

clinician will probably never encounter. Sleep apnea, both obstructive and central, makes up the bulk of clinical work, comprising perhaps four of every five referrals to a sleep center, but receives only 50 pages of compact description, roughly one-eighth of the book. Restless legs syndrome and periodic limb movement disorder, two other common entities, receive even less space. Insomnia is better covered, with separate chapters devoted to causes, clinical approach, and management, but it too receives less attention than its high incidence merits: 17 pages. The coverage of delayed sleep phase and other disorders of circadian rhythm is also thin.

For a reference source, this book's index is only adequate. For example, although tobacco use and its effect on sleep are mentioned in several chapters, the index has no listing for tobacco, smoking, or nicotine, and nicotine use is not included in the discussion of substance abuse and sleep. Cited references are listed at the end of chapters, but for those seeking additional sources a bibliography would be useful, and this book has none.

In short, *Sleep Medicine in Clinical Practice* is a useful introduction to an exciting medical field, but readers looking for greater depth of clinical information will need to go elsewhere.

Reference

1. Aserinsky E, Kleitman N: Regularly occurring periods of eye motility, and concomitant phenomena, during sleep. *Science* 1953; 118:273–274

RICHARD B. MAKOVER, M.D.
New Haven, Conn.

MODELS OF THE MIND

Brain Dynamics and Mental Disorders: Project for a Scientific Psychiatry, by Avi Peled, M.D. Tel Aviv, Israel, Yozmot Heiliger Publishers, 2004, 121 pp., \$24.00 (paper).

Toward the end of the 1980s neural network theories of connectionism became sufficiently current that we began to feel that, yes, for the first time we could see how the brain might self-organize and generate mental experience. This brief book reviews the recent progress in this newly dominant way of thinking about the logical-computational basis of brain function and proposes a framework for conceptualizing psychopathology. Readers who find the author's clear exposition a bit spare might wish to consult some of his most heavily relied upon sources, such as Hebb, Hopfield, Rumelhart and McClelland, Hoffman, Goldman-Rakic, Tononi, Edelman, and Mesulam, especially if such terms as "Hebbian plasticity," "Hopfield nets," "parallel distributed processing," "pathological foci," "reverberating network feedback," "reentry," "neural Darwinism," and "heteromodality" are not words found lying about their households.

The subtitle echoes Freud's "Project for a Scientific Psychology" (1) and attempts to continue his abandoned, premature effort to explain neuronal roots of mind. Mental functions can now be viewed as emergent properties of complex brain organization, and mental disorders can be seen as perturbations of

this organization. For example, Peled sees dysthymia as "recurrent deoptimization shifts of the transmodal levels accompanied by constraint frustration" (p. 100), bipolar mood swings as an "oscillatory dynamic of optimizations and deoptimizations" (p. 72), psychosis as "connectivity breakdown of the dynamic core" (p. 72), anxious loss of control as "destabilization of the higher level transmodal brain systems relevant to conscious awareness" (p. 73), and transference as "activation of the attractor systems which represent the person from the past" (p. 75). He does not address character types, which I believe can be modeled plausibly by tweaking neural network elements.

Peled provides illustrative cases for his system of psychiatric brain profiling in which both "external and internal perturbators affect the system development and organization" (p. 93). For external perturbators he favors the Holmes-Rahe Social Adjustment Scale (p. 94), which ranges from minor violations of the law and Christmas to divorce and death of spouse. Internal perturbators include metabolic, medication, and intracranial pathological effects. Peled says his Psychiatric Brain Profile is less stigmatizing and categorical and has more "degrees of freedom" than DSM and yet is more constrained by neuroscience than psychoanalytic conceptualizations that "have unlimited degrees of freedom allowing for all concepts to describe all occurrences and thus are operationally meaningless" (p. 95). Many of Peled's sources as well as his subtitle, however, are conceptually derived from psychoanalysis.

The book concludes with ideas about future directions for psychiatry. Testable hypotheses must move from a linear two-factor model of cause and effect to a three-level model of lower-level multiple biological factors, an intermediate-level system organization, and higher-level system functions and emergent functions. Means to detect perturbations of brain organization must be developed. Synaptogenic control should include neurogenesis. Direct pacemaker control could include transcranial magnetic stimulation coupled with EEG as well as imaging and deep brain stimulation. Experience control should include virtual reality technology, which Peled believes has potential to correct specific brain cognitive deficiencies, even delusions (for example, by showing patients with delusions of persecution by the FBI a warm and caring FBI headquarters).

If the brain were a corporate office, our present state of functional imaging would put us in the position of the superintendent in the basement who can monitor departments' use of electrical power and tell who is burning the midnight oil. Peled seems to be proposing that psychiatrists assume the role of a corporate information technology manager who knows the information storage and transmission requirements of each department as well as the volume and destinations of its e-mail and who addresses bugs, overloads, crashes, and viruses that arise in the system. In a continuation of the metaphor, psychoanalysis would be a little like entering the play sphere of the office party to observe the employees' interactions, or perhaps taking the chief executive officer's secretary to lunch to hear gossip about office politics. We still do not know how to read the e-mail and must infer how the corporation does its business, decides its priorities and strategies, innovates, integrates its employees' expertise, and sets departmental budgets.

Reference

1. Freud S: Project for a scientific psychology (1950 [1887–1902]), in Complete Psychological Works, standard ed, vol 1. London, Hogarth Press, 1966, pp 295–397

DAVID V. FORREST, M.D.
New York, N.Y.

The Mind: Its Nature and Origin, by Christiaan D. van der Velde, M.D. Amherst, N.Y., Prometheus Books, 2004, 242 pp., \$28.00.

Given the expansive title of this book, I expected to find a cryptic and complex tome of many hundreds of pages filled with diagrams, positron emission tomography scans, and the most modern three-dimensional images. As it turned out, I was partially correct. *The Mind* does seem cryptic and complex to me, but it runs under 250 smallish pages and fulfills the promise implied about the nature or origin of one's mind.

I am willing to accept some responsibility for not fully grasping the merits of the book. Perhaps I am too narrowly focused in biologically oriented psychiatric medicine to appreciate this effort. However, some fault must lie with the author and editors for producing a book whose book jacket summary, a reflection of the contents, is so convoluted that it left me and a few colleagues puzzled.

The quest, we are told, is to demonstrate how cerebral activities become mental events. On this journey of 21 chapters organized within five parts we revisit Freud, Piaget, and many other revered psychologists and behavioral scientists; engrams; and Gestalt. We are treated to the history of dialectical concepts, beginning with Zeno of Elea in 464 BCE. We are offered dialectical interconnectedness and dialectical triads. We are awash with matrices and fusions as well as complex and simple mnemonics. Part 3, Structures of the Mind, has a chapter titled "Ego, Superego, Id," and the only other chapter is titled "The Neurophysiology of Dreaming."

The section on Brain, Mind and Body includes six chapters totaling 28 pages. The chapter on the "Mind-Body Problem" is less than four pages long and has three references, from 1950, 1980, and 1985 (by the author), and includes a figure (number 10) of the ubiquitous smiley face and sad face.

The section on Psychological and Clinical Implications covers personality formation, psychopathology, and psychotherapy in a brief 40 pages. Although it might fortify the previous chapters, as a clinician I found that it did not offer much to strengthen my practice or pearls to share with residents.

Pointing out what I see as flaws in this book does not necessarily mean I found no merit. I look at *The Mind* as primarily a relatively brief philosophical, psychological, and scientific exploration of concepts. For those wanting to ponder "the mind," memory, and cognition relative to a historical framework it may well be a very rewarding experience. For those looking for a more useful clinical or teaching tool for psychiatric medicine I do not think this would be a first-line choice.

MARK H. FLEISHER, M.D.
Omaha, Neb.

The Philosophy of Psychiatry: A Companion, edited by Jennifer Radden. New York, Oxford University Press, 2004, 447 pp., \$74.00.

The 30 chapters of this book are written by 25 philosophers and a handful of clinicians. Most are written by a single author, addressing the many philosophical aspects of psychiatric practice and targeting issues such as what it means to make a diagnosis, when is one not responsible for a criminal act, what does competence imply, and when is the self continuous or discontinuous. There are philosophical discussions of such varied topics as brain pain, desire, memory, values, evolution, research ethics, religion, race, and gender.

I wish I could say that the promise inherent in the nature of the topics translates into great reading, but it doesn't. The idea for the book is excellent, and this may prove a very successful text if the intended readers are philosophy students. Clinicians, however, will find most of the chapters hard to read. The language of academic philosophy is not the language of bedside psychiatry. With some exceptions, the single-authored chapters by philosophers are so dense, so laden with jargon, and so embedded in a philosophical context inscrutable to the ordinary reader that their message is lost.

A notable exception is the chapter by Jennifer Church on the social construction of madness. This is a wonderful exploration of the pros and cons of viewing illness as socially constructed versus accepting it as biologically predetermined. This chapter is insightful, thought-provoking, and written in plain English. Another very readable, balanced, and useful chapter written by a philosopher, Daniel Robinson, is on the concept of dangerousness. On the whole, the chapters that work best are those written by a philosophy/psychiatry team. Sadly, there aren't many of these. Michael Schwartz and Osborne Wiggins contribute a very good chapter dispelling the myth that clinical drug trials and neuroscience constitute the sole scientific methodologies of psychiatry. They talk about understanding and interpretation, the methodology of studying psychopathology and psychotherapy. This is important because it broadens the focus of what psychiatric practice encompasses and shields it from allegations of reductionism, charges to which biomedicine is vulnerable. Most of the co-authored chapters are worth reading—a comment on the fact that when two disciplines work together to produce a piece of writing, they abandon the jargon of their respective fields and write in a style that others can understand.

Because the idea for a book of this kind is so good, I would encourage the editor to try again. My prescription for excellence would be to restrict the number of topics and to select authors carefully. I would insist that philosophers and psychiatrists collaborate on each chapter. I would not allow bland reviews of a topic area and would insist that each chapter defend a point of view. I would ensure that all chapters be read by all authors and that wrestling with each other's arguments be part of the task of writing. I would not permit the use of vocabulary that the general educated public does not understand. I look forward excitedly to such a book.

MARY V. SEEMAN, M.D., F.R.C.P.C.
Toronto, Ont., Canada