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Ḥajjāj ibn Yūsuf ibn Maṭar

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Flourished **Baghdad, (Iraq), 786-830**

We know next to nothing about Ḥajjāj's personal life, his family, his friends, or his training; we do know that he was one of the most influential translators of the late 8th and early 9th centuries in Baghdad, then the capital of the 'Abbāsīd Empire.

Ḥajjāj translated **Ptolemy's** *Megále Sýntaxis* (later known as the *Almagest*) and Euclid's *Elements*. In the early 9th century, he translated the *Elements*, apparently on the basis of a single Greek manuscript, into Arabic for Yaḥyā ibn Khālid (died: 805), the Vizier of Caliph **Hārūn al-Rashīd**. In the 820s, Ḥajjāj revised his translation and produced for the then ruling 'Abbāsīd Caliph **Ma'mūn** (reigned: 813-833) a new version described as more sophisticated than his original translation. When and for whom he translated the *Almagest* is unknown. Two manuscripts of Ḥajjāj's translation of Ptolemy's major work are today extant, one of them complete, the second containing only Books I-IV.

Ḥajjāj's translations exercised a long-lasting influence upon the community of Arabic, Persian, Hebrew, and Latin students of Ptolemy's and Euclid's books. It can be detected in the manuscripts representing the second major tradition in the Arabic transmission of the *Almagest* and the *Elements* (and in that of its later offspring in Latin and Hebrew). This second tradition was started by **Ishāq ibn Ḥunayn**'s translations of the *Almagest* and the *Elements* into Arabic and continued with **Thābit ibn Qurra**'s edition of the two translations. Several of the ten manuscripts of the Arabic *Almagest* extant today and representing this tradition contain some portions of the Ḥajjāj translation, in particular the star catalog. Manuscripts of both traditions, including manuscripts having parts of each, were studied in Andalusia (Spain), in northern Africa, the central lands of the Middle East, Central Asia, and India. Important scholars such as **Abū 'Alī ibn Sīnā** (in Central Asia and Iran;), **Jābir ibn Aflah** (in al-Andalus), and **Naṣīr al-Dīn al-Ṭūsī** (in Iran) knew and worked with manuscripts of both traditions and commented, sometimes critically, upon them. In the 12th century, **Gerard of Cremona** translated the *Almagest* in Toledo from Arabic into Latin using manuscripts representing the two Arabic traditions. Books I-IX of his translation are based on the work of Ḥajjāj except for the star catalog in the books VII.5-VIII.1, which represents a text mixing the two Arabic traditions. The remaining three books of Gerard's translation are derived from the work of Ishāq ibn Ḥunayn and Thābit ibn Qurra (Ptolemäus, Vol. 2, p. 3, 1990).

Selected References

Ibn al-Nadīm (1970). *The Fihrist of al-Nadīm: A Tenth-Century Survey of Muslim Culture*, edited and translated by Bayard Dodge. 2 Vols. New York: Columbia University Press.

Kunitzsch, Paul (1974). *Der Almagest: Die Syntaxis Mathematica des Claudius Ptolemaüs in arabisch-lateinischer Überlieferung*. Wiesbaden: Otto Harrassowitz.

——— (2001). "A Hitherto Unknown Arabic Manuscript of the *Almagest*." *Zeitschrift für Geschichte der Arabisch-Islamischen*

Wissenschaften 14: 31-37.

Lorch, Richard P. (1975). "The Astronomy of Jābir ibn Aflāḥ." *Centaurus* 19: 85-107.

Ptolemäus, Claudius (1986-1991). *Der Sternkatalog des Almagest: Die arabisch-mittelalterliche Tradition*, edited by Paul Kunitzsch. 3 Vols. Wiesbaden: Otto Harrassowitz.