

entire medieval period, although he concentrates on the High and Late Middle Ages. The text is clearly laid out, with its chapters organized both thematically and chronologically. There is an emphasis on medical trends in the German-speaking world and the author often includes case studies of specific German cities, such as the provision of doctors in Soest or the progress of the Black Death in Aachen. Time-lines appear at the start of each chapter, and short biographical sketches of important medical figures (such as Hildegard of Bingen and Arnold of Villanova) and concepts are scattered throughout the text.

There are no images, which might have been useful for readers unfamiliar with the subject. Nevertheless the book more than compensates for this omission by including a profusion of short selections of primary sources. These are highly readable and are notable for their variety, from the hagiography of Cosmos and Damien in the *Legenda aurea* to a fifteenth-century apothecary's advice to his patient or a contemporary chronicler's account of the "bloody flux" in Osnabrück in 1341. These sources complement and enrich the accompanying text very well.

The volume begins with a very short introduction to Graeco-Roman medicine and then covers the early Middle Ages. Medicine in the monastic orders follows, along with medical education in the school of Salerno and the burgeoning universities. Medical provision in urban areas comes next, with case studies for German cities and details on the establishment of hospitals and the different hospital orders. The final chapter is the longest, and deals with specific diseases that affected the medieval world. The two ailments that are given the most space are plague and leprosy, and both modern medical and medieval perceptions of these diseases are covered. The progress of plague through German-speaking areas is examined, along with specific case studies of certain cities and the ways in which urban authorities tried to handle the outbreak. The section on leprosy concentrates on the provision of leper-houses and care of the patient.

Other diseases covered include ergotism, influenza, smallpox and the "bloody flux", i.e. dysentery, especially the latter's influence on armies. The chapter ends with two "new" diseases that appeared at the end of the Middle Ages: syphilis and the "sweating-sickness". The text concludes with a short appendix of sources and a selected bibliography, a useful starting point for students as, due to the compact nature of the text, only a cursory nod is given to many developments.

*Krankheit und Heilkunde im Mittelalter* is part of the *Geschichte Kompakt* series, which publishes introductory texts for a variety of historical subjects and periods. As such, Jankrift's text succeeds admirably. This should be a very useful and accessible text for both undergraduates and postgraduates who would like a concise overview of medieval medicine. Scholars of medieval medicine might find certain sections which deal with specific case studies within the German-speaking world interesting as well.

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**Arnaldi de Villanova, *Opera medica omnia*,** vol. xvii: Abū l-Şalt al-Dani, Umayya b. 'Abd al-'Aziz, *Translatio libri Albuzale De medicinis simplicibus*, ed. **J Martínez Gázquez** and **M R McVaugh**; Abū l-Şalt al-Dani, Umayya b. 'Abd al-'Aziz, *Abū-l-Şalt Umayya, Kitāb al-Adwiya al-mufrada*, ed. **A Labarta**; Abū l-Şalt al-Dani, Umayya b. 'Abd al-'Aziz, *Llibre d'Albumesar de Simples medecines*, ed. **L Cifuentes**, Barcelona, Publicacions de la Universitat de Barcelona; Fundació Noguera; Lleida, Pagès Editors, 2004, pp. 625, €55.00 (paperback 84-9779-240-8).

The *Opera medica omnia* of Arnau de Vilanova is an outstanding monument to the study of medieval medicine over the last quarter century. Nothing else has done as much to illuminate the nature of western scholastic medicine, achieved through the old-fashioned virtues of scholarly textual editing. The latest

addition to the series of volumes is a translation by Arnau into Latin from the Arabic of Abū-l-Şalt's Arabic text on simple medicines. It is the first to be published since the death in 2000 of Luis García-Ballester, who was effectively founder of the series, and saw to its continuation. Fittingly, this volume is dedicated to his memory. The editorial board of the series has now been reconstituted, bringing on board Jon Arrizabalaga, Pedro Gil-Sotres and Fernando Salmón, and the advisory board too has been supplemented with distinguished scholars.

The first volume produced under this new leadership is a peculiarly challenging project, as its editors admit. Since neither the translation nor the original Arabic had ever been published, it was necessary to edit both from the surviving manuscripts. Ana Labarta prepared the Arabic text and José Martínez Gázquez the Latin, while Michael McVaugh and Danielle Jacquart modified the presentation of the Latin in conjunction with the Arabic, and prepared the Arabic-Latin and Latin-Arabic glossaries. A medieval Catalan translation (known only in a Paris manuscript) of Arnau's Latin text was found to witness to a fuller and earlier version of his translation than any of the surviving Latin witnesses, and Lluís Cifuentes prepared a transcription of the Catalan text to accompany the Arabic and Latin ones. Introductory essays in Catalan by the editors are repeated in English and French after the translation itself, which presents Arabic and Latin versions on facing pages, and has the Catalan version as an appendix.

The author of the original Arabic text, Abū-l-Şalt, was born in Andalucia in 1068 CE, and was one of the greatest ornaments of Maghrebi culture, a poet, philosopher, and musician, as well as physician. The 'Book of simple medicines' was a kind of practical handbook for physicians presenting information about the simples that could be used to evacuate humours and treat diseases of the whole body or of particular organs. It is organized in twenty chapters, and typically each chapter consists of a succession of statements about particular simples, of the form

(14.11) "bitter almonds are hot and dry in the second degree. They clear obstructions in the spleen". Even the prologue on theory which explains the Galenic humoral theory of the four qualities and the principle of treatment by opposites operates at a basic level. Although it introduces the question of how to compound simple medicines using quantitative ratios that was to preoccupy writers in Muslim Spain, it does not explore the question in detail or in a sophisticated way. Perhaps it was this very simplicity of argument and of grammatical structure that drew Arnau to the text in the 1270s. Interestingly even so Arnau may have balked at the theoretical prologue, for it is not found in manuscripts of his Latin translation, which launches directly into the twenty chapters. The editors speculate that it was the first of his three known translations from the Arabic, and its list-like structure may have made it straightforward. Nevertheless, the work may have sparked Arnau's interest in the compounding of simples that later in the 1290s gave rise to his own highly sophisticated *Aphorismi de gradibus* (*Opera medica omnia*, II).

The quality of Arnau's Latin translation is not high, despite the simplicity of the text he translates. Even allowing for scribal errors in the surviving manuscripts it is clear that Arnau often misunderstood the Arabic—for instance confusing the words for "pigeon" and "bath" to disastrous effect. Omissions often include the method of administering a medicine, which perhaps he decided was not central to the purpose of the text. The editors of the Latin text make judicious use of the Catalan translation, which is very faithful to the Latin, to emend evidently erroneous readings in the later Latin manuscripts. But they do not go so far as to choose to follow the Catalan manuscript when its reading coincides with the Arabic but is entirely different from existing readings in the two families of manuscripts that preserve the Latin. As they confess, given the surviving manuscript evidence (Arabic and Latin) no accurate reconstruction of Arnau's original translation is possible, only an approximation to it. What we are given is nevertheless a

volume fit to stand alongside its predecessors in this splendid series.

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**Gérald Jorland, Annick Opinel,**  
**George Weisz** (eds), *Body counts: medical quantification in historical and sociological perspectives/ La Quantification médicale, perspectives historiques et sociologiques*, Montreal and London, published for Fondation Mérieux by McGill-Queen's University Press, 2005, pp. x, 417, £64.00 (hardback 0-7735-2829-6).

The seventeen essays (plus Introduction) in this book complicate and deepen the narrative about the use of quantification in medicine over the *longue durée*. I say "complicate", because in their Introduction, Gérald Jorland and George Weisz make the point that there is much more to the history of medical numbering than the received wisdom of persistent rejection until the acceptance of mathematics as a research tool in medicine after the Second World War. The chapters take the reader from the early eighteenth through to the early twenty-first century and cover a lot of international ground (though with recurring attention to Great Britain and France in particular). Written in either English or French (a paragraph abstract in French of the English chapters and *vice versa* would help non-bilingual readers), the chapters are organized into four broad themes, namely: 'Medical Arithmetic'; 'Quantification and Instrumentation'; 'Statistics and the Underdetermination of Theories'; and 'Reducing Uncertainty and the Politics of Health'.

Of course, many individual chapters overlap these categorizations and it strikes me that three themes should be emphasized further as contributions to the debate about quantification. The first is the two-way link between quantification and policy. I was

impressed with Andrea Rusnock's essay on eighteenth-century attempts to use Bills of Mortality and parish registers to quantify and explain infant mortality in England and France. Not only does Rusnock's chapter serve as an important corrective to the assertion that infant mortality was "invented" in the nineteenth century, but it also teases out the possibility that by drawing distinctions between ages, places and social classes in the overall picture, infant mortality calculations in fact influenced "reform" for the care of foundlings and the timing of smallpox inoculation. On an altogether different note, in tracing epidemiology and statistics in post-Second World War France, Luc Berlivet observes that ministerial desire for data and analysis during the HIV crisis furthered the development of applied epidemiology.

A second topic is the relationship between the numeric method and the state, notably as a tool of governance and administration. One is now used to reading about this issue from particular national contexts and especially in relation to public health. In his essay on the mid-eighteenth-century debate between Daniel Bernoulli and Jean D'Alembert about the "value" of smallpox inoculation, Harry Marks encourages us to think not only about what such quarrels tell us of "moral expectation", but also about what the State actually is and means. Lion Murard takes us one step further by considering the supranational context, specifically the massively diverse measures of quality of life and health reported on by the League of Nations in the inter-war period. The unwieldy range of survey tools used by individual countries defied distillation and provides us with an informative historical backdrop to the more recent preoccupations of international public health with rural under-development and global health indicators.

The third issue concerns statistical and/or epidemiological methodology. It hardly goes without saying that forms of quantification are crucial to the practice of modern medicine and public health. One of the most enjoyable aspects of this book is the compelling treatment