcome
a. Poverty	a. Type A	High blood	Enlarged	Coronary	Coronary
b. Lack of exercise	b. Smoking	pressure	left	arterio-	heart
c. Obesity	c. Alcohol	Apolipoprotein	ventricle	sclerosis	disease
d. Performance demands/low rewards	d. Sleep/Apnea	A-1			(CAD)
e. Chronic	e. Sleep disturbances	LDL cholesterol			
f. Gender		LDL (up)			
		HDL (down)			
		Fibrinogen (up)			
		Beta-adrenergic receptors (down)			
		Epinephrine (down)			
←———— Six Years —————→					
II. Episodic	Vital exhaustion	Autonomic imbalance		Episodic Ischemia	Progression (CAD)
		Macrophages in coronary arteries (up)			
		Blood clotting (up)			
		Fibrinolysis (down)			
←———— Two Years —————→					

Table 7B. The Development of Coronary Heart Disease, Myocardial Infarction or Sudden Death

III. Precipitating Events (Acute)	Time	Physiology	Effects on Heart	Pathology	Outcome
Anger	Morning	Increased:	a. Cardiac arrhythmias	a. Ischemia	Myocardial infarction
Exercise		a. Heart rate	b. Coronary vasoconstriction	b. Plaque rupture	Sudden death
Stressful		b. Blood pressure	c. Increased requirement for oxygen to heart	c. Thrombosis	
		c. Blood volume	d. Decreased coronary blood flow		
		d. Blood platelet			
		e. Blood coagulation			
		f. Sympathetic activity			
		Decreased:			
		Parasympathetic activity			
←———— One Hour —————→					

General and Specific Physiological Responses to Stressful Experiences: Patterns’ Not Single Variables (See Tables 7A and 7B)

As previously noted the experimental work of Cannon and Selye led to the conclusion that regardless of the inciting situation, or trauma (Selye), or the emotional behaviors engendered in the animal (Cannon), the same general, but singular, physiological (respectively, E and GCs) responses occurred. In Cannon’s experiments, they were adaptive, in Selye’s they were not.

But as previously pointed out, in order to control and master a potential or actual stressful experience, organisms must make an appropriate, adequate and specific adaptive response. If the event is ambiguous, however, such responses are not likely to be possible. As previously noted, general behavioral responses such as fleeing, fighting, avoiding, hiding, submitting, or “negotiating” are conserved throughout Evolution. Additionally, each person or animal also has his/her specific and appropriate ways of adapting to particular events, situations and experiences. Furthermore, general and specific physiological responses occur in response to potentially stressful experiences, but they also vary according to their novelty, expectability, controllability, acuteness, intensity, duration, repetitiveness, the context and time of day or night during which they occur, and the ongoing preparedness and behavioral state of the animal.

Cannon and Selye were in part correct empirically, if not theoretically. The anticipatory and almost immediate physiological responses to a wide variety of tasks and stressful experiences, and novelty, is the secretion of E, followed by norepinephrine (NE), and then (in human beings), of cortisol. The cooperative, physiological function of these three substances is to mobilize energy resources—e.g., glucose from liver and muscle glycogen, and free fatty acids from muscle—to underwrite the immediate energy requirements of the organism to fight, flee, exercise, exert itself, etc. At the same time, respiratory ventilation, heart rate (HR) and cardiac output (CO) increase to deliver oxygen to cells for their increased metabolic needs.

Epinephrine increases cerebral, splanchnic and muscle blood flow mediated by β -adrenergic receptors, and potentiates the strength of myocardial contraction. While NE raises peripheral resistance and thus BP levels, and the stroke volume of the heart.

The GCs have both general and specific actions. It took many years for their role to be reconceptualized.¹⁰² They act together with E and glucagon to stimulate hepatic gluconeogenesis; but they inhibit glucose uptake by peripheral tissues, promoted by insulin. They suppress insulin secretion by pancreatic β -cells. In summary, they modulate the action of insulin, and glucose secretion. They also regulate allergic, inflammatory (e.g., PG synthesis), and immune reactions (see below). The synthesis and/or secretion of corticotrophin releasing hormone (CRH), β -endorphin, and other proopiomelanocortin products, and arginine vasopressin (aVP) are counter-regulated by GCs via specific receptors. The GCs, therefore, play a key regulatory role in stressful conditions.

Under basal conditions they are secreted with a circadian rhythm, and then play a permissive, and not a regulatory role. The circadian rhythms of the catecholamines and of lymphocytes are the mirror image of the GCs’ rhythm. Thus, the time of, and hour at which an acutely stressful experience is imposed on an organism, is another variable, affecting the outcome.

The GCs are bound by, and act through a heterotrimeric, cytosolic receptor (GCR), which on activation dissociates to bind to a specific transcription factor that induces or suppresses, at least 25 genes coding for, amongst others, synthetic enzymes for biogenic amines, PGs, carbohydrates, fats, and amino-acids. These actions are, however, context dependent, and tissue specific.

The GCs have a variety of effects on immune function: low doses enhance interleukin-4 (IL-4) production *in vivo*; activate T-cells; and increase the expression of receptors for IL-1, -2 and -6, tumor necrosis factor (TNF), and the migration inhibition factor (MIF); induce acute phase proteins; while raising the levels of some complement factors. Under certain conditions, they promote apoptosis of leukocytes, or lyse them.

The GCs, therefore, play both general and specific modulatory and regulatory roles, depending in part on their ambient levels.^{102,177} The same generalization of their roles holds for components of the immune system.

The antibody response mounted by specialized B-lymphocytes and plasma cells to viral, bacterial, and other classes of antigens is highly specific; but in addition, the immune system becomes activated on any antigenic challenge, and an acute-phase response occurs due to the release of a large number of cytokines, in particular IL-1 β and TNF. Interleukin-1 β induces fever and fatigue, suppresses appetite, promotes slow-wave sleep, and the secretion of CRH. It stimulates the production of neutrophils by bone marrow, the synthesis of a variety of proteins (e.g., C-reactive) by the liver, while suppressing albumen synthesis. It depresses serum iron levels, and iron metabolism. It stimulates fibroblasts to proliferate, and collagen to be synthesized to promote tissue repair.¹⁸⁰ Therefore, it would appear that Selye’s original question about non-specific symptoms in infectious diseases, such as loss of appetite and fatigue, has been answered.

Beginning in mid-century, psychophysiologicalists began recording in human subjects a limited number of cardiovascular responses to various procedures in the laboratory. The subjects were confronted by a variety of challenging experiences, or the threat of, or actual induction of pain. Heart rate, BP changes, ballistocardiographic, and galvanic skin responses were measured, as a means of inferring sympathetic nervous system activation.

It is a curious quirk of history that psychosomatic and psychophysiological investigators originally pursued the study of single, or a small group of physiological variables, while seemingly oblivious of the findings and concepts of, what is now called, systems physiology, one of whose founders was Cannon's colleague, L. J. Henderson.⁵ He demonstrated that only the *interactions* among several respiratory variables were meaningful, and he displayed them in a matrix. Henderson was Richards' mentor. Beginning in 1940, Richards⁵ investigated the patterns of hemodynamic changes occurring in various forms of traumatic shock, incited by fractures, burns, and other forms of injury to various parts of the body. In some forms of injury, the patterns were the same, and in others they were not.¹⁰¹

Patterned Catecholamine and Hormonal Responses to Avoidable Procedures

Mason^{99,106} also revised our notions about the catecholamine, and other hormonal responses in monkeys trained either adaptively to avoid painful electrical shocks, or conditioned to a fear response. He markedly enhanced our knowledge as to how specific to these two situations the physiological responses were. Furthermore, the patterned responses unfolded differently over time, and consisted of increases, decreases, or both.

Great care in these experiments was taken to observe the animals' behaviors. Mason also recorded anticipatory behavioral and hormonal responses before any conditioning procedure was initiated. A monkey deprived of food in a setting, in which its peers were being fed, had different (unconditioned) behavioral and physiological responses than when deprived in isolation. Such purely "psychological" experiences also produced increases in GCs excretion. Mason thus focused attention on the fact that a monkey's emotional response was specific to each situation, although increased GCs secretion was not necessarily so. As noted, Mason¹⁰⁶ recorded unfolding patterns of serum and urinary catecholamine and hormone levels during 72 hours of avoidance conditioning. The most rapid increases were those of E levels, which fell precipitously after the procedure was over. Norepinephrine levels had a slower rise, but remained elevated for six days after the conditioning sessions had ended. 17-Hydroxycorticosteroid excretion levels rose to a peak 48 hours after the start of the experiment. Plasma insulin levels fell throughout the experiment but rose markedly afterwards. Urinary testosterone (T) and estrogen (E₁ and E₃) levels both fell only to recover when the conditioning sessions were over.

In summary, some blood and urinary hormone levels rose, some fell, some recovered to baseline levels quickly, in others, the fall persisted. Other enzymes (e.g., Pg), and hormone-derived levels (e.g., protein-bound iodine) also showed individual patterns of response.

Mason's work disproved the idea once and for all that there was a specific category of "stress" hormones. In fact, 13 different substances, some not generally considered at that time as being remotely connected with experimentally-produced, stressful experience, were altered in this experimental situation.

Mason's experiments demonstrated that an adaptive, behavioral avoidance response was associated with patterns of physiological changes, which were different than those produced by inferred hunger. Both were context dependent. His demonstration markedly extended, and revised Cannon's observations.

"Stress" Analgesia: Unavoidable Experiences

Unavoidable experiences are most likely to bring about bodily changes, as Selye had demonstrated. Amongst the most interesting and informative phenomena described in the past 30 years is stress analgesia.¹⁸¹ Continuous, unavoidable electric shocks (120 for 2 minutes) applied to the feet of rats,

produced one form of total body analgesia, mediated by histamine, but not opioids. Whereas discontinuous shocks (120 for 10 minutes) induced an opioid-dependent form of analgesia.¹⁸² Subsequent investigations have shown that the two forms of analgesia were mediated by different brain circuits. Stress analgesia was also manifested in male rats defeated in a fight, and other rats that were threatened when they intruded into the home-cage of another male. Rats made to swim in cold water also became analgesic, but the water temperature determined whether the analgesia was opioid-dependent, or not.¹⁸³

Therefore, the mediators of the analgesia were exquisitely-dependent on the parameters of the electric shock, and the temperature of the water, in which the rat was immersed, pointing up once again the necessity of specifying in detail the stressful experience.

Studies in Nature: The Physiology of Social Hierarchies (Dominance and Submission)

Equally influential as Mason's experiments were Henry's observations on the role of social confrontation in colonies of mice¹⁸⁴—a chronically challenging and recurring situation for the animals. As a social rank-order was established during the formation of the colony one male mouse assumed the dominant role, patrolling the periphery of the colony, while “granting” himself the “privileges” of being the first at the food source, and of mating with receptive females. This mouse paid the price for his status by developing elevations of systolic BP, which correlated with an increased content of adrenal E, and levels of plasma NE, and of several of their synthesizing enzymes—monoamine oxidase, tyrosine hydroxylase, and phenyl ethanolamine N-methyl transferase—in the adrenal medulla.¹⁸⁵

Henry and colleagues¹¹⁴ later published a conceptual model based on his data. When male mammals perceived a threat, they usually coped with it if they could control it. But if they could not, and loss of control was threatened (e.g., in a fight), behavioral arousal and an aggressive response occurred, mediated by the amygdala nucleus. The hypothalamic defense reaction was activated, increasing serum E, NE, and T, but not GCs, levels. When the animal lost control over the fight, it assumed a submissive posture mediated by the hippocampal-septal system. The hypothalamic pituitary adrenal (HPA) axis was then activated, resulting in the increased secretion of ACTH and GCs, a precipitous fall in T secretion, but no changes in catecholamine levels. Henry emphasized the central importance of control over a threat, or a fight; when maintained, patterns of hormonal and catecholamine secretion occurred, which differed from those observed when it was lost.

However, later data has revised his notions somewhat. Catecholamine and GCs secretion patterns are both centrally controlled by CRH. They have different time courses, as Mason first demonstrated, but they are not as independent as Henry postulated them to be.

Naturalistic Studies of the Role of Social Status on Hormonal Secretory Patterns

Hypercortisolemia occurred in subordinate, male olive baboons living in the wild, and observed at regular intervals for six years, who were continually harassed by the dominant male. The hyper-cortisolemia results from a reduction of the inhibitory responsiveness to CRH of GCRs on anterior pituitary corticotrophs.¹⁸⁶ The subordinate males also had chronically lowered serum T levels.¹⁸⁷

Social status also affected the function of the hypothalamic-pituitary-ovarian axis in female marmoset monkeys, kept in submission by the dominant female. The subordinates did not ovulate. Their serum levels of luteinizing hormone (LH) and progesterone (P) were unvaryingly low. When removed from the presence of the dominant female, or when infused with pulses of LH-releasing hormone, even in the presence of the dominant female, their normal oscillatory patterns of LH resumed, and serum P levels rose.¹⁸⁸ The suppression of LH and P levels has also been described in subordinate, female naked mole rats, due to an odor sprayed by the dominant female rat on the subordinate.¹⁸⁹

These experimental and naturalistic observations on chronically challenged animals of three species demonstrated an association between challenges and reproductive fitness.

Cardiovascular Patterns and Fighting Behavior

Patterned cardiovascular responses, not only hormonal ones, have been described in cats preparing to, and during a fight.¹⁹⁰ During the initial phase, the animal pawed the air, its HR and CO fluctuated, but BP levels remained unchanged. Blood flow in the mesenteric, renal and iliac arteries diminished. During the fight itself, the cats' claws were extended, its teeth bared, and it attacked its opponent, during which period HR, BP and CO all rose sharply. Blood flow in the mesenteric arteries was further reduced, while it increased sharply in the iliac and femoral arteries. This circulatory pattern (in the legs) was maintained when the cat fled.

These studies once again underlined the need to study both behavior and cardiovascular adaptations at the same time, and point up their discriminated natures.

Patterned Psychobiological Responses to Disruption of the Mother–Infant Relationship

The foregoing review dealt with specific patterns of behavior and physiological responses to injury in human beings, and with controlled experimental, and naturalistic studies of prototypically stressful experiences in three species of animals. Henry demonstrated that the assumption of dominant status and chronic confrontation in a male mouse ended in BP increases, elevations of enzyme levels, and had a profound impact on cardiovascular physiologies.

However, none of these studies incorporated the role of early experience on the later behavior and physiologies of animals (rats). A developmental perspective is critical for any comprehensive model in medicine, and for an understanding of how early experience may set the stage for later responses to challenges.

When 14-day old rats were separated from their mothers, a variety of behavioral and physiological changes^{129,191} occurred in a time-dependent patterned manner. The magnitude of the changes in each system varied.

The immediate response to separation of these young rats was to emit ultrasonic sounds, whose incidence rapidly declined. Serum GCs levels, exploratory motor activity (when the ambient temperature remained at about 36°C.), and non-nutritional sucking increased. The infant's sleep was repeatedly interrupted, and the percentage of rapid eye movement sleep declined at the expense of slow wave sleep. Plasma growth hormone (GH) levels fell. Body temperature could not be maintained unless the animal was artificially kept warm. The separated infant's HR fell 50% but its BP did not. Brain monoamine levels decreased, unless the infant's body temperature was artificially maintained. At the end of the 24-hour period of observation, proffered food was ignored, and the animal became quiescent to the point of immobility.¹²⁹

These elegant, analytic experiments have not only revised our knowledge about the many systems affected by separation but also our ideas about the nature of the mother-infant interaction. These observations told us that each of the rat pup's behavioral and bodily systems "responded" before separation to different maternal signals, which act as their regulators, and were mediated by different body-surface receptors on the infant: for example, maintaining the pup's body temperature regulated its motor activity level. The infant's HR was prevented from falling by the mother's milk, which, however, had no effect on its activity level. Growth hormone levels were maintained by stimulation of its nuchal hairs and skin.

The effect of separation, which rapidly reduced GH levels, was particularly instructive: if prolonged, it could permanently alter the transcription of a key enzyme, ornithine decarboxylase (ODC), involved in growth and in polyamine synthesis.^{192,193} The transcription of the ODC gene is under the control of several regulators, of which GH is but one.

The developmental physiology of the HPA axis was also affected by premature separation. Usually, for the first four days after birth, the infant rat showed brisk GCs responses to stressful experiences. Normally, when the rat was 4–14 days old these responses vanished. The response to ACTH injection in this second period became elective, but after 24 hours of separation at that time, young rats continued to be responsive to changes in the environment and to pain: they showed brisk GCs and ACTH secretion to novel environments, or to saline injections. The specific situations that also brought back adrenal responsiveness was the milk supplied by the mother, and the characteristic anogenital licking of the pup by the mother.^{194,195} The separation experience of young rats appeared to alter the regulation of at least one gene, and also the regulation of the HPA axis. Specifically, anogenital licking reduced the secretion of CRH, during the first 14 days of the life of normal rat pups, while also increasing the numbers of GCRs on hippocampal neurons.¹⁹⁶

Hofer's innovative studies not only demonstrated the importance of the mother–infant interaction in the regulation of behavior and physiology, but also allowed the inference to be made that several rhythmic systems (e.g., sleep) were altered by separation, while also disrupting the transcription of, at least, one gene. And, Ladd's and his coworkers¹⁹⁵ observed that as adults, prematurely separated rats, respond to challenges by enhanced CRH responses.

(Later, a review of the disease consequences of separating 14-day old rats from their mothers will be carried out).

Stressful Prenatal Experience

The main focus of earlier experiments in the past Century had been on the acute and chronic effects of stressful experiences on adult animals to alter phasic changes in behavior, bodily function, and in structure. No one had conceived of studying the effects of prenatal experience on later behavior and physiology until Ward and Ward did so. They exposed pregnant rat dams to a specific experience to determine whether their offsprings' later behavior and physiology were altered.¹⁹⁷ When the dams were presented with a light stimulus and restrained during the last week of gestation, their male offspring, when sexually mature, displayed female copulatory (“lordosis”) behavior to an ardent, male rat. But they did not copulate with, or ejaculate, when presented with a receptive female.

The sexually dimorphic, hypothalamic preoptic nuclei was smaller in the male offspring whose mothers had been exposed to light and restraint. The discrepancy in size was correlated with a failure of the usual, sharp rise in serum T levels at 18–19 days of gestation in fetal males.

The male offspring also had reduced plasma levels of LH, and a reduction of the hypothalamic content of the enzyme, aromatase, which converts androgens to estrogens. And, the activity of another enzyme, $\delta 3$ - β -hydroxy-steroid dehydrogenase, was diminished in the Leydig cells of their testes. These effects on the male offspring could be averted by treating the dams with naloxone before exposure to light and restraint. However, naloxone injections after birth did not affect the feminized sexual behavior of the male offspring.

In an age when differences in behavior and physiology tend to be ascribed exclusively to genes by many biologists, Hofer's and Ward's experiments exemplify the epigenetic effects of specific experiences on later behavior and physiology.

Hormonal Effects of Chronically Stressful Experience

With the exception of Henry's studies on dominant male mice,¹⁸⁴ Sapolsky's on apes,¹⁸⁶ and Kiecolt Glaser's description of the immunological consequences of taking care of elderly (demented) patients (see below), there have been few that have followed animal or human subjects for prolonged, stressful periods. Such observations must take into account the fact that subsystems being measured vary constantly in concert with the changing environments, and circadian rhythms.

Some subsystems (e.g., receptors) may become habituated, or their regulation changes. In chronically stressed rats, the response characteristics of the HPA were altered in the following manner¹⁹⁸: (1) ACTH

secretion, but not synthesis, became less regulated by CRH and more by aVP, which is less suppressible by GCs than ACTH is; (2) The messenger RNA (mRNA) for aVP was increased in the paraventricular nucleus (PVN) of the hypothalamus. These neurons also showed enhanced α -1 adrenoreceptor-mediated responsiveness, which facilitated the regulation of ACTH secretion by aVP; (3) Diurnal GC rhythms were blunted in the face of raised GCs levels; (4) However, in chronically stressed rats, the responsiveness of the HPA was facilitated by prior stressful experiences, and remained so when new ones were imposed throughout the diurnal cycle.

Although the elevations of GCs levels during these chronically stressful experiences were partially adaptive, and even life-saving (modulating infection, reducing fever, etc.), they were also deleterious—raising mean arterial BP, insulin and blood lipid levels, and promoting central fat deposition when food supplies were plentiful. These circulatory and metabolic changes promoted arteriosclerosis.¹⁹⁹ *Chronically stressful experiences in rats and monkeys with elevated GC levels were also associated with the death of hippocampal neurons.*²⁰⁰

In summary: an animal can survive acute challenges and dangers if the HPA axis is intact. But in the chronically stressed rat, the regulation of the HPA axis is altered, resulting in adaptive, but also maladaptive, circulatory and metabolic changes when GCs levels are chronically raised, and their diurnal rhythm is altered.

The foregoing (selective) review of investigations on animals and human beings has clarified many puzzling issues about the roles of patterned behavioral and physiological changes while animals were making adaptive (avoidant) responses, meeting challenges and threats from peers, establishing and maintaining social hierarchies, and fighting. The importance of controlling and avoiding, or not, the experience was emphasized. The effects of altering the pre- and post-natal experiences of rats on their physiology and later behavior was documented. New phenomena such as stress analgesia were described. As the twentieth century drew to its close, the impact of acute and common challenges, and chronic tasks on immunological variables were being described.

One of the most puzzling issues—the different effects of acute and chronically stressful experiences—began to be clarified. Generally speaking, as Mason's observations demonstrated, a wide range of hormonal responses occurred while the monkey was making adaptive, avoidant responses during a 72-hour task period. Each hormonal change had its own time course, but most returned to base line within minutes or hours after the end of the procedure. The same conclusion may be drawn of the cardio-vascular responses described in fighting cats. However, in the case of Hofer's and Ward's observations, long-term behavioral and hormonal alterations after an acute experience were documented.

When the stressful experience is chronic, or recurrent, persistent and/or altered physiological responses occurred—such as elevations of BP in rats, hypercortisolemia, and tonic suppression of T levels in subordinate male baboons, and a reorganization of the regulation of ACTH secretion, and alteration of circadian GC rhythms in rats. As the subsequent sections will also detail, these physiological changes may have beneficial and/or detrimental effects on health.

Clarification of this conclusion has occurred by broadening the range and interactions of subsystems—by studying the effects of acute and chronically stressful experience on catecholamine and GC secretion levels while also taking measures of a number of parameters of immune functions (reviewed in note 177). Acutely stressful experiences mediated by increased plasma GCs levels produced a redistribution of blood leukocytes, decreased the number and percentage of circulating lymphocytes, while increasing the number and percentage of neutrophils, in a large number of animal species.

Patterns of Changes in the Immune System in Human Subjects

Stressful experiences may alter single, or patterns of component(s) of the immune system in animals and human beings—a line of research [psychoneuro-immunology (PNI)] that began in the 1960s.²⁰¹ However, a note of caution needs to be introduced: Attempts to delineate the impact of defined experiences, using

in vivo and in vitro immunological techniques, have created uncertainty over the clinical significance of the measured changes, and whether they were large enough to alter immuno-competence.²⁰²

Beginning with the use of mitogens to produce proliferation of both B and T cells, the next technics developed consisted of measuring natural killer (NK) cell numbers, and/or their activity. These technics were designed to evaluate selective changes in the number of subpopulations of lymphocytes. But measuring decreased NK cell activity alone begs the question, unless one simultaneously measures, for example, a rise in circulating antibody to a virus (e.g., herpes simplex virus I), immunity to which is partly conferred by NK activity. With the subsequent development of other techniques (e.g., cell sorting), it became apparent that there were minimally¹⁶⁶ cluster designations (CD) markers on immune cells, which characterize their phenotypes, but not necessarily their function. Nor does the presence of a CD tell us whether the cells are activated or not—the number of a particular phenotype in the blood may have changed due to their redistribution to various bodily compartments. Thus a minimal requirement when using sorting techniques is to count a change in the number and the functional efficacy of that phenotype. Changes in cell numbers depend not only on an antigenic challenge but reflect circadian variations in numbers, and their constant migration in and out of the bloodstream, which are in part also regulated by GCs and the catecholamines.

Cytotoxicity assays of T or NK cells also have their limitations, although they are fashionable in PNI research. Some of these assays are not physiological; and, numerous variables affect cytotoxic activity, which need to be controlled for in every study.

Technical limitations and problems of interpretation also becloud measures of antibody titers, cell proliferation, blast transformation, and the estimation of cytokine levels. From a physiological point of view the latter would tell us most about the state of regulation of the immune system. However, only a very small number of cytokines can be detected in the serum of healthy human beings due to the lack of sensitivity of the techniques.

Despite these several difficulties, considerable progress has occurred in PNI research. Immunological patterns, not single variables, have been measured prospectively during every day challenges in students during medical school examinations.

Kiecolt-Glaser and her colleagues described their results in a series of such studies (rev. in note 203). Natural killer cell activity, proliferative responses to mitogens, interferon gamma (IF γ) production by stimulated lymphocytes were reduced, while plasma and intracellular levels of cyclic AMP were increased. These changes were interpreted as representing decreased cellular immune competence—an inference supported by impaired responses to hepatitis B virus inoculations in some students. The experience of examinations also reduced the synthesis of IL-2 receptor mRNA by leukocytes, and the level of IL-2 in cell cultures. The subgroup showing these changes was independently assessed as having been more stressed by the examinations, and also more anxious. The students most affected by examinations were also the lonelier, and the more work-oriented. They reported more symptoms of mild infectious illnesses during the examination period.

Kiecolt Glaser²⁰³ also described the long-term immunological and endocrine effects on the healths of caregivers to chronically sick patients. These studies are of considerable historical importance. Most previous studies as noted, both in the laboratory and in the field, had reported on the effects of acute or short-term stressful experiences on animals and human beings. They needed to be supplemented by the effects of chronic or intermittent (or both) stressful conditions, changes, challenges, and/or demands.

Other studies on caregivers of elderly persons, divorcees, married couples in conflict with each other, etc., have been carried out, while measuring patterns of immune and endocrine variables, and health outcomes. They have advanced our knowledge of the vicissitudes of human relationships and stressful experiences in altering immune function, and the responses to viral infection.

Acute Stressful Experience Imposed on Chronic Ones in Human Beings

In human beings, chronically stressful experiences (e.g., bereavement) have been associated with increases, decreases, or no change in baseline circulating levels of E and NE, no changes in serum cortisol levels, and a variable reduction in NK-cell activity. As already mentioned, only a small number of human

studies have examined the physiological correlates of imposing an acutely stressful experience on persons experiencing a chronic, ongoing, stressful one.

When community volunteers were assessed by the Brown and Harris contextual rating scale and other scales, they could be grouped as either living through chronically stressful experiences, or not. Members of each group were then subjected to a 12-minute period of mental arithmetic, and a video control one. The two groups did not differ at baseline on any physiological measure. But as the result of the challenges, the experimental group experienced more distress, and significantly higher, acutely occurring, peak levels of E, lower peak levels of β -endorphin, a protracted lowering of NK-cell lysis, and more evidence of NK-cell redistribution.²⁰⁴ However, no measures of the development of feelings, or the development of symptoms, were taken in this study.

Longer lasting decreases in lymphocyte numbers affecting T-helper and B- cells, monocytes, NK, and large cytotoxic T-cells have also been observed. Recovery of their number and percentages to baseline levels occurred within three hours after the termination of the experimental procedure. Analytic experiments demonstrated that these longer-term effects were mediated by GCs acting through the Type II GCR on lymphocytes and monocytes. Both E and NE (whose secretions, as noted, were more rapidly mobilized than GCs by the acutely stressful experiences), increased the numbers of neutrophils and NK-cells in the first 10 minutes while B- and T-cells numbers decreased—effects mediated by α -1 and β -adrenergic receptors. The rapid increases in blood granulocyte numbers brought about by E and NE were later counter-regulated by GCs, leading to their fall in the next two hours.¹⁷⁷

The changes in number and percentages of the various immunocytes during acutely stressful experiences, resulted from their redistribution from the circulation to the skin, gut and urogenital tract mucosae, spleen, and lymph nodes. This redistribution was likely to be adaptive, in preparation for local injury and infection.

Short-term and/or mildly stressful tasks, experienced by human subjects, such as public speaking, mild exercise, or mental arithmetic, were mainly mediated by the catecholamines, which increased granulocyte and NK cell numbers. However, longer lasting tasks and challenges, mediated by GCs, decreased them. Thus biphasic responses occurred.

Acutely restraining rats enhanced cell-mediated immunity, mediated by GCs; while applying electric shocks to their feet increased both humoral and cell-mediated immunity. Mice exposed to cold showed accelerated antigen removal. Glucocorticoids administered to mice in physiological doses enhanced IgG production by mitogens, and shifted the balance to TH2 cells, and enhanced nitric oxide (NO), IL-1 β and TNF α secretion by macrophages.

However, chronic stressful experiences in human subjects suppressed leukocyte redeployment, humoral and cell-mediated immunity, effector NK cell function, resistance to a variety of viral and bacterial infections, and delayed wound healing. These alterations may be associated with feelings of exhaustion, demoralization, helplessness, and in the giving-up syndrome, described in humans in the face of chronic, repetitive stressful experiences, and the dysregulation of ACTH secretion and alteration of circadian GCs rhythms in rats (vide supra). To complicate the matter further, leukocytes themselves secreted CRH during local inflammations; the peptide stimulated the (inflammatory) reaction.

In the review of their investigations, Dhabhar and McEwen¹⁷⁷ clarified many issues about the effects of acute and chronic stressful procedures on several components of the immune system, and the mediating roles of the catecholamines and GCs. As noted already: (1) Acutely and chronically stressful experiences had opposite effects on a number of immunological variables: in particular, leukocyte redistribution; (2) The immune response from the presentation of antigen to the production of antibody was a complex multistage process. Thus, the timing of the stressful experience, relative to the time course of the unfolding immune response, was a critical variable. Glucocorticoids affected a number of separate factors in this multistage process; (3) Individual animals and human beings each varied in the amount of GCs secreted, and, the responsivity of, and rapidity with which GCRs adapted; (4) As previously noted, circadian rhythms of peripheral blood lymphocytes and leukocytes, and of NE are the mirror images of the GC rhythm. The relevance of these rhythms was twofold: circadian suppression of T-cells by GCs has been described, and the time of the night or day when an organism was exposed to a stressful experience, or

an antigen, determined the outcome of the procedure; (5) When endogenous GCs levels were low, their binding to their carrier globulin was high (80%). When levels were high (during peak circadian levels, or after stressful experiences), the binding was low (50%), permitting much higher levels of effective free GCs. Therefore, when exposing organisms to stressful experiences, the investigator must take into account not only the base line level of the GCs, but the amount of their binding. The relevance of doing so is that it seems that low levels of GCs were permissive, or enhancing to immune function, while high levels were inhibitory. (Normal growth and the regulation of several enzymes in the brain also depended on free GCs levels.)

As pointed out in Dhabhar's and McEwen's review,¹⁷⁷ the enhancement of the immune reaction by acutely stressful experience mediated by GCs may increase the resistance to infectious agents, and tumor formation, but it may, at the same time, exacerbate other inflammatory, and autoimmune, processes. Whereas chronically stressful experiences leading to immunosuppression by sustained GCs levels, may have the exact opposite effects on these disease processes.

It has taken many years to sort out the numbers of variables involved in the release of GCs and catecholamines following stressful experiences, their modulation and regulation of immune function, and disease inception.

Summary

These representative studies have markedly enhanced our understanding of the patterned, behavioral physiology of stressful experiences, the differences between the effects of acute and chronic ones, and the long range changes occasioned by prenatal and postnatal ones. Because of the manner in which data are gathered, reduced and analyzed, the reality of the rhythmic nature of every behavioral and bodily function is obscured. *Patterns are the product of positive, negative and mixed feedback systems, pattern generators, and biological clocks, which are also the product of complex feedback systems due to the interactions of proteins.*

Animal Models of the Association of Stressful Experience and Disease Onset

The investigations just reviewed did not answer a central question of psychosomatic research—can stressful experience be a factor in the onset of diseases? The only exceptions to this statement were Henry's^{184,185} demonstration of the development of elevated systolic BP and chronic nephritis in dominant male CBA mice, and Dallman's that chronically stressful experiences anteceded high BP and arteriosclerosis in rats.¹⁹⁸

Animal models of the relationship of stressful experiences to disease onset added validity to clinical observations of such an association. And they also permitted the explorations of some of the proximate mediating processes, which link one to the other. If experiments have a developmental long-term perspective, insights can also be obtained into some of the ultimate factors in the inception of bodily disease.²⁰⁵

The role of genetic factors in disease can also be explored in animals bred to be stress-sensitive, or-resistant. Transgenic or null-mutant mice have been produced; they are especially useful as models of monogenic, human diseases.²⁰⁶

Research on animals has enhanced our knowledge of the role of stressful psychosocial factors, early experience, conditioning, or perturbing social arrangements in producing a variety of disease states: gastric erosions; immune-related and infectious diseases; tumor development and metastasis; growth delays; the development of hyperglycemia in Type II diabetes mellitus; atherosclerosis; and altered BP regulation.²⁰⁷ Although it remains unclear whether wild rats develop gastric erosions,

many different experimental procedures have been devised to incite them since Selye first caused them to develop. *Critical in later experiments was the animal's ability to predict and control the onset of signaled electrical shocks; when unable to do so, the extent of the erosions was greater by a factor of 6.*²⁰⁸

Early Experience and Later Disease

Central to most integrated concepts of disease is the belief that genetic and early experiential (epigenetic) factors can contribute to the risk for disease later in life. In the case of gastric erosions, the genetic tenet was shown to hold.²⁰⁹ On the other hand, male rats of a uniform strain, prematurely weaned at 14 or 15 days, were eight to nine times more likely to develop gastric erosions as normally weaned animals were, when both groups were restrained at 22 or 30 days of age.²¹⁰

Later, at 40–60 days of age, the susceptibility to erosion formation of the separated animals diminished; while normally weaned, but separated animals became more liable to lesions. Therefore, no simple linear relationship existed in the increased vulnerability to erosion formation with age, for reasons that so far have not been explained.

The critical intervening variable in erosion formation in prematurely weaned rats was their inability to maintain their body temperature in the second half of the 24-hour immobilization period.²¹¹ The fall in body temperature was 8°C. If these restrained rats were kept warm, no erosions formed. Their inability to maintain body temperature was latent; it was elicited by restraint. It was inferred to be a product of the fact that the 14- or 15-day old rat did not eat laboratory chow for two days after weaning. But if the young rat was allowed to lap milk from the sidewall of a plastic cage, it neither lost weight, nor did body temperature fall when restrained, and it did not develop erosions.²¹²

The link between adequate nutrition and the development of adaptive thermoregulation, appeared to be the amount of brown fat that the young rat laid down; if the stores were small, they became rapidly depleted with restraint, and body temperature could not be maintained.

Subsequently, Paré demonstrated that a fall in body temperature mediated many different experimental procedures that ended in gastric erosions in rats. However, strain differences were apparent in the differential incidence of erosions, as were the rates of recovery of normal body temperature following restraint.²¹³ The prematurely separated rat also demonstrated a disturbance of the sleep–wake cycle, with a progressive loss of activated sleep during restraint.

The proximate mechanisms of gastric erosion formation were not explained in these experiments. Subsequent research has, however, shown that the role of increased gastric acid secretion was not by itself responsible for erosion formation in rats; however, a minimal amount of hydrochloric acid in the stomach was a necessary condition. In combination with slow gastric contractions produced by cold and/or restraint, etc., it might be, but neither alone was sufficient to do so.²¹⁴

The regulation of gastric acid, bicarbonate, serotonin, prostaglandin, and mucus, etc. secretion is extremely complex. They are under both local and vagal control. The dorsal motor nucleus of the vagus (DMV)—the principal source of efferent fibers to the stomach—is under the influence of monosynaptic pathways from the central nucleus of the amygdala (CNA), the PVN of the hypothalamus, the central gray and the reticular nuclei of the brain stem, and the nucleus tractus solitarius.

A great deal of indirect and direct evidence has accumulated that suggested that stress-induced, slow gastric contractions and erosions were produced by the stimulatory effects of thyrotropin releasing hormone (TRH) in physiological doses, and of serotonin on DMV neurons. These effects were counter-regulated by CRH and bombesin, and 1L-1β. When TRH was injected into the CNA, PVN, and ventromedial nucleus of the hypothalamus, gastric acid secretion, and slow contractions were increased,²¹⁴ and erosions formed. These peptides mentioned so far are not the only ones that influence gastric acid secretion; they may, however, be involved in erosion formation (rev. in note 215).

The Consequences of the Disruption of Social Hierarchies in *Cynomolgus* Macaques: Arteriosclerosis

In male *Cynomolgus* macaques, the development of CAD exemplified the roles of specific, chronically stressful social behaviors, gender, and the mediating role of chronic sympathoadrenal activation.^{216–218} The development of CAD in these monkeys, which is closely analogous to the disease in humans, was promoted by feeding the animals a diet high in cholesterol and saturated fats, even when the social group was stable. However, pre-menopausal female monkeys were not likely to develop the disease, when fed the same diet.

Cynomolgus monkeys live in groups. They show elaborate patterns of social interactions, consisting of affiliations between generation-spanning relatives; supportive mutual alliances; and social status hierarchies. These hierarchies in males developed both in captivity and in the wild. Distinctive and stable dominant and subordinate status was achieved by competitive encounters, culminating in the dominant male attaining and maintaining his status by threatening gestures, which end with the subordinate males in flight.

Any unfamiliar male animal, which attempted to join the social group, was met with threats, and antagonism. Therefore, it was experimentally possible to perturb a stable social group of males by repeatedly introducing an unfamiliar, male conspecific into it.

Dominant male social status, and the creation of such social instability over a 22-month period, conduced to the development of CAD in the dominant on a stable diet. This result was mediated by repeated autonomic arousal. Any factor that impaired protective, ovarian function in female monkeys also predisposed them to the disease.

Dominant males had twice the extent of CAD than did sub-dominants.²¹⁶ The disease could be prevented by the daily administration, over a 26-month period, of propranolol when the social group was periodically disrupted. However, the drug did not change the dominant monkey's social status, nor his serum lipid levels.²¹⁷

In female *Cynomolgus* monkeys, the situation was just the reverse. Only pre-menopausal subordinate females developed arteriosclerosis. They had measurably elevated levels of GCs and total plasma cholesterol, but depressed concentrations of high density lipoproteins (HDL) and luteal phase plasma P. *During the period of observation, the number of anovulatory menstrual cycles was five times greater than in dominant females.* Ovariectomy exacerbated, whereas pregnancy, or treatments with estrogens, averted the disease.²¹⁸

Atherogenesis, Arteriosclerosis, Coronary Artery Disease (CAD) and Its Outcome in Human Beings (See again Tables 7A and 7B)

The process of atherogenesis is truly complex, and drawn-out. Except in the case of familial hypercholesterolemia Type II, it starts in the aorta in the first to second decades of life. In the coronary and other arteries, atherogenesis begins about a decade later, often culminating in another 25–30 years in MI, sudden cardiac death (SCD), congestive heart failure (CHF), stroke, etc. The earliest lesion of arteriosclerosis consists of the subendothelial accumulation of macrophages, engorged with cholesterol. This lesion progresses to the further accretion of lipid-rich, necrotic debris, an increase in smooth muscle cell numbers, and goes on to calcification, ulceration of the luminal surface, and hemorrhage, terminating in thrombus formation.

*At least 17 risk factors for arteriosclerosis have been identified; some have a strong genetic component; others are of a social, behavioral and psychological nature.*²¹⁹ All the risk factors are not present during every patient's life. Some play greater, ultimate etiological roles, and others more proximate and complex pathogenetic ones. It has not been ascertained with certainty whether the various risk factors are additive, or whether some, such as elevated levels of serum cholesterol and BP, amplify each other.

Be that as it may, the most comprehensive, multivariate, predictive, and longitudinal studies have been reported by Karasek and Theorell,¹⁶² and Siegrist.⁴² Combining their data with those of the proximate

psychophysiological ones obtained by Appels,²²⁰ Kop²²¹ and Deanfield and his colleagues,^{222,223} *a picture emerges of a patterned, progression in CAD of correlated socio-psychophysiological events culminating in disease, and/or death.*

The Swedish¹⁶² and the German⁴² investigators identified a specific occupational risk factor, over which male workers had no control. It consisted of a discrepancy between high demands for productivity, low financial rewards, and few chances for promotion. In these middle-aged German and Chinese workers⁴² studied prospectively for a period of 6½ years, the relative risk ratio for MI and SCD was 6.15 when compared with a matched group of middle-aged men in different occupational settings.

Initially, it seemed that this particular work situation was uniquely associated with CAD and its consequences. In the light of more recent work, this conclusion must be modified. As mentioned, Peter and his coworkers¹⁶⁴ found that other male workers, exposed to similar work conditions, developed functional bowel and neuromuscular disorders, and “burnout.” Therefore, the same occupational situation anteceded CAD in some workers, and functional syndromes in others.

Siegrist followed the behaviors and physiology of the members of his cohorts. They progressively manifested the Type A behavior pattern (excessive striving at work, hostility, etc.); an increased use of tobacco, and intake of alcohol; weight gain; sleep apnea (in 40%), or other sleep disturbances (induced by distress); BP elevations; left ventricular cardiac hypertrophy; a fall in the HDL/LDL ratio (due to increased LDL-cholesterol levels); and raised apolipoprotein A-1 and fibrinogen levels. Indirect evidence of a down-regulation of β -adrenergic cardiac receptor activity was also obtained. Serum levels of E and cortisol, but not NE, fell during the progression to disease.

Socio-cultural factors also played a role in these men, as indicated by the fact that the amounts of the etiological variances differed in German and Chinese workers. The Chinese men gained less weight, had a 12% lower prevalence of high BP, and smaller decreases in HDL/LDL ratio, but they smoked more, and drank more alcohol daily than did the German workers.

Siegrist’s work illuminates the complexity of the etiological (risk) factors which may predict the increase of cardiovascular morbidity and mortality. But it did not specify how they culminated in MI or SCD.

Additional Factors That Led Up to These Final Events

Episodic: characterized by feelings of “vital exhaustion” (VE) in 50–60% of a cohort, or a depressed mood in 10–20%. The appearance of these feelings and moods frequently anteceded by two years in a crescendo manner, an episode of MI. The feeling of VE was additively correlated with Type A behavior, further raising the risk for MI.²²⁰ Vital exhaustion was not the consequence of the extent of CAD, or of poor cardiac pump function.²²¹ It was more prevalent in patients after MI, in whom exercise increased their feelings of exhaustion. Despite similarities, VE differed from a depressed mood; exhausted patients did not feel sad, guilty, or worthless, as do many depressed patients.²²⁰

Vital exhaustion has been correlated with a decrease in fibrinolysis, mediated by the plasminogen activator inhibitor-1, and an increase in fibrinogen levels, but no change in blood coagulation factors (e.g., VII or VIII.) During VE, circulatory changes described by Siegrist—a decreased cardiovascular reactivity to a challenge—persisted.

Acute to Chronic: culminating in MI, or SCD. This terminal phase was often associated with acute intermittent, or sustained episodes of (“silent”) ischemia occurring at rest, with exercise, and/or mental activity,^{44,223} outbursts of anger, or on arising in the morning. The episodes of ischemia were demonstrably associated with a reduced coronary blood flow, due to a paradoxical vasoconstriction produced by the destruction of the endothelium and, therefore, of reduced NO formation²²²—a classical regulatory disturbance.

In this stage of CAD, controlled laboratory stressors increased HR and BP. Those patients, who had the highest BP responses, showed the greatest coronary vasoconstriction. The end phase of CAD was also characterized by increased sympathetic, and decreased vagal discharge to the heart. Elevated catecholamine

secretion and plasma volume occurred, and increased blood platelet activation, but diminished fibrinolysis, led to plaque rupture and thrombosis—the final event of MI.

In the past, the emphasis in the mediation of these terminal events has mainly been placed on increased sympathetic outflow to the heart. However, new methods of measuring vagal tone, by estimating the amplitude of respiratory sinus arrhythmia, have been devised. Decreases in amplitude of sinus arrhythmia have been used, as an index of a stressed organism²²⁴ and as an important correlate of impending cardiac ischemia and MI.²²⁵ Recently, low levels of vagal tone have also been described in high risk infant populations, and as a criterion of stress responsiveness, adaptive functioning, and of impending cardiac disease in adults.²²⁴

To highlight the changes in thinking in this area of knowledge, which has occurred in the past 50 years: At different phases of CAD process, a specific uncontrollable socio-ecological (work) situation promoted correlated behaviors and psychological states, which may be conceptualized as failing attempts to adapt to, and control it. They were associated with a variety of physiological and biochemical changes which constitute a pattern (no single variable predominates), or matrix, of failing physiological adaptations. Some of these changes were manifested in: (1) rhythmic physiological systems: specifically, sleep, respiration during sleep, and BP; (2) altered regulatory processes of HR, consisting of a down-regulation of vagal, and β -2 adrenergic receptors, NO release, and cortisol responses leading to MI or SCD.

One should, however, also not lose sight of the fact that additional risk factors for CAD have recently been described—elevated homocysteine blood levels, a variety of disturbances in the regulation of blood coagulation, and Chlamydia pneumoniae infection.⁴¹ But it is not absolutely clear as yet at what time in the development of CAD, or its terminal events, they play roles.

Very recently, the interaction of some of these variables of CAD have, in part, been clarified. It is recognized that in addition to VE, a depressive mood may antecede acute coronary events (such as MI), and may also alter their prognosis.^{226,227} When a coronary artery biopsy, and blood samples were taken at the time of angioplasty in depressed and non-depressed patients, the samples of the former contained higher serum levels, (but not tissue mRNA) of IL-1 β and TNF α , and of antibody titers against Cytomegalovirus and Chlamydia pneumoniae.²²⁸ But the study did not inform us about the causal direction of the correlations between infection, cytokine levels, and depression.

Siegrist's comprehensive longitudinal study is specific to a particular work situation, and cannot be generalized to others: for example, the highest incidence of CAD occurred in the lowest ranks of British civil servants, with the least income, and opportunities for advancement. The higher and highest civil grades had a progressively diminishing incidence.²²⁹

On the average, women in most studies developed CAD at least 10 years after men do. Declining and low estrogen levels, following menopause, played significant roles in placing them at risk for the disease. But we still do not have as comprehensive a picture of CAD in women as we do in men.

Conclusion: The Current Integrated Medical Model

This historically-oriented review has traced out some of the conceptual changes, which have occurred in models of health, ill-health and disease, from a patient-oriented Hippocratic one to a disease-oriented, clinical-anatomico-pathological one to the germ theory of disease, and to the biomedical one.

In the twentieth century, the patient-oriented model resurfaced, and was called, psychosomatic medicine. It emphasized features of the patient's personalities as correlates of, or of his/her personal conflicts as predisposing factors of, disease. A dialectic took place between those who promoted such specific features, and those who described general psychological ones, which characterized many patients. These general characteristics described patients' limited adaptive capacities. For many methodological and conceptual reasons, a shift later occurred in psychosomatic medicine, which broadened its purview to the many different changes, challenges and dangers in the natural, socioecological, occupational, and personal environments of patients. These might be perceived, appraised, and responded to individually especially

when unexpected, ambiguous, enduring, onerous, or taxing. To adapt to these, especially if they are chronic, many or all subsystems of the organism are mobilized. Adaptive success maintained, or restored health. Adaptive failure has been followed by ill-health and/or disease.

To summarize: as the twentieth century ended, psychosomatic or mind/body medicine evolved into a more comprehensive medical model, incorporating all the previous ones. This model as it now stands, contends that:

- Health, ill-health, and disease are relative states of adaptation, which depend on the variable adaptive capacities of individuals.
- These capacities are multi-factorial in nature, and depend on social, behavioral, psychological, developmental, physiological, anatomical, and genetic variables.
- The adaptive state of animals and human beings does not only rely on one of its subsystems.
- The subsystems, of which organisms are composed, serve specialized functions but they also interact, monitor, receive, and respond to a variety of communication signals from all the others, and from the environment. Therefore, their operations are also context dependent.
- The organism's adaptive state is, therefore, the product of an integration of its subsystems into a complex network, subserving its fitness and survival.
- Adaptation results from a continuous, dynamic interaction of the organism with its constantly changing environment.
- These environmental changes may impose new dangers, disruptions, tasks, challenges, opportunities, or threats to daily existence, etc., subsumed under the rubric of stressful experiences. When unexpected, uncontrollable, chronic, harmful, unwished for, constantly changing, or destabilizing, they exact heightened adaptive efforts, which may fail.⁴²
- The adaptive capacities of individuals and their subsystems vary with constitutional/environmental endowment, state of maturity, age, and experience.
- The nature, meaning, and connotation of the stressful experience, and how it is interpreted, appraised and coped with¹⁷⁰ determine adaptive behavioral success, or failure.
- Specific (emotional) signals warn and alert the organism to potential dangers, challenges, etc., and also appraise it of its adaptive success or failure.
- The incidence and prevalence of diseases and ill-health rise, recur, and fall in every period of history as a result of their prevention, treatment, control, improvements in housing, nutrition and child-care, etc. (Paradoxically, technological innovations may be harmful and/or beneficial.)
- The incidence and prevalence of diseases and ill-health are unevenly distributed in a population, even in the same environment, or conditions.^{22,105} This variable distribution depends on different interpretations of the environment and on different genetic profiles.
- The incidence and prevalence of disease and ill-health vary in different populations, and in different environments.¹⁵¹
- In every population there is a pool of persons, who by virtue of their adaptive capacities remain well, even when predisposed to a disease.
- In stable social environments in which demands for adaptation are few, the incidence and prevalence of disease and ill-health are reduced.^{148,149}
- Individuals in a population, exposed to the same or similar stressful experiences, have markedly different adaptive capacities and responses, which influence adversely, or not, their health.¹⁰
- The same experiences—e.g., bereavement, divorce, physical and sexual abuse, unemployment, poverty, specific work conditions, the accumulation of daily challenges, etc.,—are experienced as stressful by some persons because the usual ways of adapting to them do not suffice.⁴²
- The same stressful experience—e.g., bereavement—may be the context in which many different diseases, and the syndromes of ill-health may begin. Conversely, different stressful experiences may be the context for the onset of the same disease, or syndrome.
- The disease is usually specified by a number of risk, predisposing, or inciting factors of many different origins, which are either cumulative, or amplify each other.²¹⁹ (Much less is known about them in the syndromes of ill-health.)

- Gross anatomical, cellular, or genetic defects, or viral or bacterial infections do not necessarily impair health, or directly cause symptoms. An individual may harbor any one of these and remain in good health. Conversely, he/she may be in ill-health, or symptomatic, and not be afflicted by them. But he/she cannot be in good and ill-health at the same time.
- Both general and specific adaptive physiological responses of the organism's subsystems occur to stressful experiences. The responses differ in acute and chronic experiences.^{177,198}
- The adaptive capacities and responses of the subsystems vary quantitatively and qualitatively in individuals. They may result from alterations or defects in the nodes of a network constituting the subsystem, leading to disturbances in the regulation of, and the communication between cells, often manifested by change in rhythmic functions.¹¹⁷
- These defects and disturbances, especially in biological rhythms, not only characterize many diseases but are also manifested in the syndromes of ill-health. Therefore, this model unifies our understanding of ill-health and disease.
- Anatomical changes may only manifest themselves in changes in function when the organism is challenged. Anatomical changes may result from changes in physiological function. Conversely, they may alter the functional, adaptive capacity of organs and cells.
- The society, culture, economy and family are affected by ill-health and disease in its members (as well as affecting them).

Epilogue

This essay's principal focus has been on the empirical and conceptual advances that occurred in the twentieth century, which have led to a model of health, ill-health and disease, alternative to the traditional medical model. Little has been said about applying this model to prevention, or the treatment of patients.

Initially, the focus of psychosomatic medicine was on the individual patient, as Hippocratic Medicine had been. It sought not only to understand the impact of war on the minds of soldiers and sailors, and of sickness after their inception on patients, but also of the contributions of their personalities and/or personal conflicts to the etiology and pathogenesis of diseases, and the diverse syndromes of ill-health, which the traditional disease model eschews. A major concern of psychosomatic medicine, or in its anglicized version, mind/body medicine, was how personal characteristics, or conflicts, and their attendant emotions, such as fear, terror, grief, anxiety, anger, depression, or reactions to abuse, were translated into the physiological and anatomical changes in bodily organs. It became apparent that the "choice" of the bodily organ, or target, was in part determined by other risk-factors, including sub-clinical disease, itself.

However, many of the inciting factors of the emotional reactions such as fear, emanated from actual, or imagined dangers encountered in the natural, physical and social environments. In addition, threats to socioeconomic status and poverty; to personal security, such as abuse, bereavement, and divorce; work conditions; the accumulations of daily challenges; and many others may be experienced as stressful, especially if the usual ways of adapting to them do not suffice. If such events are ambiguous, unwished-for, unexpected, uncontrollable, chronic, have harmful consequences, or interrupt daily living, adaptive efforts may fail. Because each person perceives and interprets such events differently, and responds to them in his/her own way, individual treatment of their adverse responses may be required. While the population approach to such socioeconomic issues as poor housing and nutrition, the abuse of alcohol, the smoking of tobacco, the fluoridation of water, vaccination, pasteurization of milk, and sewage disposal, etc., requiring enlightened social policies, public health measures and education, has at the same time met with partial, or incomplete success.

With measures taken to reduce the smoking of tobacco, to prescribe diets low in cholesterol, to try to reduce overweight, and to encourage exercise, a reduction in the incidence of MI and stroke has occurred in the USA. More targeted interventions for CAD are now also being planned. The Enhanced Recovery in Coronary Heart Disease (ENRICHED) is a multi-center, randomized, collaborative trial of cognitive behavioral treatment to reduce depression, and to enhance the level of social support in patients after their first MI.²³⁰ The rationale for this endeavor, as mentioned, is that depression is an important predictor of

morbidity and mortality, particularly after MI, independent of the severity of CAD, and of poor psychosocial adaptation. And, low levels of social support have also been linked to enhanced morbidity and mortality after MI²³¹ in a number of studies.

This on-going study exemplifies the conceptual advances that have been made as a result of a patient—and not only a disease-oriented medicine. The latter emphasizes the use of drugs to relieve angina pectoris, or to treat heart failure after MI, or to increase coronary artery blood flow by the surgical relief of the block in the coronary artery(ies).

The targets in the planned study are two psychological and social factors that increase CAD morbidity and mortality. Other studies of this kind have tried to reduce the impact of stressful experiences on male patients after an MI.²³¹

One of the offshoots of patient-oriented medicine was behavioral medicine, which rose to prominence in the 1960s. It was based on learning theory. Patients were taught to regulate and control their anxiety and BP levels, HRs, breathing rhythms, gut motility, and to speed up the EEG rhythms (when epileptic). These exercises took place while these various physiological measures were monitored and displayed. The patient learned to alter them. These so-called biofeedback techniques achieved the same reductions in BP levels as antihypertensive drugs did.

Patients have been taught to breathe properly—that is with their lower chests—if they suffered from the hyperventilation syndrome. With encouragement and insistence, patients with fibromyalgia may lose their symptoms with physical exercise, and obliterate their fast alpha brain wave rhythms during slow-wave delta sleep, with which their symptoms correlate.

Meditation, prayer, relaxation, and breathing exercises have been devised and used to reduce the impact of stressful personal experience, or to reduce symptoms. Cognitive-behavioral therapy has been developed for the treatment of depression, and to correct avoidance, pessimistic attitudes, and behaviors when dealing with adverse experiences, including disease and ill-health. In the treatment of depression, it may be as efficacious as medications, and its effects may last longer than they do.

The advantage of behavioral and psychotherapeutic methods is that they avoid the frequent side-effects of drugs. Their aim is to enable the patient to be proactive in dealing with their own symptoms, the impact of being sick, and to control their apprehensions, pain, physiological functions, and to avoid giving-up, and helplessness.

Physicians, trained according to the biomedical model, tend to resist such measures. They are guided by an ideology: the “cure” of disease at all costs—by specific directed methods, such as antibiotic and chemotherapeutic drugs (“magic bullets”), and surgery, or radiation to remove the anatomical defect, or lesion. *They are content only to relieve symptoms and suffering. However, most diseases, especially chronic ones, are curable.* They also affect the marriages and the children of patients, their work performance, and their capacity to love, and enjoy life. And chronic sickness beclouds the future of patients. These collateral effects of sickness—and their treatments—are now being assessed not only in terms of absolute or relative rates of cure, but in terms of the impact of sickness on the quality of patients’ and their families’ lives.

Another and related development of a patient-oriented medicine is liaison psychiatry. Its focus is on the impact of disease and ill-health, mainly on hospitalized patients, who may be depressed, fearful, distressed, delirious, demented, in pain, or who need relief from the side effects of drugs, and medical technologies.²³² Liaison psychiatrists also attempt to understand and correct the non-compliant attitudes of patients. They are called upon by their specialist colleagues to prepare and assist them in the care of patients treated by modern medical technologies, such as renal dialysis, bone-marrow, heart, kidney, liver and lung transplantation. Each of these carries with it special complications and risks such as the effects of irradiation of the entire body, immunosuppressive drugs, metabolic disruptions, and the prospect of death. Some liaison psychiatrists specialize and assist oncologists in the care of patients with various forms of cancer, or who are at risk for it. The surgical treatment of some forms of cancer (e.g., or the breast) is disfiguring, requiring a major readjustment of patients and spouses. Every form of cancer in all age groups carries with it long-lasting uncertainty about a possible recurrence of the disease, together with the recognition that there may be permanent cognitive (due to irradiation of the brain), emotional, and

physical side-effects of treatment. The outcomes of treatment are in part influenced by social support, and the responses of families, etc., and not only by medical treatment.

A recent development in the care of children with malignancies, for example, is to share with them their diagnosis, and to have them sign consent for treatment. The emphasis is to keep communication open, and return them to a normal life even during treatment.²³³

In conclusion, there have been astonishing developments in patient care, as it has become recognized that the patient, not only the disease, should be the focus of the health-care provider.

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Glossary

ACTH	adrenocorticotrophic hormone;
aVP	arginine vasopressin;
BP	blood pressure;
CAD	coronary artery disease;
CNA	central nucleus of the amygdala;
CO	cardiac output;
CRH	corticotropin releasing hormone;
DMV	dorsal motor nucleus of the vagus;
E	epinephrine;
E1, 3	estriol, estrone;
GCs	glucocorticoids;
GCR	glucocorticoid receptor;
GH	growth hormone;
HPA	hypothalamic pituitary adrenal axis;
HR	heart rate;
IF	interferon;
IL	interleukin;
LH	luteinizing hormone;
MI	myocardial infarction;
MIF	migration inhibition factor;
mRNA	messenger RNA;
ODC	ornithine decarboxylase;
P	progesterone;
PDU	peptic duodenal ulcer;
Pg	Pepsinogen;
PG	Prostaglandin;
PTSD	post traumatic stress disorder;
PVN	paraventricular nucleus;
T	testosterone;
TNF	tumor necrosis factor;
TRH	thyrotropin releasing hormone.

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