Farghānī: Abū al-ʿAbbās Aḥmad ibn Muḥammad ibn Kathīr al-Farghānī

Flourished Central Asia and Baghdad, (Iraq), 9th century

Farghānī’s main claim to fame rests upon his widely circulated compendium of Ptolemy’s Almagest, as well as on his writings on observational instruments. His name has also been associated with the Nilometer at al-Fuṣṭāṭ (near modern Cairo), as well as with the construction of an irrigation canal to supply the new city of al-Jaʿfariyya in Iraq built by Caliph al-Mutawakkil (reigned: 847–861). Not many biographical details are known. From his name, it appears that Farghānī was born in the vicinity of Farghāna in Transoxiana, probably about the beginning of the 9th century. He appears to have spent much of his career associated with the ‘Abbāsid court in Baghdad.

Farghānī’s compendium (jawāmiʿ) of the Almagest was composed after the death of Maʿmūn in 833 but before 857. It was quite popular in Arabic, as testified in part by the surviving manuscript copies. It was also the subject of two commentaries, the first by Abū ʿUbayd ʿAbd al-Wahid ibn Muhammad al-Ṭūṣjānī, a student of Ibn Sinā, and the other by Abū al-Saqr ʿAbd al-ʿAzīz ibn Uthmān al-Qabīṣī. We know that Birūnī wrote an extensive discussion of this work entitled Tahdīḥ fuṣūl al-Farghānī, but it is no longer extant.

Farghānī’s compendium was, perhaps, even more influential in its Latin translations. The first of these was by John of Seville about 1135. Printed Latin versions based on this translation were published in Ferara (1493), Nuremberg (1537), and Paris (1546). The translation of Gerard of Cremona (made some time before 1175) was not printed until the 20th century, but it circulated in manuscript form throughout Europe. A Hebrew translation (before 1385?) of the Arabic text was prepared by Jacob Anatoli. This Hebrew version, together with the Latin version of John of Seville, was used by Jacob Christmann to prepare a new Latin translation, published in Frankfurt (1590). The Arabic text, together with a new Latin translation and notes (which cover only the first nine chapters), was published posthumously by Jacob Golius (Amsterdam, 1669).

Farghānī’s treatise on the astrolabe survives in Arabic. (It appears not to have been translated into Latin.) It is a competent discussion of the mathematical principles of astrolabe construction directed toward serious scholars at an “intermediate” level, according to a statement in the introduction. This treatise also seems to have been somewhat influential, since a “supplement” (Tatmīm ʿamal-ʾastūrlāb) was composed by Aḥmad ibn Muḥammad al-Azharī al-Khāniqī (flourished: 1350). An anonymous summary (Tajrīd) is also extant. Farghānī is also credited with a discussion of the construction of hour lines on horizontal sundials (ʿAmal al-rukhāmāt), but it
Selected References


Sezgin, Fuat (1978). Geschichte des arabischen Schrifttums. Vol. 6, Astronomie, pp. 149-151. Leiden: E. J. Brill. (The most recent bio-bibliographical study. Provides references to earlier studies that should be consulted as well, since Sezgin focuses on manuscript materials not found in the earlier sources.)

Toynbee, P. J. (1895). “Dante’s Obligations to Alfraganus in the Vita Nuova and Convivio.” Romania 24: 413-432. (Discusses the influence of the Latin version of John of Seville on European intellectual life.)