Published: December 15, 1988
Last Updated: October 27, 2016

BANŪ AMĀJŪR

BANŪ AMĀJŪR (or **MĀJŪR),** ABU'L-QĀSEM ʿABD-ALLĀH (ʿAlī according to Ebn Yūnes) b. (A)Mājūr Torkī and his son Abu'l-Ḥasan ʿAlī, astronomers. The descendants of a Turk from Farḡāna named Amājūr or Mājūr, Abu'l-Qāsem and his son came from Herat. The suggestion made by A. Sayılı (pp. 101-03) that they were connected with the family of Amājūr, an amir of Damascus who died in 264/877-78, is possibly correct but does not contradict their eastern origins. Abu'l-Ḥasan made a series of at least six observations of the planets, apparently at Shiraz, between 26 Rabīʿ I 272/10 September 885 and 1 Moḥarram 297/20 September 909 (Ebn Yūnes, pp. 174-79); the third observation, on 18 Šawwāl 288/6 October 901, is specifically stated to have taken place in Shiraz, while the dates of the first, fourth, and fifth are given in both the Arab and Persian calendars. The family seems to have been in Baghdad, however, when Abu'l-Ḥasan observed the planets again between Moḥarram and Rajab of 306/June, 918-January, 919 and compared his results with computations made with the tables of Ḥabaš and Ptolemy (Ebn Yūnes, pp. 120-27); in the same year, 306 *hejrī*/288 *yazdegerdī* (these years overlap from 6 April to 2 June 919) the Banū Amājūr observed Regulus and determined the rate of progression to be Ptolemy's 1° in 100 years (Ebn Yūnes, pp. 166-69). Abu'l-Qāsem, Abu'l-Ḥasan, and the latter's freedman Mofleḥ b. Yūsof further calculated a series of five lunar and two solar eclipses between 12 Ṣafar 311/1 June 923 and 14 Ḏu'l-qaʿda 321/5 November 933 and compared these calculations with their observations of the events themselves (Ebn Yūnes, pp. 128-41). Finally the same trio observed the sun and determined the parameters of its motions, though those accepted by the Banū Amājūr in their

Zīj al-badīʿ differ from those adopted by Mofleḥ (Ebn Yūnes, pp. 150-53).

From Ebn Yūnes' reports of their observations it is clear that the Banū Amājūr were particularly concerned with an attempt to correct the tables of Ḥabaš on the basis of new data, and that they also considered the relation of Ptolemy's parameters to their own. It is known that Abu'l-Qāsem had personal contact with the astronomer Ebn al-Adamī, who died in 308/920-21, but nothing further concerning their personal lives appears in the Islamic biographical tradition (Ebn al-Nadīm, ed. Flügel, p. 280; Ebn al-Qefṭī, p. 220-21, 231, 234). Those sources do, however, give a list of their writings, ascribed to Abu'l-Qāsem: 1. *Ketāb al-qenn* (?) (Book of the slave?), only in Ebn al-Nadīm. 2. *Ketāb al-zīj al-ḵāleṣ* (The pure astronomical tables), Kennedy, p. 135 no. 78. 3. *Ketāb zād al-mosāfer* (Book of provisions for the traveler). 4. *Ketāb al-zīj al-mozannar* (The girdled astronomical tables), Kennedy, p. 135 no. 79. 5. *Ketāb al-zīj al-badīʿ* (The amazing astronomical tables), Kennedy, p. 125 no. 8; this is the only *zīj* specifically named by Ebn Yūnes and may be the source of all the observation reports that he records. 6. *Ketāb zīj al-sendhend* (Astronomical tables of the Sendhend), Kennedy, p. 135 no. 90; this is presumably a reworking of the *zīj al-Sendhend* of Abū Jaʿfar Moḥammad Ḵʷārazmī. 7. *Ketāb zīj al-mamarrāt* (Astronomical tables of transits), Kennedy, p. 134 no. 67. 8. *Ketāb zīj al-Merrīḵ ʿala'l-taʾrīḵ al-fāresī* (Astronomical tables of Mars according to the Persian calendar), only in Ebn al-Qefṭī.

None of the above-mentioned works is extant, but there does exist in manuscripts at Paris a *Zīj al-ṭaylasān* ascribed to Abu'l-Qāsem ʿAlī b. Mājūr; it is perhaps of the type described by Goldstein, that is, cowl-shaped or triangular. There is also preserved in manuscripts at Paris and Leiden a *Jawāmeʿ aḥkām al-kosūfāt (kosūfayn) wa qerān al-kawākeb* (*kawkabayn*) (Collection of judgments from eclipses and planetary conjunctions). This is said to contain a reference to a conjunction that took place in 699/1299-1300 (Brockelmann, p. 397), though in fact no significant conjunction occurred during that year. The authenticity of this astrological text is yet to be established.

BIBLIOGRAPHY

Brockelmann, *GAL*, S. I, p. 397.

B. R. Goldstein, “A Medieval Table for Reckoning Time from Solar Altitude,” *Scripta Mathematica* 27, 1962, pp. 61-66.

Ebn al-Qefṭī, *Taʾrīḵ al-ḥokamāʾ*, ed. J. Lippert, Leipzig, 1903.

Ebn Yūnes, *Zīj al-kabīr al-ḥākemī*, in Caussin de Perceval, “Le livre de la grande table Hakémite,” *Notices et extraits des manuscrits* 7, year 12, pp. 16-240.

EI^{2} III, pp. 702-03.

E. S. Kennedy, *A Survey of Islamic Astronomical Tables*, Philadelphia, 1956.

A. Sayılı, *The Observatory in Islam*, Ankara, 1960.

F. Sezgin, *GAS* V, p. 282.

Suter, *Mathematiker*, pp. 49-50.