

as from his broad reading. She shows just how central to his thought were Cardano's neglected commentaries on the Hippocratic Corpus. Like every commentator since antiquity, he recast Hippocrates in his own image to justify his own ideas. Siraisi's consideration of Cardano's belated adoption of anatomical practices is also especially welcome, focusing on his rhetorical use of autopsy to vindicate his diagnostic pronouncements and promote his clinical practice.

Cardano did not sit comfortably within any of the disciplinary discourses of his day, for all his desire to be accepted. An autodidact and a mathematician, he had an unusual approach to many problems and he argued his position in clumsy and rebarbative prose instead of deploying scholastic logic or humanist rhetoric. His heroes were Ptolemy, Hippocrates and Plotinus, rather than Aristotle and Galen, but he sought the reform rather than the destruction of scholastic philosophy and medicine. He was not averse to ascribing occult causation, and he collected talismanic gems, but he attributed lovesickness and impotence, from both of which he suffered himself, to humoral rather than hidden causes. In discussing demons and incantations, he steered a middle course between the Platonism of Ficino and Fernel and the sceptical Aristotelianism of Pomponazzi. His work on the praeternatural was consequently as useful to orthodox demonologists as it was to sceptics.

The encyclopaedic interests and idiosyncratic positions of Cardano have made him as difficult for historians to pigeonhole as he was for his contemporaries. Although renowned and reviled as an occult philosopher, he can hardly be described as a Neoplatonist. Despite his stress on observation, he remained deeply indebted to medieval authorities. As a result of this complexity, Siraisi's study, for all its many virtues, cannot be regarded as the last word on Cardano's medical practice and ideas, or their interaction with other aspects of his thought. Siraisi gives due attention to dietetics and the interpretation of dreams, but she barely touches on the possible influence of his interest in physiognomy and judicial astrology on his

diagnostics and therapeutics. The vast range of topics discussed by Cardano provides innumerable ways in which his works can be used to shed light on Renaissance medicine.

Cardano's posthumous notoriety, not as a medical practitioner but alongside Agrippa and Paracelsus as one of the anti-Christian occult philosophers, or deluded natural magicians, or heroic precursors of freethinking, has survived for a surprisingly long time. Siraisi's study is not shackled to such hoary projects and their baggage of myths. Instead, she has produced an admirable example of the social history of ideas, integrating the contingent circumstances of individual biography with the larger forces of cultural change and social construction.

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Thomas Wharton's Adenographia, first published in London in 1656, translated by Stephen Freer, with an historical introduction by Andrew Cunningham, Oxford, Clarendon Press, 1996, pp. lxxxiii, 609, illus., £85.00 (0-19-854788-9).

Those who wish to have access to a modern English version of one of the most important works on anatomy published in England in the mid-seventeenth century will be much indebted to Stephen Freer, for this excellent translation of Thomas Wharton's work on the glands, and to Dr Christopher Wharton (a descendant of Thomas) for commissioning Freer's work. It is reproduced with a photographic image of each page of the original on the left-hand side and the English translation on the facing page. Readers can therefore easily compare Freer's version to the original. Although Freer is not explicit about his method, it is clear that he has (rightly) chosen to translate the sense rather than the words. For example, he renders "Est autem fateor, scruposa hæc sententia, multisque objectionibus obnoxia" as "But this opinion, I admit, is hard to take, and open to many objections" (pp. 111–12). On the other hand, where possible confusions might arise, he indicates them clearly: "aliud nimirum

corticis, aliud medullæ” becomes “one, of course, is that which forms the shell (‘cortex’), the other the marrow (‘medulla’)” (p. 9). The names of other people and texts mentioned briefly by Wharton, and other details, are identified fully in endnotes. This is a careful and accessible edition.

Wharton’s book was of capital importance, building on some of the latest anatomical discoveries of his time. With great excitement, the structure of the nervous and lymphatic systems were being revealed by English and Continental investigators; Wharton sought to bring an understanding of the anatomy and function of the glands into congruence with both these systems. The nerves as well as the lymphatics were thought to be vascular in nature. Wharton argued time and again that the glands served the purpose of both extracting needed fluids from the lymph and conveying them to the nerves and providing a means of evacuating waste products from the nervous system into the channels of the lymphatic system. By the end of the seventeenth century, as an appreciation of vascular physiology became commonplace, many authors cited Wharton’s work with applause. He himself gave special thanks to the Dane Thomas Bartholin, the French Jean Pecquet, and the Dutch Johannes van Horne. After defining glands in general, Wharton explained by reasoning and the presentation of anatomical details why the tongue, brain, and spleen were not glands; he then dealt thoroughly with the various glands themselves, including lengthy descriptions of the reproductive glands such as the testicles and ovaries. He gives an up-to-date explanation, for instance, of how glands produce the male sperm from a fluid of the nerves (echoing Hippocratic views), and the milk in the female breasts from a similar nervous fluid. Given Freer’s fine translation, Wharton’s views are easy to follow.

Wharton’s book gives clear evidence not only of an incisive author of much reading, but also of an energetic and careful anatomical (and vivisectional) investigator of human and animal bodies. While his book takes the form of a presentation of reasoned conclusions

rather than detailed descriptions of anatomical experiments *per se*, he offers both sharp criticisms of others and statements of new findings based on close personal inspection. While Wharton is (like almost all his contemporaries) teleological and functionalistic in his reasoning, he carefully avoids the Galenic language of faculties and powers. Wharton did not yet have the ability to make use of the microscope in his studies, as Robert Hooke, Jan Swammerdam, Antoni Leeuwenhoek, and Marcello Malpighi would a decade later; he also does not discuss his views on matter theory. Unfortunately, this leads Cunningham, in his otherwise fine introduction, to argue that these are failings which place Wharton’s work in the old-fashioned “scholastic” camp rather than among the followers of the new and “mechanistic” philosophy. Cunningham’s introduction may also make too much of the significance of Descartes in stimulating Wharton, although he is persuasive about the significance of Francis Glisson. It would be a shame, however, if the introduction convinced readers that this excellent new version of Wharton’s work should be set on the “old” side of a mid-seventeenth-century divide. At the time it was produced, it was at the forefront of anatomical studies. It helped to usher in a new era of physiological reasoning about bodily structures and fluids. Now that it has appeared in English, Wharton’s book deserves to be well recognized.

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John M Riddle, *Eve’s herbs: a history of contraception and abortion in the West*, Cambridge, Mass., Harvard University Press, 1997, pp. vii, 341, £26.50 (0-674-27024-X).

In *Contraception and abortion from the ancient world to the Renaissance* (Harvard University Press, 1992), Riddle proposed that effective contraception began in the ancient world: “the ancients discovered what we only