

have originated in India. They are mentioned only as stars in the earlier parts of the Rigveda, then the names of three of them are found in the latest parts of that Saṃhitā, and finally in the later Atharvaveda and in the Yajurveda Saṃhitās the full list appears. It may also be noted that the Vedic Indians show (see Graha) a remarkably small knowledge of the other astronomical phenomena; the discovery of a series of 27 lunar mansions by them would therefore be rather surprising. On the other hand, the nature of such an operation is not very complicated; it consists merely in selecting a star or a star group with which the moon is in conjunction. It is thus impossible *a priori* to deny that the Vedic Indians could have invented for themselves a lunar Zodiac.¹⁵⁷

But the question is complicated by the fact that there exist two similar sets of 28 stars or star groups in Arabia and in China, the Manāzil and the Sieou. The use of the Manāzil in Arabia is consistent and effective; the calendar is regulated by them, and the position of the asterisms corresponds best with the positions required for a lunar Zodiac. The Indians might therefore have borrowed the system from Arabia, but that is a mere possibility, because the evidence for the existence of the Manāzil is long posterior to that for the existence of the Nakṣatras, while again the Mazzaroth or Mazzaloth of the Old Testament¹⁵⁸ may really be the lunar mansions.¹⁵⁹ That the Arabian system is borrowed from India, as Burgess¹⁶⁰ held, is, on the other hand, not at all probable.

Biot, the eminent Chinese scholar, in a series of papers published by him between 1839 and 1861,¹⁶¹ attempted to prove

¹⁵⁷ Max Müller, *Rigveda*, 4², xlv *et seq.*, maintains the Indian origin of the system. Thibaut, *Astronomie, Astrologie und Mathematik*, 14, 15, admits it to be possible, as does Whitney, *Oriental and Linguistic Essays*, 2, 418.

¹⁵⁸ 2 Kings xxiii. 5; Job xxxviii. 32.

¹⁵⁹ Weber, *Nakṣatra*, I, 317, 318; Whitney, *op. cit.*, 359.

¹⁶⁰ *Journal of the American Oriental Society*, 8, 309-334. This was Weber's view also, according to Whitney, 413

et seq.; but Weber himself disclaimed it (see *Indische Studien*, 9, 425, 426; 10, 246, 247). On the other hand, Sédillot, *Matériaux pour servir à l'histoire comparée des Sciences Mathématiques par les Grecs et les Orientaux* (Paris, 1845-1849), favoured influence from Arabia on India.

¹⁶¹ Summed up in his two works, *Recherches sur l'ancienne astronomie Chinoise*, and *Études sur l'astronomie Indienne et l'astronomie Chinoise*.