



CONSTELLATIONS

CONSTELLATIONS. Although several of the constellations visible in the northern hemisphere were recognized and named by the Sumerians already in the 3rd millennium b.c.e., there is no evidence that this feature of Mesopotamian astronomy was shared by the ancient Iranians. Nowhere in the Gathas of Zoroaster or the Old Persian inscriptions of the Achaemenids are even individual stars mentioned. The first and only two constellations to be named in Old Iranian sources are Ursa Major and the Pleiades, in the Younger Avesta. Their names, *haptōiringa* (Pers. Haft-owrang), literally “having seven marks,” and *paoiryaēinyas* (NPers. Parvīn), derivative of *paoirya-* meaning “first,” are clearly indigenous and not, as was the case with several later Iranian astronomical appellations, taken over from Babylonian (in which Ursa Major is called MAR.GÍD.DA = *erequ* “wagon” and the Pleiades MUL.MUL “stars” par excellence). The date of this first attestation of Iranian constellation names is uncertain (see [avesta](#)) but can presumably be placed in a prehistoric period of the eastern Iranian world.

The next possible mentions of constellations are of two kinds, both dating from late Middle Persian times but only actually attested in works or manuscripts from the Islamic period. The first comprises the names of the twelve signs of the zodiac found in the fifth chapter of the Pahlavi encyclopedia *Bundahišn*. Although these signs no longer exactly coincided with the constellations from which they were named, it must be assumed that the constellations generally had the same names. The Babylonian zodiac had been developed by the time of Achaemenid rule over Mesopotamia.



Nevertheless, a comparative list (Table 16) shows that the Middle Persian names are practically identical with those of the Greek zodiac, a system distinct from but closely dependent upon the Babylonian.

The sixth zodiac, *hōšag*, is named after the brightest star in the constellation Virgo, Spica (Gk. *stáchys*); the name of the whole constellation was thus probably *dōšizag* “maiden.” The description of the constellation Sagittarius as a centaur (not to be confused with the constellation Centaurus) is justified by both Babylonian and Greek models, in which the archer is depicted with a horse’s body. Of the northern and southern constellations, ten each in the late Babylonian system, there is no mention in Iranian sources. The only other constellation outside the zodiac named in Pahlavi is Ursa Major, in the “learned” form *Haftōring*.

The other possible source of the names of constellations is the lists of lunar mansions. There are four of these in Middle Iranian: in the *Bundahišn*, chap. 2, in Pazand; in a Sogdian manuscript from Mt. Mug (Henning); it is practically identical with a Choresmian list given by Bīrūnī in his *Ātār al-bāqīa*; and a Sogdian list also given by Bīrūnī (p. 240). The first list contains twenty-seven names, in a sadly corrupt state. It is nevertheless possible to recognize stations of the moon called *pēš Parwēz* “before Parwēz” and *Parwēz*, giving this as the Middle Persian form of the name of the Pleiades (elsewhere in the *Bundahišn* said to comprise six stars) and one “before the Pleiades” (Perseus?), and three others apparently called *kaht-sar*, **kaht-myān*, and *kaht* “the head of Kaht, the middle of Kaht, Kaht (itself),” giving Kaht (or **Kayt*?) as the name of a constellation near Pisces, possibly Andromeda or Pegasus, or even Cetus. Each of the other lists contains twenty-eight names, for the most part probably of individual stars or asterisms. They allow the identification only of *prwy* as the Sogdian and Choresmian spellings of the name of the Pleiades.

After the Muslim conquest of Persia, and especially during the ‘Abbasid caliphate, Greek astronomy as translated into Arabic took possession of the field. In his *Ketāb al-tafhīm le awā’el šenā’at al-tanjīm* (Book of instruction in the elements of the art of astrology), written in Arabic at Ġazna in 419-20/1028-29, Bīrūnī listed twelve constellations (*šūrat*) in the zodiac, twenty-one situated to the north of it and fifteen to the south, with descriptions of how they were depicted. The list of names in Arabic was derived directly from Ptolemy’s *Almagest*. Several betray their origin, for example, for later Hercules (*en gónasin*) “kneeling,” Cygnus (*órnis*) “hen,” Equulus (*híppou protomé*) “forepart of the horse,” Eridanus (*pótamos*) “river.”



The Persian equivalents are preserved only in the star tables of certain manuscripts of the Persian translation of the work (possibly made in part, but not entirely, by the author himself). Although some of these Persian names were obviously preserved from pre-Islamic times, others are no more than translations of the Arabic terms. Most of the Persian names had long ago fallen out of use in favor of the Arabic terms. Some of the zodiac constellations have popular names (given in parentheses in [Table 17a](#) and [Table 17b](#)).

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[Table 16](#). Concordance of Ancient Names for Constellations of the Zodiac

[Table 17a](#). Names of the Constellations in Islamic Persia

[Table 17b](#). Names of the Constellations in Islamic Persia (Continued)