

Book Reviews

“concepts ‘éternels’” (p. 23) to which we must respond.

The first two papers (by Hellmut Flashar and Vivian Nutton) survey the similarities and differences between Hippocratic medical ethics and our own. As Nutton points out in the discussion of Flashar’s paper, “the relationship between modern medical ethics and those that can be loosely termed Hippocratic is far from simple” (p. 21). “Hippocrates” can be used as a pulpit from which the shortcomings of the medical profession can be addressed. Perhaps more powerfully, the Oath can also be used as “an important article of faith” (p. 47) from whence the medical profession claims authority.

The next six papers deal with the Graeco-Roman period. Thomas Rütten gives a learned study on the deontology of the Oath and its variants. Charlotte Schubert discusses the concepts of health and disease as metaphors of moral, political and ethical status (the equating of health with *καλός* and disease with *κακός* has a terrible resonance for our century). Heinrich Von Staden gives an excellent analysis on the relationship in Greek medicine between a physician’s skill (*τέχνη*) and his life (*βίος*), concluding that one’s moral comportment is essential to, and may even reflect, one’s professional conduct. Von Staden maintains that the structural heart of the Oath contains a “profoundly moral pledge” (p. 191), binding on a person’s public as well as private life. Jacques Jouanna explores how Galen incorporates (and to a significant extent, alters) the meaning of key Hippocratic texts, concentrating the analysis on Galen’s *Commentaries*. Galen does this to underwrite his own claims that the best physician should be seen “comme modèle Hippocrate” (p. 230). However, Galen remains silent on the Oath and Law, which leads Nutton to note that this may reflect Galen’s stress on *τέχνη* (p. 248). If so, this provides a key theme taken up by Western medicine: the physician as source of specialized knowledge *simpliciter*.

Jackie Pigeaud examines medical ethics in Rome, using Cornelius Celsus as a main source, and this discussion is extended in

Philippe Mudry’s paper dealing with the *Preface* of Scribonius Largus. He, like Celsus, possesses a more distinctive voice than generally thought. The penultimate paper takes us to the medical world of Late Antiquity and Byzantium (Antonio Garzya). Finally, Olivier Reverdin discusses the handling of the translation of the *Materia Medica* of Pedanius Dioscorides by the remarkable sixteenth-century Lyon-born (but Geneva based) physician Jean-Antoine Sarasin.

By engaging with the past, medicine is better equipped to analyse current ethical debates, and respond to their imperatives coherently. This volume gives us, in 381 pages of analysis and debate, far more than a survey of past medical ethics. It provides a reference base for which this reviewer, a former medical practitioner, is grateful.

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Roshdi Rashed (ed.), *Encyclopedia of the history of Arabic science*, 3 vols., London and New York, Routledge, 1996, pp. xxviii, 1105, £160 (0-415-12410-7).

This encyclopedia is a virtually complete survey of Islamic sciences by subject, which includes astronomy, the various branches of mathematics, optics, nautical and musical sciences, engineering, alchemy, medicine and botany. Some chapters dealing with the influence of several Arabic sciences on the medieval Latin and Hebrew traditions have been also included. This reviewer, however, misses the presence of independent chapters on astrology and pharmacology.

Despite the fact that one short chapter does not allow an exhaustive study, since contributors are in general outstanding specialized scholars, they have provided a basic but accurate picture of their respective subjects. Therefore, taken as a whole, this three volume publication constitutes a useful overall introduction to Arabic science. This review will focus only on those chapters related to the scope of this journal: medicine and allied sciences.

In the chapter devoted to botany and agriculture (vol. 3), Toufic Fahd first describes the botanical sources succinctly (lexicographic, agronomical, botanical and pharmacological, and geographic). He then continues with an exhaustive description of the contents of the book *al-Filāḥa al-nabaṭiyya* (*Nabatean Agriculture*) as a model for the stereotypical classification of plants throughout medieval Islamic botanical works (aromatic plants, fragrant plants, fruit trees, and so on). However, the order followed by Fahd is not the original one in *al-Filāḥa al-nabaṭiyya* nor does it apply to all Islamic botanical treatises, since some of them have reached us in alphabetical order. Each section in Fahd's description contains the detailed list of the botanical items mentioned in *al-Filāḥa al-nabaṭiyya*, along with the transliteration of the corresponding Arabic word. Unfortunately, the Latin name (i.e., the scientific identification) has not been included. This information would have made the listing of plants more useful, and probably would have prevented mistakes of identification such as *utrujj* (fruit of *Citrus medica* L., var. *cedrata* Risso) as cedar (*Cedrus atlantica* Manetti, *C. libani* Barrel, Fam. *Pinaceae*) (p. 823). Sometimes, the location of items within the modern editions of the two most influential Islamic botanical encyclopedias—those by Abū Ḥanīfa al-Dīnawarī (flourished in Iṣpahan and Dīnawar, d. ca. 282/895) and Ibn al-Bayṭār (Málaga, d. 646/1248)—is given. A short section regarding theoretical questions on phytobiology and morphology of plants closes this part on Arabic botany.

In the following section on Arabic agriculture, Fahd again deals with a systematic inventory of the contents of *al-Filāḥa al-nabaṭiyya* in order to present the theoretical and practical teachings allegedly discussed in every Islamic agronomical source. By contrast with this extensive listing, Fahd barely devotes two pages to the agricultural knowledge in al-Andalus (Muslim Spain). Although *al-Filāḥa al-nabaṭiyya* had an important influence on the Andalusian treatises, Andalusian agriculture would have merited an equally detailed description, since it developed much further

and became the most influential source both in the East and the West until the eighteenth century. Likewise, it would have been worth noting other aspects relating to botany and agriculture in general not mentioned by Fahd, such as the importation and acclimatization of Eastern plants (like the orange tree), the progress in the improvement of tools for agricultural labour, and the development of botanical gardens (perhaps actual “physic gardens”, since physicians appear to have been in charge of them). Also, since the Islamic tradition largely expanded earlier knowledge, it would have been interesting to see the original contributions of the Arabs and their impact on the Latin European tradition. This chapter ends with a reflection summarizing the high development of botanical and agricultural knowledge amongst the Arabs of the Middle Ages, followed by the endnotes.

Emilie Savage-Smith's chapter (vol. 3) is a comprehensive and well structured synthesis of Islamic medicine. Her survey begins with a thorough—although brief—reflection on factors such as the vast geographical boundaries, the large chronological span, the diversity of local conditions, Muslim religious rules, commercial and political fluctuations, and their interaction with the communication of ideas, the blending and coexistence of traditions, the multifaceted medical practices, and the effort to deal with medical problems common to all peoples. The complexity of these factors, including the need for a critical attitude on the part of modern readers when approaching Islamic medical sources, has seldom been so accurately stated before.

After a section concerning written sources, Savage-Smith describes the development of Islamic medicine by periods, sometimes under the main feature which defined them: medicine before the 'Abbāsīd caliphate, early 'Abbāsīd medicine, the great systematizers, prophetic medicine, and Ayyūbid and Mamlūk patronage. A section devoted to hospitals precedes a discussion of social aspects (such as professional status, medical learning, and medical qualification) under the heading 'The medical profession as an art'. This synthesis is completed

by four other sections related to Islamic medical care: surgery, ophthalmology, anatomy, and popular medicine. These are followed by a conclusion, endnotes, and a selected bibliography relating to each point developed.

A main feature in this chapter is the presence of well-chosen passages from the diverse sources mentioned. However, although the author has contrived to give a thorough insight into Islamic medicine in a very limited space, this reviewer would have liked some more information on Islamic medicine in al-Andalus, since, as the author suggests (p. 926), it developed in a different manner from medicine in the East.

Unfortunately, Islamic medicine in al-Andalus has not been included either in the chapter 'The development of Arabic science in Andalusia' (vol. 1) by two outstanding Spanish scholars, Juan Vernet and Julio Samsó. This failure rather seems a lack of coordination on the editor's part, as the authors' comprehensive vision of scientific progress in Muslim Spain, not only includes their main fields of specialization (the exact sciences and astronomy), but also involves the applied sciences, like pharmacology. Otherwise, this chapter by Vernet and Samsó is the first study written in English to deal with the particular development of Islamic science in al-Andalus, from the Latin-Visigothic tradition, its role during the first centuries of Islamic culture in Spain, the increasing influence of eastern scientific knowledge, and the historical context of the political events which accompanied this process, up to the influence of genuine Andalusian contributions to the Latin West. Since these features also apply to medicine, it might well serve as a useful introduction.

Given that English-language scholarship during the last few decades has paid little attention to medicine and related sciences in al-Andalus—a topic usually confined to al-Zahrāwī (d. ca. 1013) and his surgical instruments, with fleeting references to Ibn Zuhr (d. 1162), Maimonides (d. 1204) and Ibn al-Bayṭār (d. 1248)—an independent chapter on this subject would have filled an important bibliographical and historiographical gap.

In the chapter 'The influence of Arabic medicine in the medieval West' (vol. 3), Danielle Jacquart discusses the role played by certain key medical texts in the reception of Arabic medical knowledge in the West. Her survey is divided into three sections, which correspond to the main stages in the process of transmission to Europe: 'The first wave of translations: the establishment of Western medical doctrine', 'The second wave of translations: in pursuit of the original works of Galen', and 'The translations of the thirteenth century: from philosophy to pragmatism'. The author has confined herself to medical works, leaving aside surgery and *materia medica*. This chapter ends with a useful chronological table of the major Arabic medical works which were translated into Latin.

Françoise Micheau's chapter on 'The scientific institutions in the medieval Near East' (vol. 3) will also be of interest to medical historians, since some of these institutions were related to formal medical education and practice. Although the author's interpretation of sources is questionable in some instances, and relies too much upon secondary bibliography in others, her contribution is useful and expands the information given by Savage-Smith.

One general point needs to be made regarding this three-volume set. Each volume contains the bibliography and index related to its contents. These are, of course, useful tools always welcomed by readers. But for the chapters discussed in this review, the bibliography is rather outdated. Since the aim of this encyclopedia is to serve as a book of reference, it is surprising that Fahd does not, for instance, quote the most recent publication concerning Ibn al-Bayṭār's work, a facsimile edition of the French translation, published by the Institut du Monde Arabe in 1987. Moreover, he seems to be unaware of the long-established and ongoing scholarship on Islamic botany and agriculture developed at the School of Arabic Studies in Granada, and more particularly, of J Carabaza Bravo's critical edition of the Arabic text, translation and study of Abū l-Khayr's *Kitāb al-Filāḥa* (Madrid,

1991). While Fahd's Arabic edition of *al-Filāḥa al-nabaṭiyya* (1993 and 1995) is quoted in the chapter's endnotes but does not appear in the general bibliography (in which his most recent listed publication is dated 1977), many important works published by Savage-Smith long before this encyclopedia are missing, and recent Spanish publications, undoubtedly known to the authors and cited by Samsó in another publication of 1992, have not been included. The chapters by Jacquart and Micheau are virtually the only ones employing publications issued after 1990. In the case of Savage-Smith's chapter, it ends with a note (p. 956) stating that it was written in 1983 and updated in 1987, but that no publications after 1987 were able to be used—presumably because there was no opportunity given by the editor for a further updating. This indicates that the encyclopedia was in press for a long time, nearly a decade, before its actual publication.

Nevertheless, in spite of certain shortcomings, the *Encyclopedia of the history of Arabic science* is still a useful introductory book.

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Malcolm Barber (ed.), *The military orders: fighting for the faith and caring for the sick*, Aldershot, Variorum, 1994, pp. xxviii, 399, illus., £55.00 (0-86078-4338-X).

This volume publishes a selection of the papers presented at a 1992 conference on the military orders from their origins in the eleventh and twelfth centuries down to the present day. Though the mission of caring for the poor and the infirm was always a prominent objective of these orders, the medical historical aspects have often been neglected in favour of military and political developments. This volume is unfortunately no exception, in that only four of the 41 studies deal directly with the theme of "caring for the sick" expressed in its subtitle. Nevertheless, these studies are of considerable value and merit attention among medical historians.

Anthony Luttrell's account of the medical tradition of the Hospitallers from the final collapse of the Crusader presence in Syria in 1291 until the transfer of the Order to Malta in 1530 (pp. 64–81) stresses that the Hospitallers had originated as a charitable order dedicated to relief for the poor and the sick, and that this aspect of their work, though overshadowed for a time by increasingly military activities, was never abandoned. After the fall of Acre, the convent moved to Cyprus and then Rhodes, taking with it a long medical tradition based on experience in Palestine. Numerous hospitals and infirmaries were established in both the East and in Europe itself, and organizational statutes were repeatedly revised and promulgated anew. In all this activity there was also an important propaganda function, as offering relief to paupers, patients, lepers, and orphans and foundlings was extremely expensive and there were no longer glorious victories in the Holy Land to attract the donations and endowments upon which the military orders depended. Such support was attracted not only by the existence of the facilities themselves, but also by the statutes sustaining them, tales of their ancient origins and miracles, and hyperbolic accounts of the remarkable cures on offer and the importance of their services.

Two papers discuss the actual hospital function of the Knights of St John. Fotini Karassava-Tsilingiri studies their great fifteenth-century hospital at Rhodes, which took fifty years to complete and survives today in renovated form as the Rhodes Archaeological Museum (pp. 89–96). Following the lead of Luttrell, the author sees the foundation at least in part as an effort to impress the Latin Church and laity and secure support from the West. But his main concern is the plan, as there are no unproblematic remains of Hospitaller hospitals elsewhere, and of most there are no extant remains at all. That the arrangement of rooms around a central courtyard suggests a Middle East origin—the conventional wisdom to date—is rejected in favour of the pattern available in European hospital types dateable as far back as the ninth