

where God comes into interaction with his creation, Nature.

The book is completed by several indexes, a bibliography, a glossary, and an index of persons. The bibliography is rich and carefully compiled. I would like to add a minor comment on bibliographies for the history of science. I rather dislike a footnote of the sort “Leibniz, 1962,” referring to the republication of C. I. Gerhardt’s *Mathematische Schriften* by Olms in 1962, when the author is discussing Leibniz’s *Nova methodus*. I think the reader gets more information from a footnote like “Leibniz, 1684,” with perhaps the date of the edition used given as well. Thus I suggest that we should split bibliographies in history of science, and maybe in history more generally, into two parts: the first one would list secondary literature, as usual, while the second would list the original sources in chronological order.

The glossary is rather poor; many terms are missing, among them “*hylarctick*,” “*hylopathia*,” and “*conarion*.”

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Robert L. Martensen. *The Brain Takes Shape: An Early History.* xxvii + 247 pp., index. Oxford/New York: Oxford University Press, 2004.

The Brain Takes Shape is an ambitious and diverse book that seeks to combine a culturally motivated history of early modern neuroscience with even broader considerations on the Western view of brain, body, and self, as relating to monarchy, monotheism, and, ultimately, reductionist programs in biomedicine. Unfortunately, it is also a very disparate, poorly edited, indeed scattered work that brings together apparently unrelated essays, mostly from the early 1990s (e.g., Ch. 7, on gender), in the guise of a book with a unified argument—namely, the shift from a humoral model of the body to a cerebral model—that is not really substantiated. Interesting insights on the neuroanatomical ideas and practice of Thomas Willis and René Descartes are diminished by massive generalities, such as the approximate bringing together of Willis, Galen, and Plato on the brain and the soul in one sentence or claims like “Aside from Locke I know of no physician who was taken seriously by philosophers” (p. 140): but certainly Locke was not taken seriously as a physician or because he was a physician! Robert Martensen does not take account of earlier scholarship that similarly put Willis (rather than Descartes) at center stage in the history of neuroscience, notably Georges Canguilhem’s study on the origin of the notion of reflex action (*La*

formation du concept de réflexe aux XVIIe et XVIIIe siècles [1955; 2nd rev. ed., Vrin, 1977]). And his book has since been superseded by Harry Whitaker, C. U. M. Smith, and Stanley Finger’s 2007 edited collection on eighteenth-century neuroscience (*Brain, Mind, and Medicine: Essays in Eighteenth-Century Neuroscience* [Springer]).

In sum, this is a useful “first access” capsule history of medicine in England in the early modern era, with a focus on Thomas Willis, who is presented as the genuine anatomist of the brain, in contrast to Descartes’s more metaphysically conditioned scientific program. However, this history is layered with various metahistorical considerations (the shift from likeness to presence, the identification of brain and self, etc.) that are neither well argued for nor well documented. Further, Martensen oddly claims that the lack of widespread acceptance of Harveian models in England during the Interregnum and early Restoration reflects a “broader crisis” concerning “the roles of matter and spirit in the macrocosm of the universe and the microcosm of man” (p. 24); that Western medicine’s reductionist, antiteleological focus on linear causality is an effect (?) of monotheism (p. 97); and, lastly, that “Willis’s model of the cerebral body, constructed as it was to emphasize the supremacy of order and reason over passionate enthusiasm, satisfied a broader High-Church need for a ‘natural’ explanation of the supernatural phenomenon of the Christian Resurrection” (pp. 118–119). Such considerations are never connected to—for example—the more obvious historiographical question of the status of “Life” and the “life sciences” in the Scientific Revolution (in contrast to recent work on the emergence of physiology or Cartesian medicine). This book can thus be recommended, with reservations, as an introductory work but not as a work of scholarship in the history of early modern life science, whether internalist or externalist, sociocultural or positivistic.

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Anita McConnell. *Jesse Ramsden (1735–1800): London’s Leading Scientific Instrument Maker.* (Science, Technology, and Culture, 1700–1945). Foreword by **Lord Martin Rees.** xxii + 318 pp., illus., figs., apps., bibl., index. Burlington, Vt.: Ashgate, 2007. \$99.95 (cloth).

The increasing attention historians have been paying to the material culture of science has fostered a deeper understanding of scientific