Islamic astronomy and Geography by David A. King


Reviewed by
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Islamic astronomy in ninth-century Baghdad was the outcome of Arabic translations of, and borrowings from, Indian, Persian, and Greek sources, some of the translations from Greek being direct and some through the intermediary of Syriac versions. The whole constituted a process called by A. I. Sabra appropriation and naturalization. Two particularly influential works thus translated were Ptolemy’s *Almagest* (Greek), of which there were several translations, compendia and commentaries, and the Sindhind *zij* (Indian). E. S. Kennedy compiled a catalogue of *zijes* in 1955; P. Kunitzsch published his study of the *Almagest* in 1974; and a group of scholars in Munich is now studying Ptolemaeus Arabus. But there is still much to be done. We have information about some of the authors and works from al-Nadīm’s *Fihrist* and also from later astronomers like al-Bīrūnī, who sometimes quote their predecessors.

A mathematical culture emerged in ninth-century Baghdad and continued for many centuries. *Inter alia*, non-Ptolemaic planetary models were developed that were very similar to those of Copernicus. Everyday things were also affected: e.g., the *qibla* (the direction of Mecca) was found mathematically, though not always heeded in the building of mosques. The author maintains that, after the initial period, astronomy developed in regional schools—for example, in Egypt, the Yemen, Spain, and so forth. The one in Egypt is illustrated by a description in chapter 4 of the *zij* of Ibn Yunus (d. 1009). The functions of the *muwaqqit*, the mosque astronomer responsible mainly for the times of prayer, are described in chapter 5.

Chapter 6 is on the medieval Maghrib, which the author praises for the many volumes by the scholars of Barcelona. Some of this chapter is on the 13th-century Tunisian astronomer Ibn Ishaq.
Besides a general survey of the field with a full bibliography, King presents two lists of sources: one of relevant manuscripts and the other of instruments. There are also chapters on mathematical astrology and geography.

The preface begins, ‘This volume supplements my three previous Variorum volumes on the history of Islamic astronomy.’ But the book could equally be read as an introduction to the subject: the massive list of King’s publications (261 + 5 items), also included in the book, will give indications for further reading. This impressive volume is dedicated to Julio Samso and his school in Barcelona.