

*Alfonsine Tables* (Yehudah ben Mosheh and Ishaq ben Sid), Jacob ben David Bonjorn and, obviously, Zacut. The only exception would be the *Tables of Barcelona*, computed by Jacob Corsuno and strongly influenced by Ibn al-Kammād, although Chabás' analysis of the mean motions of the Sun and the planets in these tables (see his paper in *From Baghdad to Barcelona* I, 477-525) makes me think that this exception is a mere illusion. I am looking forward to the future research of Chabás and Goldstein on the Medieval Jewish astronomical tradition in order to see whether it confirms or rejects my hypothesis. At this point I can only thank them for this excellent book.

J. Samsó

Luis García Ballester, *Medicine in a Multicultural Society*. Variorum Reprints, Aldershot-Burlington USA Singapore-Sydney, 2000.

Sadly and unexpectedly, this book is posthumous. Luis García Ballester's *Medicine in a Multicultural Society*, together with another volume also published by Variorum, *Galen and Galenism: Theory and Practice* and his most recent work *La búsqueda de la salud. Sanadores y enfermos en la Corona de Castilla* (Barcelona, 2001), have set the seal on a long and fruitful career devoted to the History of Medicine which only a scholar of the first rank could have accomplished. García Ballester (València, 1936 - Puente Arce, 2000) taught and researched the area at the universities of Murcia, Valencia, Granada and Santander and at the Institució Milà i Fontanals of the CSIC, the Spanish Council for Scientific Research, in

Barcelona. He researched widely in many fields, from Galen to Renaissance medicine and beyond, and was an acknowledged master in the two hemispheres of research in the History of Science: the edition and study of texts, and the investigation of the social context of scientific practice and its protagonists.

One of the most important projects that García Ballester undertook involved the cooperation of many other scholars: the edition of Arnau de Vilanova's complete works in the collection *Arnaldi de Villanova Opera Medica Omnia* (AVOMO). The project was launched in 1975, thanks to the efforts of García Ballester, Michael McVaugh and Juan Antonio Paniagua, who persuaded many other scholars to take part. The nine books of the collection that have appeared so far provide meticulous studies of the treatises, and represent roughly half of the entire project. When the collection is completed it will honour the memory not only of Arnau de Vilanova but of García Ballester as well.

As regards the study of the social context, we should stress the fact that García Ballester, perhaps like no other Spanish historian of medicine before him, spent an enormous amount of time working with the documents in historical archives. His dedication opened up new perspectives on social history in areas that no one had explored before. His conclusions were published in many innovative articles and books, some of which are compiled in the volume under review. It is no exaggeration to say that the studies on regions such as Valencia and Castile and on religious minorities conducted by García Ballester and his colleagues and pupils have laid the foundations for our understanding of

medical practice in medieval and modern Spain.

García Ballester's research in Muslim and Jewish minorities in Spain is the cornerstone of his scholarly legacy (see, for instance, *Historia social de la medicina en las España de los siglos XIII al XVI, vol. I, la minoría musulmana y morisca*, Madrid, 1976). His studies address the problem of the frontiers of Arabic-Islamic science. This fascinating collection *Medicine in a Multicultural Society* is essential reading for those interested in the medieval medicine in the Iberian Peninsula, and the work pays fitting tribute to a lifetime of research. The nine papers compiled shed light on the process by which the Arabic corpus gradually becomes appropriated by others, and also describes the fate of its ancient practitioners in an increasingly hostile milieu. The first part includes three articles on medicine in Hispanic Christian regions, two of which deal mainly with the classical question of the diffusion of Arabic scientific texts and their translations. In "Medical Science in Thirteenth-Century Castile: Problems and Prospects" the subject is treated as the touchstone of a wider problem. The author provides a careful overview of the problems of Castilian medicine in the thirteenth century, of which the following issues are particularly interesting. The first is the lack of interest of scholastic science and the universities in the growth of medicine; scholars appear almost to forget the medical treatises translated in Toledo during the previous century, and references to medicine in the Alfonsine translations, for example, are conspicuous by their absence. Second, the Muslims, now *mudéjares*, as well as the Jews, continued to practice medicine, drawing on the

Arabic sources which remained in use in these circles for years to come. Third, there was no real contact between Christian and Arabic medicine, except in the case of the recently conquered kingdom of Murcia where scientific and medical texts were translated. These developments posed a question to the historian of Arabic science: were medieval translations, in addition to being an intellectual phenomenon, also a sort of spiritual conquest of the territories lost on the battlefield? "Nature and Science in Thirteenth-Century Castile. The Origins of a Tradition: The Franciscan and Dominican *Studia* at Santiago de Compostela (1222-1230)" is a novelty in the study of Hispanic medieval science. Following the path of eminent specialists such as Haskins or Beaujouan, García Ballester literally recreates a little known learned circle in Santiago on the strength of a single document that records the books borrowed by certain friars from the Archbishop's library over a few short years. In contrast, the next article, "Medical Licensing and Learning in Fourteenth-Century Valencia", written together with M.R. McVaugh and A. Rubio Vela draws on a wealth of documentary sources. This is a major study that bears witness to the painstaking work of the author and his colleagues in the archives. The article focuses on the transmission of medical knowledge and, above all, on the professional practice of the discipline at a time when medicine was becoming subject to legislation passed by the king or the parliaments. The authors study licensing procedures in Valencia, where after 1329 the regulations on the matter were very strict: in order to practise, a physician had to hold a bachelor's degree from a University and had to pass an

examination set by the Valencian medical authorities. In theory this meant that the Jewish and Muslim minorities, excluded from the universities, were prevented from practising medicine. The same was true of women. However, some medical licenses were granted without the authorization of the city, and a certain amount of medical practice by those who did not have formal licenses was tolerated. The authors show convincingly that the problem involved far more than mere legal provisions; they construct an accurate framework of medical licensing in the Crown of Aragon in which the documentary information from one of its cities, Valencia, though relatively scarce, is highly illustrative. The second section of the book focuses on Jewish medicine: "Jewish Appreciation of Scholastic Medicine" (together with L. Ferré and E. Feliu), "Changes in the *Regimina Sanitatis*, the Role of Jewish Physicians" and "Dietetic and Pharmacological Therapy: a Dilemma among Fourteenth-Century Practitioners in the Montpellier Area". From a range of perspectives, all three studies address the question of the retreat of Arabic written science due to the progress of scholastic medicine and the gradual loss of the Arabic language among Jewish communities. The first article concentrates on the areas of Catalan and Provençal culture in which Christian medicine is particularly rich, and describes the experience of Jewish physicians who saw the need to translate Latin medical treatises. The other two articles in this section also deal with Jewish medicine influenced by Latin texts, focusing on the particular case of the genre of medical literature known as *regimen sanitatis*, and the Hebrew translation of one of the most famous treatises, Arnau de

Vilanova's *Regimen Sanitatis*. These books give dietary advice, and were originally written for a single person or for a group. The genre spread in the fourteenth century because at that time health became a public concern which began to interest wider segments of population. The Hebrew translations of Arnau de Vilanova and the personal comments of the translators contributed to this process. Arnau de Vilanova's *Regimen Sanitatis ad Regem Aragonum*, edited by García Ballester and McVaugh and published in AVOMO, vol X.1., Barcelona, 1996, with a long prologue written by P. Gil-Sotres assisted by García Ballester and Paniagua, presents a thorough study of the *regimina* genre. The third section of the book addresses in more detail one of the subjects dealt with in the previous section, the ebbing of Arabic medicine at both theoretical and practical levels. In "A Marginal learned Medical World: Jewish, Muslim and Christian Medical Practitioners and the Use of Arabic Medical Sources in Late Medieval Islam", the author offers the most important survey published to date of this subject in the late Middle Ages, summarising most of his own bibliography, which we warmly recommend (for example, an article that is not reproduced in this volume but is particularly interesting, "Los médicos judíos del siglo XIV y el galenismo árabe: *Kitāb al-Ṭibb al-Qashṭālī al-malūki*", *Asclepio*, 42, 1990, 119-147, written together with C. Vázquez de Benito), as well as other major contributions in the bibliography on Hispanic Islam and related subjects. Even though the article is not long, the subject has been studied at almost every possible level of analysis: social history, the history of the dissemination of knowledge and

analysis of sources (see the summary given here of the *Kitāb al-Ṭibb al-Qashṭalī al-malūkī* mentioned above, the last medical treatise written in Arabic in the Iberian Peninsula, by a Castilian Jew named Ibn al-Waqqār). The last two articles leave the Medieval period behind them and enter Modern history, following the path of Arabic medicine. We know that medicine was still taught in Arabic in the Zaragoza *madrasa* as late as 1494, but the discipline was soon to die out. There were three main reasons for its extinction: Muslim minorities lost their learned scholars, most of whom emigrated to Muslim countries; the Arabic language lost pride of place as Peninsular Romance languages and Latin took hold; and Muslims could no longer acquire scholastic knowledge since even those who converted – “Moriscos” – were denied access to universities. “Academicism versus Empiricism in Practical Medicine in Sixteenth Century Spain with Regard to Morisco Practitioners” is a vivid description of the world of Morisco healers which draws on direct testimony from Inquisition archives, aiming to ascertain the process by which a medical-scientific tradition evolved into empirical or even folkloric knowledge as contact with the sources was gradually lost. But it was also a period in which attitudes towards practical techniques (for example, surgery in medicine) changed decisively for the better. Against this background, created to all intents and purposes by the Inquisition, we see how these Morisco healers, surgeons, or doctors, most of them the heirs of a family tradition, confronted the new situation. Some were allowed to practise; others were persecuted. Most of them were quacks who healed Christian and Muslim alike by means of empirical

and even magical procedures – which inevitably brought them into conflict with the Inquisition. Others managed to pursue a career (even in scholarly circles in some cases) based on the Latin and Spanish texts, though in fact one Morisco doctor still possessed an Arabic treatise as late as the beginning of the seventeenth century. Thanks to their skills, some of them, particularly surgeons, reached the highest echelons of society. The article is excellent, though perhaps in the discussion of the more folkloric aspects of Morisco medicine reference could have been made to the valuable works published on the subject in recent years (see, for example, the texts edited by A. Labarta in *Libro de los dichos maravillosos*, Madrid, 1993, and the bibliography given here). The last article “The Inquisition and Minority Medical Practitioners in Counter-Reform Spain, Judaizing and Morisco Practitioners, 1560-1610” explains how the Inquisition, always eager to act against heresy, kept a careful watch over the originally Jewish (or “conversos”) and Muslim (or “Moriscos”) minorities. However, whereas the Jews became fully integrated into the dominant culture, the Moriscos retained many of the customs of the Muslim faith. The Inquisition destroyed the remains of Islamic culture until finally Philip III decreed that the Moriscos be expelled. The most interesting feature of this article is its use of the Inquisition’s archives, from which it reconstructs the proceedings against a *converso* Doctor (Felipe de Nájera) and against a Morisco healer, Jerónimo Jover.

Miquel Forcada

Mònica Rius, *La alquibla en al-Andalus*