

etiology' (and substitutes for the exaggeration *all*, the equally great exaggeration *none*). A valuable section on demons follows, which distinguishes between demonic possession that requires exorcism, and demon-caused illness that calls for healing. One could easily continue this line of thought and posit a distinction between miraculous healing sought for naturally caused disease and demon-caused illness.

The key concept of Chapter 4 is that the New Testament miracles 'represent the external aspect of salvation, the physical manifestation of a new spiritual order' (p. 65) and are not to be viewed *per se* as healing miracles. Christians, however, were soon to face the challenge put by successful pagan healing miracles. They had to come up with a response and a valuation: 'when claims of contemporary miraculous cures were put forward in the second century, in debate between the followers of Jesus and those of Asclepius, Christians discovered cures were abundant and whose claims were hard to deny, let alone to match' (pp. 70–1). The value of this observation is shown by the fact that it accommodated different possible accounts. Ferngren's is that Christians simply did not consider healing important until the fourth century, but put considerable effort into organised, non-professional, mostly palliative care of the sick. This attitude had a two-fold basis: in Christian medical philanthropy (Chapter 5), which actively cared for the sick, especially during plagues; and also outside the community of Christian worship. The theological imperative behind this was the doctrine of the *imago Dei*: 'every human life has an absolute intrinsic value as a bearer of God's image and as an eternal soul'; while money, writes Ferngren, came from wealthy individuals, long before state sponsorship began in 313. Christians' long experience in medical charity prepared the way for the eventual establishment of the first hospitals as faith institutions (Chapter 6). Christians were able to organise themselves well for a large-scale charity activity, and church communities soon created minor clerical orders to assist

them, chosen for spiritual rather than medical qualifications. In Ferngren's words, the hospital was 'in origin and conception, a distinctively Christian institution, rooted in Christian concepts of charity and philanthropy'. It had, as he sees it, no ancient precursors either in the sphere of medical care, or in that of religious healing.

What may the reader feel is missing from Ferngren's argument? The parallel world of non-medical healing, undoubtedly a contemporary reality. But even if the reader concentrates only on the medical side, and on the Christians' appreciation of medicine, he or she would naturally be curious about the process of adapting medical practice to the needs of faith. How were Hippocratic and Galenic scientific medicine transmitted? How did they become accepted and incorporated into the new Christian *paideia*, especially as medicine, and the study of medicine, was after all a pagan art, with many of its practitioners closely linked to Greek philosophy and to the fading late Antique pagan intelligentsia?

The book is a challenge, in the best sense, and has an important place in the ongoing dialogue between medical historians and Classical and New Testament scholars. In addition to his scholarly qualities, Ferngren has a sympathetic approach and an engaging ability to step back and see the object of research and the research itself as part of a larger picture. 'The modern age is a historical period like any other, limited in its perspective by time and culture . . . Understanding that we, too, have historical and cultural limitations forces us to view the past in a manner that is neither patronizing nor disparaging but appreciative of the power of ideas and practices that we do not always share or fully understand' (p. 10).

Ildiko Csepregi,
Museum of Fine Arts, Budapest

Leigh Chipman, *The World of Pharmacy and Pharmacists in Mamlūk Cairo*, Sir Henry Wellcome Asian Series, Vol. 8 (Leiden:

Brill, 2010), pp. x + 318, €104.00/\$154.00, hardback, ISBN: 978-90-04-17606-5.

In what will undoubtedly become one of the key publications in this field, Chipman presents an important study of pharmacists and pharmacy in the mediaeval Islamic world and its, so far, neglected aspects. She begins with a close reading of al-Kūhīn al-‘Aṭṭār’s immensely popular thirteenth-century Arabic guide for pharmacists, the *Minhāj ad-dukkān* (‘How to Manage a Pharmacy’), and an analysis of how al-Kūhīn al-‘Aṭṭār added to or modified the recipes of his predecessors. The *Minhāj* provides practical details, such as the preparation of drugs, substitute drugs, and the identification of less known *materia medica*, and thus offers insights into the practical work of a pharmacist. In the second part of the book, Chipman moves away from an analysis of the text and places al-Kūhīn al-‘Aṭṭār and his *Minhāj* in its social context, focusing on depictions of the pharmacist in Mamlūk society. A wide range of sources is consulted, including legal works, popular literature, and chronicles, which generally depict the pharmacist as a scoundrel who was merely concerned with profit. Chipman contrasts this negative image with al-Kūhīn al-‘Aṭṭār’s ideal of a God-fearing pharmacist anxious to help his fellow man, and she draws attention to the fact that the *Minhāj* generally employs inexpensive and readily available ingredients. She concludes that the reality is likely to be found in between these contradicting depictions.

Religion is a theme which runs through Chipman’s historical investigations, and we thus learn about the disregard for certain Jewish dietary laws, alternatives for wine, and that certain parts of the *Minhāj* are explicitly devoted to the topic of religion. Even though several parallels to Jewish writings can be identified, al-Kūhīn al-‘Aṭṭār does not go beyond a general monotheism.

Another recurrent theme is the differences between physicians and pharmacists, and here Chipman’s comparisons of the work ethics of both professions yield interesting results.

However, even though she emphasises that boundaries between pharmacists and physicians are not always clear-cut, we are left with the general image of practice-orientated pharmacists and theory-orientated physicians. For instance, the thirteenth-century physician Ibn Nafīs is depicted as having stated that his discovery of the ‘pulmonary circulation’ (correctly ‘pulmonary transit’) is purely theoretical. However, Ibn Nafīs actually claimed that *tashrīh* (‘dissection’ or ‘anatomy’) proves his predecessor Galen to have been wrong and it therefore remains open to debate whether or not Ibn Nafīs practised human dissection to corroborate his conclusions. Equally problematic is Chipman’s reliance upon Sami Hamarneh’s historically flawed analysis regarding capillaries (see p.124).

The differences between physician and pharmacist are also reinforced through comparisons such as those between al-Kūhīn al-‘Aṭṭār and Saladin’s Jewish court physician Ibn Jumay‘. In his laconic compendium, Ibn Jumay‘ does not present many of the practical descriptions contained in the *Minhāj* as he was opposed to compiling such comprehensive compendia. Ibn Jumay‘ pointed out in his letter to Saladin that comprehensive compendia tempt the reader to become lazy and to ignore the irreplaceable writings of the ancients and the oral guidance of teachers. It is therefore not surprising that Ibn Jumay‘ presented only a mere outline of *materia medica* in his own compendium, which was intended to be supplemented by both experience and erudition. That Ibn Jumay‘ was also a practice-orientated physician, especially when it came to drugs, can be seen in his treatises on the medicinal use of the lemon/lime or rhubarb.

While Chipman includes an index of general terms and *materia medica*, it is unfortunate that she neglects to index Arabic drug names. Therefore, Appendix Two, which lists all the recipes found in the *Minhāj*, remains of very limited use for scholars seeking these. The translation of drug names is yet another problem as no caveat is presented to remind the

reader that translations and equivalents for mediaeval drug names are problematic, for instance, *al-laymūn* is translated as lemon, but lime is equally plausible.

In some places, Chipman suggests that ineffective drugs were not included by al-Kūhīn al-‘Aṭṭār and that he added the tag ‘beneficial’ (*nafi*) to a remedy whenever he found a drug to be effective. Historians should indicate, however, that their statements about the efficacy of drugs remain problematic as long as we lack reliable research about how drugs were tested and how mediaeval notions compare to modern ideas of ‘effective’ or ‘tested drugs’.

Finally, it has to be said that Brill has done a major disservice to the author and adversely affected the wider dissemination of an important scholarly study. Individuals will be reluctant to purchase a volume that, in addition to being over-priced, has a somewhat displaced cover with a cheap glue binding, reminding the potential buyer of a poor-quality pirated copy of an originally expensive book. The contents of the present volume deserve a much better physical presentation.

Daniel Nicolae,

University of Oxford

Maaïke van der Lugt and Charles de Miramon (eds), *L'hérédité entre Moyen Âge et Époque Moderne: Perspectives Historiques*, Micrologus' Library, 27 (Florence: Sismel – Edizioni del Galluzzo, 2008), pp. vii + 416, €58.00, ISBN: 978-88-8450-309-1.

This book is a collection of essays on the place of heredity in the thought of the Middle Ages. Its core is the clear demonstration by Maaïke van der Lugt that the notion of hereditary disease emerged in the thirteenth century, and found a clear expression in the fourteenth. Its roots were in the writings of Arab philosophers and doctors, but what was revolutionary was the metaphoric transfer of

the expression ‘hereditary’, previously used to designate goods and properties transmitted through generations, to the domain of medicine.

This book challenges the view that the Renaissance was a revolutionary time for medical and biological thought. The opposite is true: the notion of hereditary disease emerged in the thirteenth century, was not deeply transformed during the Renaissance, and took on increasing importance at the end of the eighteenth century, finally leading to the birth of a scientific theory of heredity in the middle of the nineteenth century.

But this book also challenges the alternative hypothesis: heredity was a central question for thinkers of the Middle Ages. The justification of the power of the nobility by the existence of a ‘noble blood’, the rise of anti-semitism supporting a differentiation between human beings, the efforts made to breed animals of higher quality, the progressive interpretation of original sin in biological terms, the rules established by the Church against consanguinity: all would have contributed to the emergence of an hereditarian vision.

The different contributors show that the situation was much more complex. There was a sharp contrast between the hereditarian functioning of society, with a strict hereditarian transmission of power and charges, and the numerous factors which opposed this hereditarian vision: the conviction, based on the Bible, of the uniqueness of human nature, the emphasis placed on the conditions surrounding conception and pregnancy to explain human characteristics, the importance of the notion of complexion in medicine, a product of nature and local environment, opposed the emergence of a science of heredity. The widely accepted belief in an heredity of acquired characters made the picture even more fuzzy. The rules preventing consanguinity were not justified by a ‘eugenic’ project. The existence of ‘noble’ blood was a popular conception, disconnected from the writings of doctors. The improvement in animal breeding only concerned animals of the nobility, falcons and dogs. The interpretations