

surprising to discover the same feature in the Sanjufīnī *zīj*, but it is amazing to find that exactly the same mistake is to be found in al-Bīrūnī's *al-Qānūn al-Mas'ūdī*.

The volume also includes two papers dealing with the introduction of modern European astronomy in India: David Pingree ("Philippe de La Hire at the Court of Jayasimha", pp. 123-131) and S.M. Razaullah Ansari ("European Astronomy in Indo-Persian Writings", pp. 133-144). Savai Jayasimha II or Jay Singh is the well known maharaja of Amber (1699-1743) who gathered an important collection of Sanskrit, Persian and Arabic astronomical MSS, as well as printed European books. Among them we find the 1727 Paris reprint of La Hire's *Tabulae astronomicae*, brought to him from Portugal in 1730, among other European books and astronomical instruments, by the Jesuit missionary Manuel de Figueredo, who arrived with a Portuguese astronomer, Pedro da Silva. David Pingree's paper analyses all the information available about the influence of this work in India, which marks the beginning of the introduction of European astronomy in this country. La Hire's tables were copied by hand by Joseph du Bois and at least two Sanskrit versions of it were made. Computations of lunar longitudes made with them were compared to lunar observations made at the observatory of Jaypur and to positions calculated with Ulugh Beg's *Zīj-i Jadīd* between 1727 and 1737. Discrepancies between the observed and computed positions led Jay Singh to ask (1732) for clarifications, and this led to the arrival (1734) of two other Jesuit astronomers (Fathers Boudier and Pons) equipped with modern astronomical instruments, including a 17-foot telescope. A group of Muslim astronomers, in Jay Singh's court, worked from the 1720's on the compilation of the Persian *Zīj-i Muḥammad Shāhī*, finished about 1735. A good part of this *zīj* is based

on Ulugh Beg's *Zīj-i Jadīd* but two papers by Mercier (1984) and van Dalen (2000) have established that the mean motion tables are the result of an adaptation of those of La Hire to the Muslim calendar.

Ansari's paper completes Pingree's information during the second half of the eighteenth and the first half of the nineteenth century: it deals with Indian scientists who came into contact with the scholar-administrators of the East India Company and some of them had the opportunity to visit England and other European countries and returned with updated knowledge about the recent developments of modern astronomy. Ansari summarizes the works of five of these scientists, most of which have been preserved in manuscripts in Persian, written particularly during the first half of the nineteenth century. It is remarkable to see that an adequate knowledge of contemporary astronomy does not imply the abandonment of the Islamic (and Hindu) traditions: an author such as Mirzā Abū Ṭālib (1752-1805-6), who has a detailed knowledge of European astronomy of the early 19th c., when he deals with transits of Venus and Mercury across the solar disk, refers to observations of the same kind made by Ibn Sīnā, Ibn Bājjā and Quṭb al-Dīn al-Shīrāzī. Similarly, Ghulām Ḥusayn Jawnpūrī (1790-1862), who made observations of Pallas with a telescope in 1826, wrote, in 1818, a book on the construction and use of the astrolabe.

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Charles Burnett, Keiji Yamamoto, Michio Yano, *Al-Qabīṣī (Alcabitius): The Introduction to Astrology. Editions of the Arabic and Latin texts and an English translation*. Warburg Institute Studies and Texts, 2. The Warburg Institute - Nino Aragno Editore. London- Turin, 2004,

VIII + 515 pp.

The team formed by Burnett, Yamamoto and Yano began, in 1994, a large scale project of editions of important Arabic astrological texts which were diffused in medieval Europe through Latin translations. In that year they published Abū Maʿshar's *Madkhal* or *Mudkhal Ṣaghīr*, which was followed, in 2000, by the *Kitāb al-Milal wa'l-Duwal* of the same author (edited by Yamamoto & Burnett). To this we should add that Yano edited Kushiyār ibn Labbān's *Madkhal* in 1997 and that other scholars have also had their share in this kind of work: I am thinking of the nine volumes of Abū Maʿshar's *Madkhal Kabīr* published in 1995 by the late Richard Lemay and of the most recent publication (Zaragoza, 2005) of G. Hilty's edition of books VI-VIII of the *Libro conplido en los iudizios de las estrellas* (*Kitāb al-bārī fī aḥkām al-nujūm*) of ʿAlī ibn Abī'l-Rijāl. All this amounts to a large number of editions of astrological classical texts (mainly Eastern, but most of them well known in the Maghrib) and it is very clear that the task undertaken by the three editors of this volume has acquired an outstanding position, for reasons I will try to explain.

We have here the edition of the *Kitāb al-mudkhal ilā ṣināʿat aḥkām al-nujūm* written by Abū 'l-Ṣaqr ʿAbd al-ʿAzīz ibn ʿUthmān ibn ʿAlī al-Mawṣilī al-Qabīṣī, known in the Latin world as Alcabitius. He was an astrologer at the court of the Ḥamdānid Emir of Aleppo Sayf al-Dawla (945-967) to whom the *Mudkhal*, as well as three other works, is dedicated. In their introduction (pp. 1-13), Burnett, Yamamoto and Yano list thirteen works written by al-Qabīṣī. Among them we find the *Risāla fī imtīhān al-munajjimīn mimman huwa muttasim bi-hādihā 'l-ism* ("On the testing of those who call themselves astrologers"), which contains a list of questions (both

astronomical and astrological), with their corresponding answers, which should be used to test the capacities of those who aspire to become professional astrologers. The work is one of those dedicated to Sayf al-Dawla and it reflects the fact that men in power wish to know how far they can trust the predictions of their astrologers. The recent publication of vol. II-1 of the *Muqtabis* by Ibn Ḥayyān, a chronicle of the kingdom of the Cordovan emir ʿAbd al-Raḥmān II (822-847), has provided us with multiple anecdotes in which the emir tries to examine the capacity of his astrologers. The data furnished by the Andalusī source are, however, anecdotal and have a literary character which contrasts with the highly technical contents of al-Qabīṣī's *Imtīhān*. To the best of my knowledge this is the only known source in which there is evidence of a test of the competence of astrologers although, as the authors remark (p. 5, n. 15) several extant sources show attempts to examine the professional capacities of medical doctors: to those mentioned by the editors one should add al-Rāzī's *Miḥnat al-ṭabīb* (ed. by A.Z. Iskandar in *al-Mashriq* 54 (1960), 478-517). I know that Burnett *et al.* have prepared a critical edition of al-Qabīṣī's *Imtīhān*: I hope they publish it very soon, for it is a most interesting text. Other astronomical works by the same author show that he was competent as an astronomer and that he was interested by certain problems that had attracted the attention of other Muslim astronomers of the 9th and 10th centuries: such is the case of his *Risāla fī 'l-abʿād wa'l-ajrām* ("On distances and sizes [of heavenly bodies]"), in which, surprisingly, al-Qabīṣī says that Ptolemy only described the distances of the Sun and the Moon, or of his (non extant) *Shukūk fī'l-Majistī* ("Doubts/Problems on the *Almagest*) and of his (also non extant) *Kitāb ʿilal al-zījāt* ("Failings/Geometrical Proofs in *zījēs*).

The *Mudkhal* is a standard astrological handbook, much more detailed than Abū Maʿshar's *Madkhal Ṣagīr* and more or less equivalent in size to Kūshyār ibn Labbān's *Introduction*. It is divided into five *fuṣūl* which deal with 1) the zodiacal circle in itself (signification of the twelve signs) and in relation to the local horizon (the houses); 2) the signification of the planets (and the lunar nodes) in their own nature; 3) the planets in their relations to other planets and their accidents depending on the places they occupy; 4) different kinds of predictions (general and historical, nativities, elections, meteorological; the *haylāj* and the *tasyīr*).

The *Mudkhal* seems to have been quite successful in Arabic countries: the editors list 24 MSS (see pp. 14-17), none of which, surprisingly enough, is Maghribī. However the work met with astonishing success in Latin Europe: the Latin (and derived English, French and German) translations are preserved in some 212 MSS and 12 printed editions of the 15th and 16th centuries (see pp. 156-198, 504-510). Following the standard technique applied by Burnett and his collaborators to Abū Maʿshar's *Madkhal Ṣagīr* and *al-Milal wa'l-Duwal* the volume contains a careful critical edition of the Arabic original, based on the three oldest MSS, with occasional references to five others. An annotated English translation appears on facing pages (see pp. 18-155). Keiji Yamamoto has been mainly responsible for the Arabic edition. This is followed by an extraordinary critical edition of the Latin translation by John of Seville (pp. 225-364), prepared by Charles Burnett on the basis of 12 MSS with occasional readings of four others. A detailed analysis of the Latin manuscript tradition can be found on pp. 205-223. The edition includes three different apparatuses: the first one records the glosses found in MS Vat. Reg. Lat. 1285, which contains a copy of John of

Seville's translation with corrections made by an editor or reader who was comparing it to the Arabic text; the second apparatus contains a careful comparison, made by Burnett, with the Arabic edition (in the edition alternative translations and interpretative additions are marked in italics); finally, the third apparatus gives the manuscript variants. This, as well as the volume in its entirety, is a model to be followed. I believe nobody could ask for more from a work of this kind and if such a task was repeated with a well selected sample of Arabic texts and their corresponding Latin translations, we could think of the possibility of writing a comprehensive history of medieval scientific translations. Besides, following the example set by the two aforementioned editions of Abū Maʿshar's works, the volume includes exhaustive Arabic-Latin (1558 Arabic words, recording all the passages in the text in which the word appears) and Latin-Arabic glossaries. This kind of information will be most useful for the preparation of something we really need: a dictionary of medieval astronomical Arabic. Finally, the volume also includes four appendixes: 1) edition and English translation of an *urjūza* by the early Islamic astronomer al-Fazārī on *hudūd* (terms) (pp. 365-369); 2) an edition (prepared by David Pingree) of a Greek fragment of *faṣl* 4 of the *Mudkhal*, belonging to an early Byzantine translation (11th c.) (pp. 371-374); 3) an edition and English translation of a work attributed to Alcabitius entitled *Tractatus Alcabitii de conjunctionibus planetarum* (pp. 375-385). This is a translation, extant in two manuscripts and in one Renaissance printed edition, of an unidentified Arabic original which was also translated into Castilian and French (both apparently made from the printed edition). The text deals with the significance of planetary conjunctions in every zodiacal sign; 4) edition of the

Arabic text and Latin translation (by Robert of Ketton) of some excerpts of al-Kindī's *Forty chapters* (see Burnett in *Ar. Sci. and Phil.* 3 (1993), pp. 77-117), which seem to be one of the sources used by al-Qabīṣī for the compilation of his *Mudkhal* (pp. 386-393). The volume also contains, finally, a bibliography (pp. 394-398), an index of all the manuscripts and early editions mentioned (pp. 504-510) and a general alphabetical index (pp. 511-515).

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Mūsā ibn Nawbakht, *Kitāb al-azmina wa-l-duhūr. Tratado de astrología mundial*. Edición del texto árabe, introducción y notas por Ana Labarta. Análisis del contenido astronómico por Àngel Mestres. Àrea de Estudios Àrabes e Islàmicos. Universitat de València. València, 2005. 62 + 80 pp.

Ana Labarta published (Madrid-Bellaterra, 1982) Mūsā b. al-Ḥasan b. Nawbakht's collection of 93 historical horoscopes, entitled *al-Kitāb al-Kāmil*. This interesting collection attracted the attention of, at least, two scholars: on the one hand, John North (*Horoscopes and History*, London, 1986, pp. 52-56) analyzed the problems involved with the positions of ascendant and midheaven and tried to ascertain both the epoch used by the author and the latitudes for which these horoscopes were computed; more recently (*Centaurus* 41 (1999), 213-243) G. van Brummelen has published a most illuminating analysis of the astronomical information related to the solar and planetary positions in these horoscopes. In her study about the *Kāmil*, Labarta used information gathered in the *Kitāb al-azmina*, the other work of Ibn Nawbakht which is extant, but no edition was available. The purpose of the present book is to present such an edition, without

a translation, but with two detailed commentaries of its contents prepared by the editor herself (in Spanish) and by A. Mestres (in English). The complete work constitutes an excellent piece of scholarship and brilliantly rounds off a task which Labarta began more than twenty years ago.

The edition is based in the only extant manuscript: Istanbul University Library A-315, fols. 56v - 160r, foliated by a modern hand, though there is an older one, used here, which assigns an independent number to the folios corresponding to this work (fols. 1r - 105r). This MS was probably copied in Egypt in the 15th c. Labarta has prepared an extremely conservative text, which shows great respect to its source and she acknowledges sincerely that she has doubts in some of her readings and hopes that a future editor might understand better the text and correct the doubtful passages which, in my opinion, are very few and for which I cannot give a better alternative.

Mūsā ibn Nawbakht was a member of a prestigious family of Iranian astrologers, translators and scholars which goes back to Nawbakht al-Fārisī (d. 777), who predicted the accession to the caliphate of al-Manṣūr (754-775) and participated in casting the foundational horoscope of Baghdad in 762. A history of the Nawbakht family between ca. 750-950 (with the addition of an offspring in the 13th c.) appeared in the introduction to the *Kāmil* (pp. 15-21) and is updated in the *Azmina* (pp. 0.9-0.14). The very little that is known about the biography of the author of both works, Mūsā b. Nawbakht (fl. ca. 860-940) is summarized in the introductions to the *Kāmil* (pp. 23-27) and to the *Azmina* (pp. 0.15-0.18, 0.27). Arabic sources ascribe to Mūsā a book named *al-Kitāb al-Kāfi fī aḥdāth al-azmān* a title that does not agree with those of his two extant works. Labarta (0.17-0.18, see also Mestres pp. 0.28-0.29) emphasizes the fact that the *Azmina* and the *Kāmil* were written in two consecutive