themselves "to reduce the imperative of the maternal role" (p.197).

Providing a wealth of quotes and provocative insights into feminist writings at the end of the nineteenth century, Richardson tantalizingly leaves the reader wondering what audience read such novels and periodicals in this period. What age and class for example were those reading this work, and how far did such writings change thinking among working-class and middle-class women of the period? None the less, while these questions remain unanswered, Richardson provides an important analysis for anyone interested in feminist thought and the eugenics movement at the end of the nineteenth and early twentieth centuries.

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Marina Frasca-Spada and Nick Jardine

(eds), *Books and the sciences in history*, Cambridge University Press, 2000, pp. xiv, 438, illus., £52.00, US\$85.00 (hardback 0-521-65063-1), £18.95, US\$29.95 (paperback 0-521-65939-6).

One intriguing and possibly unexpected feature of the new electronic era is the way in which scholarship has enthusiastically shifted focus to re-examine the phenomenon of the printed book. This timely volume of essays emanates from historians and philosophers of science at Cambridge University and builds on distinguished studies in book history ranging from those by Don McKenzie, Robert Darnton, and Roger Chartier to Michel Foucault and H-G Gadamer, bringing to light a number of important functions of books across a wide range of sciences, places and periods. Medicine is mentioned only occasionally, but there is much here that is easily translatable to the history of the medical sciences, from the beginning of print in the middle of the fifteenth century right through to modern debate over the uncertainties generated by on-line biomedical authorship. All the contributors in one way or another explore

issues relating to shifts in the location of authority and credibility, and are particularly concerned with how printed materials came to be perceived as the primary and most legitimate form of scientific knowledge. Genre studies, material culture, publishers and booksellers, illustrative techniques, the rise of the periodical press, encyclopaedias and popularizations, editors, the troubled question of the death of the author, readers and reception theory, indexing and annotation each find their place in various essays. As an entity, it presents a substantial, innovative and stimulating assessment of what books—and more broadly printed matter in general—have meant during the long processes of construction, consolidation and diversification of western science from about 1453 to the year 2000.

The volume starts with Rosamund McKitterick's account of the dissemination of natural philosophical ideas before print, a necessary opener for a useful set of six or so essays on early natural philosophy that dwell in various ways on the physical arrangement and intended meanings of the knowledge contained in books. Cardano's medico-astrological charts and principles feature prominently in an interesting discussion by Anthony Grafton. The distribution of printing privileges, the rise of illustrated herbals and anatomies, and a strong account by Lauren Kassell of the mystical inductions needed in the sixteenth and seventeenth centuries for reading alchemical texts, follow on. In the second section, broadly devoted to the eighteenth century, William Clark covers the development of the research library, Richard Yeo deftly summarizes his important work on encyclopaedic knowledge, and footnotes, fashion, young readers, the physiology of reading and the periodical market make a fine showing.

A provocative theme that snakes through the earlier parts of the volume is the shifting emphasis on the act of reading itself. The voice as a means of communication—the lecture, the sermon—gradually gave way to bookish knowledge that depended more on literacy and memory, although not without scholarly misgivings, as Silvia De Renzi points out. The relations between print and other means of

communication such as pictures or speech in the early modern period were more complex than is now usually assumed, and the medical perils of reading in the eighteenth century, as analysed by Adrian Johns, were thought to be far more pervasive than even Roy Porter has documented.

The third section takes on the print revolution of the nineteenth century, where Jonathan Topham, Eugenia Roldán Vera, and James Secord write of useful knowledge, progress and the dissemination of increasingly broad-based popularizations and other forms of public text. By the mid-nineteenth century, it is argued, most significant science was appearing in periodicals rather than books, and a noticeable demarcation between popular and élite had emerged. The authors here show very persuasively how writing and publishing helped in constructing the identities of science and scientists at this key time. The section is rounded off by an essay on the Victorian editors of Bacon and the new ideologies of the period, revealing just how far past practitioners of science and medicine have been committed to using print to establish the credentials of their own work. Several authors in fact touch on the issue of intellectual property and how the concept can usefully be regarded as inhering in the social arrangements that build up around the printed page.

In concluding this wide ranging, challenging and always thoughtful volume, Nick Jardine discusses the implications for the sciences of the quest for legitimacy though printed materials. *Books and the sciences in history* is an authoritative, learned, and thoroughly readable analysis that surely marks a milestone in the way we approach our subject.

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Philip J van der Eijk, Diocles of Carystus: a collection of the fragments with translation and commentary. Volume one: Text and translation; Volume two: Commentary, Studies in Ancient Medicine, vols 22 and 23, Leiden and Boston, Brill, 2000–2001, vol. 1: pp. xxxiv, 497,

Dgl 235.80, US\$131.00 (90-04-10265-5); vol. 2: pp. xlii, 489, Dgl 196.13, US\$109 (90-04-120-12-2) (set 90-04-1213-0).

It is rare for a collection of fragments with commentary to sustain a passionate reading from cover to cover commanded by a book. This one does it. The two compact volumes of Philip van der Eijk's new Diocles combine solid scholarship and a fine sense of textual detail with originality and power in the reconstruction of ideas, cultural climate and intellectual personality from predominantly doxographic material, and with reader-friendliness in the presentation of what could easily appear arid or esoteric. It makes thoroughly enjoyable reading, and not only for the specialist. Volume I contains the texts with apparatus and translation, a general introduction, a list of the fragments with informative synopsis of the general themes, indices which include one of verbatim quotations, abbreviations and concordances. Volume II is taken up by the commentary, with an analytical introduction, bibliography, an appendix, indices to the volume and an addenda et corrigenda.

Van der Eijk's edition supersedes by far the older one by Max Wellmann.1 Along with new material it brings a radical shift in focus, general approach and specific strategies. The relationship between Diocles and Aristotle is an example of innovative historical reconstruction. Van der Eijk rejects traditional ideas of "teacher-disciple" influence, defended by influential scholars like Wellmann, Jaeger and others, in favour of a complex model of intellectual cooperation between equals. His perspective allows for divergence of opinion and a flexible chronology between the two thinkers—simple issues which have nevertheless imposed artificial and far-reaching constraints on scholarship so far. Unlike Wellmann, who treated Diocles as one among other members of a "Sicilian school" in Greek medicine and accorded him a minimal commentary,

¹Max Wellmann, *Die Fragmente der sikelischen Ärzte Akron, Philistion und des Diokles von Karystos*, Berlin. 1901.