

issues including the training and testing of midwives; the training and respective status of “stone-cutters”, surgeons, and physicians; and the connections between humanism and medical publishing during the sixteenth century (including a series of entries on Ruf’s contemporaries). Volume one—reflecting its slightly earlier publication in 2006 to accompany an exhibition on Ruf staged in Zürich—also contains a richly-illustrated, somewhat eccentric mini-dictionary of objects, events, people and concepts associated with Ruf, ranging from dramatic political and religious upheavals to colourful details about daily life in Zürich. The material in volume five includes several glossaries of terms used in Ruf’s medical recipes. The latter half of the volume is devoted to reproductions of images from the works edited in the previous three volumes. Volumes one and five are accompanied by CDs: the first an audio recording of readings of various texts by Ruf, and the second filled with visual material including documentation of the 2006 exhibition, colour reproductions of the images that appear in black and white in volume five (and some extra material, like the 1554 Latin edition of the *Trostbüchlein*), as well as an interactive map of sixteenth-century Zürich.

This complex, detailed and meticulously prepared project does suffer from some relatively minor drawbacks. While understandable in terms of expense, it is unfortunate that images appear only in the first and last volumes, particularly as some scholars will consult only individual volumes of the series. This divorces the images to a large extent from the texts with which they were intrinsically linked—a particular shame given that publications like the *Trostbüchlein* and the broadsheets so deliberately and strikingly combined text and image with graphic and conceptual impact. There is an extensive and very useful index in the last volume only, so scholars will need frequently to consult volume five for both index and images. However, the footnotes are careful and for the most part extensive, and each volume includes a bibliography of works cited.

The team of authors cumulatively and persuasively argue for Ruf as an important contemporary of better-known figures like Conrad Gessner, and they have succeeded in conveying the breadth of Ruf’s achievements: his integration of humanist interests into innovative medical (and other) publications, and—perhaps most significantly—the social and professional mobility that this work afforded him. While the strength of this publication lies in its extraordinarily detailed attention to the work and life of a single individual, many of the essays have much to tell the reader about important related topics, and above all sixteenth-century print culture, especially but not only in the medical sphere.

Jennifer Spinks,
The University of Melbourne

Michael Hunter, *Boyle: between God and science*, New Haven and London, Yale University Press, 2009, pp. xiii, 366, illus., £25.00, \$55.00 (hardback 978-0-300-12381-4).

Hunter has admirably accomplished his aim of providing “in a single volume a comprehensive view of Boyle’s life from his birth on 25 January 1627 to his death on the night of 30–1 December 1691” (p. 8). Insights gleaned from studies of Robert Boyle over the past twenty-five years, cited in an extensive bibliographical essay, have been brought together with additional new material from Hunter’s exhaustive work on the Boyle archive as well as from the letters, diaries, and manuscripts of many of Boyle’s family members and associates. By doing so, Hunter has been able to fill in many of the gaps and correct the mistakes found in the previous main sources for the details of Boyle’s life, Thomas Birch’s *Life* (London, 1744, 1772) and R E W Maddison’s *The life of the Hon. Robert Boyle, F.R.S.* (London, 1969). Boyle’s works in medicine, chemistry, the mechanical and experimental

philosophy, religion, and morality are woven together in a chronological narrative to show how they relate to the different phases of his life.

Chapters 1–4 cover Boyle’s childhood, including his father’s expectations and his mother’s death when he was only three. Hunter argues that while these circumstances contributed to Boyle’s diffidence and contemplative life, his lavish upbringing, as indicated by the expenses recorded for his clothing by his father, the great Earl of Cork, contributed to what Hunter finds to be Boyle’s sense of “innate superiority” (p. 27). After covering his early years in Ireland and at his future estate at Stalbridge, Hunter adds new details about Boyle’s grand tour, particularly concerning his lengthy stay in Geneva. Hunter notes that it was Boyle’s time in Geneva, as well as his subsequent reunion with his sister Katherine, Lady Ranelagh, upon his return to London, that were crucial for the formation of his moral and theological views.

Chapters 5–9 cover the start of Boyle’s scientific career that began in earnest during his twelve-year residence at Oxford. Influenced by his well-known associates there, as well as by the Baconian schemes of the London-based Hartlib Circle, Boyle began an extensive and eclectic experimentally based research programme that led to numerous draft manuscripts for the works that he published in the early 1660s, including histories of *Colour and Cold*, and his essays on the *Usefulness of natural philosophy*, and *Certain physiological essays*. It was here that he also composed *Spring of the air* wherein he recounted numerous experiments with his newly constructed air pump. Left unpublished from this period was the polemical ‘Doubts touching the vulgar method of physic’ that expressed his opposition to the Galenic regime (p. 162).

Chapters 10–14 cover Boyle’s London period that began in 1668. The first three chapters recount his involvement with the East India Company, the New England

Company, and the Hudson’s Bay Company that was motivated in part by his desire for information from foreign lands and in part by his missionary zeal. Hunter also devotes a chapter to Boyle’s interests in magic, the mystical side of alchemy, and witchcraft that includes his unfortunate adventures with Georges Pierre, the self-proclaimed Patriarch of Antioch.

Readers of *Medical History* will be most interested in the final two chapters in this section that cover the period 1683–91, when Boyle returned to his manuscript on the ‘Vulgar method of physic’ and now argued that Galenic therapy was actually harmful (p. 209). Boyle continued to refrain from publishing this work, Hunter argues, because of the hostility that doctors expressed toward chemical medicine as well as the respect that he had for their bedside manner, which he knew well from his association with such medical practitioners as Thomas Sydenham. Instead of his polemic, Boyle published treatises showing how his experimental philosophy could be used to make improvements in medicine. These included his *Natural history of the blood* (1684), *Reconciliation of specific medicines and the corpuscular philosophy* (1685), and *Medicina hydrostatic* (1690). Boyle urged the Galenists to reform their practice by incorporating experimental techniques—using specific gravity, for example, to determine the purity of the ingredients in their medicinal remedies. Chapter 14 covers the last three years of Boyle’s life and provides details pertaining to the first volume of Boyle’s *Medicinal experiments* that included numerous medical recipes to be used by the colonists in New England. After Boyle’s death, John Locke saw the work through the final stages of publication and subsequently published two more volumes of his recipes over the next two years.

Although Hunter does not provide analyses of Boyle’s experimental works, his detailed timeline of Boyle’s life (that includes a table of his whereabouts in a helpful appendix) provides a valuable tool for situating the

social and intellectual contexts within which he produced his work. Hunter's volume thus becomes a crucial text for all who wish to study Boyle's contributions to seventeenth-century natural philosophy.

Rose-Mary Sargent,
Merrimack College

Andrea Carlino and Michel Jeanneret (eds), *Vulgariser la médecine: du style médical en France et en Italie*, Cahiers d'Humanisme et Renaissance, vol. 89, Geneva, Droz, 2009, pp. 352, €37.95 (paperback 978-2-600-01263-8)

The popularization of medical texts in the early modern period has not hitherto attracted very much detailed investigation. It is certainly worthy of the attention it receives here from a group of scholars at all levels, from the very senior to the doctoral student. The case histories address a number of fascinating figures whose publications fall in the ambivalent area between the scholarly and the popular. These include writers of scientific poetry (Pierre Bailly), professional translators (Troilo Lancetta), *poligrafi* (Leonardo Fioravanti), university or court physicians (Pierre Tolet, Prospero Borgarucci, Laurent Joubert, André Du Laurens, Jacques Ferrand), and humanists (Barthélemy Aneau). Through these essays, we learn about the role of Italian academies in the development of the vernacular, the emergence in French and Italian of logical and medical treatises published to enhance the status of non-university practitioners of health (surgeons and apothecaries), and the uses of rhetorical strategies in medical discourse (the extended metaphor, preterition as a means of discussing taboo topics, poetry as mnemonic, and paradox in its early modern sense). Each of the essays brings new light to bear on its subject by close reading and stylistic analysis. One could have hoped in some cases for a wider cultural context. No mention is made of

André du Laurens's religious views and his discreet employment of the unpopular Ramist approach to learning through the *via divisiva* which set the Faculty of Medicine of Paris against him. The use of metaphor as an explicative device in Galen and Avicenna prior to the early modern period is not noted; nor is the use of anatomy as a proof of divine providence, which was made popular by Philip Melanchthon in his textbooks on natural philosophy. The translation of texts into the vernacular could, moreover, be seen not only as a movement towards the democratization of knowledge, but also as a contribution to the precise determination of the meaning of texts. It is striking that even the libraries of learned doctors at this time (for example, those of Caspar Peucer, Girolamo Mercuriale, and Jeremias Martius, all men with impeccable linguistic credentials) contain translations of standard texts. This is, I believe, to ensure that semantic ambiguity is removed as far as possible by a process of cross-checking: a strategy found also in the medieval collection of core pedagogical materials known as the *Articella*, which contained more than one Latin version of Hippocratic and Galenic treatises which could be read alongside each other.

Andrea Carlino's introduction brings the threads of these essays together, and teases out common themes. He stresses the mission of the writers to bring dignity to their own vernacular and to expand the field of recipients of medical knowledge. He claims that in spite of their different motivations, socio-cultural positions, and targeted readerships, these writers all contribute to the re-alignment of the frontiers which divide popular and learned culture, medical theory and practice, and the various inherited disciplines or practices which deal with health. While placing all this in the context of humanist rhetoric, Carlino concedes that these writers present themselves as practising a "*style nu*", the best to express their commitment to public utility and truth. I would also be inclined to say that they relate their enterprise not so much to "*le magma*