

The Change in Jupiter's Motion

In the Tractate Shabbat of the Babylonian Talmud it is said that in order to teach Abraham the futility and meaninglessness of astrology, the Lord let the planet Zedek, or Jupiter, change its rising point from west to east:

"Go forth (i.e. cease) thy planet-(gazing), for Israel is free from planetary influence. What is thy calculation? Because Zedek (Jupiter) stands in the West? I will turn it back and place it in the East." And thus it is written, Who hath raised up Zedek from the East? He hath summoned it for his sake (sc. for the sake of Abraham).

This statement of the rabbis contains some contradictory ideas. Nevertheless, it may preserve certain elements of ancient lore.

The Babylonians described Marduk, or Jupiter, as having an eastward motion, different from the other planets: "The earliest system from Babylon has, however, East and West reversed, and assigns to its chief god Marduk, as god of the planet Jupiter, a definite easterly direction; to Mercury, on the other hand, a westerly one." (2)

"The Ra-mythology [of Egypt] is that which describes [Ra's] course from west to east." (3) Ra, rising in the west, was called "Harakhte, only god, king of the gods; he riseth in the west." (4) However, some hymns were addressed to "Ra when he riseth in the Eastern part of heaven." (5)

Egyptian lore also knew of a "Horus of the West" and a "Horus of the East." (6) Horus was the planet Jupiter.

The expression found in Latin literature, Jupiter Dianus, or two-faced, could be interpreted as denoting two motions of Jupiter, and eastward and a westward. This conforms to the same expression applied to the Sun where, as I endeavored to show, it denotes easterly and westerly movements of the luminary.

The celestial mechanics of the implied reversal of Jupiter's apparent motion remains unsolved. Jupiter apparently changed the place of its rising points without a similar and simultaneous change by the Sun and all the planets and stars. It might seem that in order for Jupiter alone to be subject to a change, a reversal of orbital motion is required, an unlikely proposition from the point of view of celestial mechanics.

Earlier we asked in relation to Saturn's great prominence, was not the Earth at some early period a satellite of that planet?; and we may ask again, with the ascendance of Jupiter, was the Earth not in the domain of this successor to the celestial throne? Theoretically, if the Earth were revolving around Jupiter, a reversal of our planet's north and south geographical poles would cause Jupiter to appear to change the point of its rising.

References

1. Shabbat 156b, I Epstein ed., (London, 1935). Cf. Isaiah 41:2. "Zedek also has the meaning of "righteousness" or "justice" and therefore

- the sentence is often rendered incorrectly as: "Who raised up the righteous (man) from the east." Cf. Hommel, *JSOR* (1927).
- 2. H. Winckler, *Die Babylonische Geisteskultur* second ed. (Leipzig, 1919), p. 72.
- 3. L. Frobenius, Das Zeitalter des Sonnengottes (Berlin, 1904), p. 170.
- 4. J. Breasted, Ancient Records of Egypt, III. 18. Cf. E. Meyer, Zeitschrift fuer Aegyptische Sprache (1877), pp. 148ff
- 5. E.g., E. A. W. Budge ed., *The Egyptian Book of the Dead* (London, 1899), chapter XV (Papyrus Ani), p. 246.
- 6. S. Mercer, *Horus, The Royal God of Egypt* Grafton, Mass., 1942), pp. 48, 117.
- 7. Frazer, Ovid's Fasti (London, 1931), note to p. 388.
- 8. Cf. the ancient view, referred to by Macrobius (Saturnalia VIII) that the two faces of Janus symbolize the god's power over the two gates of the sky ("et ideo geminum, quasi utriusque januae coelistis potentem").

