Maʾmūn: Abū al-ʿAbbās ‘Abdallāh ibn Hārūn al-Rashīd

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**Born**  [Baghdad, (Iraq), 14 September 786]

**Died**  [near Tarsus, (Turkey), August 833]

Maʾmūn was the son of Caliph Hārūn al-Rashīd, a patron of the arts whose fame has come down to us in the tales of the *Thousand and One Nights*. Hārūn also supported a fine library in Baghdad, called “The Treasure House of Wisdom,” as well as the translation of foreign works in various fields. So Maʾmūn, brought up in an educated environment, was not only learned in the traditional Muslim studies but also was aware of a wider world of foreign learning. When he came to the throne as the seventh caliph of the ‘Abbāsīd Empire in 813, he was among the well-educated men of his time.

Maʾmūn spent his early years as caliph consolidating his reign and building internal unity in a diverse empire. It has been argued that part of that endeavor involved commissioning Arabic translations of important Persian documents, as part of a project of Arabicizing Persian learning. Since, in addition, many Persian intellectuals believed that Greek learning was in fact based upon older Persian learning, Maʾmūn commissioned translations of Greek material as well. Apart from these political considerations, however, there was undoubtedly a genuine interest on Maʾmūn's part in the learning of the Greeks. There is also a story of a dream in which Maʾmūn saw the Greek sage, **Aristotle**, reassuring him that religion and learning were not enemies and that Maʾmūn's support of foreign learning was not a threat to Islam.

Maʾmūn was zealous in his search for new material and sent the scholar Salm to Byzantine lands to buy manuscripts. (Salm also helped to improve an Arabic translation of *Ptolemy*'s astronomical classic, *The Almagest.*) According to some reports Maʾmūn founded, in the early 830s before his death, the Bayt al-Ḥikma, the House of Wisdom. However, some historians have argued that this was less a new foundation than an extension of the Treasury of Wisdom that was already in existence at the time of Hārūn. In any case we do know that Maʾmūn supported scholars of many nations and professing many faiths, who studied, translated, and disseminated wisdom and learning, particularly that of the Greeks.

In addition to his general interest in the learning of the ancients, part of Maʾmūn's support for astronomy was based on its utility for astrology, a subject with which it was to be closely associated for many centuries. Whatever the motives for his support, the result of these translation efforts was the translation into Arabic of a number of Greek astronomical works. These included the introductory treatises of **Theodosius**, Euclid, **Menelaus**, and **Aristarchus**, as well as all of
Ptolemy's works.

In addition to supporting the intellectual climate in which this work could be done, Maʾmūn also sponsored two sets of observations. The first was done in Baghdad, in 828, in the Shammāsiyya area, by astronomers including Yahya ibn Abī Mansūr and the noted mathematician Khwārizmī. (Two others were Sanad ibn ʿAlī and ʿAbbās al-Jawhari.) The Shammāsiyya observations were conducted around the times of the solstices and equinoxes, and it appears that Maʾmūn took an active interest in them. Birūnī informs us in his Taḥdīd that Maʾmūn rejected the first set of observations of 828 because of the big difference between the values for the maximum and minimum altitudes of the Sun (at the summer and winter solstices, respectively) at those observations and at the latter ones.

Yahya died before Maʾmūn left on one of his campaigns against the Byzantines in the early 830s. After his death, Maʾmūn decided to do new observations at Dayr Murrān on a hill near Damascus. Accordingly, he charged Khālid ibn ʿAbd al-Malik al-Marwarrūdhi with the task of doing observations over the period of a year with a new set of instruments. The observations, done in two periods between 831 and 833, lasted more than a year. They pleased Maʾmūn sufficiently for him to order that astronomical tables be prepared on the basis of their results. Since the observations both in Damascus and Baghdad seem to focus entirely on the Sun and Moon, these tables must have reflected earlier material for planetary motions.

Quite apart from these undoubted contributions to astronomy, Maʾmūn furnished an example of the type of a ruler that found many echoes in medieval Islam. The result was the development of the observatory as a new scientific institution, a development directly inspired by Maʾmūn, and, more generally, a tradition of royal patronage of astronomy.

Selected References


