

Vijayananda (or Vijayanandin) | Encyclopedia.com

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(fl. Benares, India, 966), *astronomy*.

Vijayananda, the son of Jayananda, a Brāhmana of Benares who followed the Saurapaksa (see essay in the Supplement), wrote a *Karanatilaka* the epoch of which is 23/24 March 966; he is, then, obviously not the Vijayananda whose method of computing the longitudes of Jupiter and Saturn is referred to by Varāhamihira (fl. ca. 550) in his *Pañcasiddhāntikā* (XVII, 62). The *Karanatilaka* is known to us only in the Arabic translation with examples (some for 1025) by al-Bīrūnī entitled *Ghurraṭ al-zījāt*, which survives in a unique manuscript at Ahmadabad that can be supplemented by many quotations in al-Bīrūnī's *India, Canon, Transits, and Shadows*.

The *Karanatilaka* consists of fourteen chapters:

1. On the *ahargana* (lapsed time since the epoch).
2. On the mean and true longitudes of the two luminaries.
3. On the *pañcāṅga* (length of daylight; *nakṣatras*; tithis; *yogas*; and *karanas*).
4. On the mean longitudes of the five planets.
5. On the true longitudes of the five planets.
6. On the three problems relating to diurnal motion.
7. On lunar eclipses.
8. On solar eclipses.
9. On the projection of eclipses.
10. On the first visibilities of the planets.
11. On conjunctions of the planets.
12. On conjunctions of the planets with the fixed stars.
13. On the lunar crescent.
14. On the *pātas* of the sun and moon.

BIBLIOGRAPHY

An ed. of the *Ghurraṭ al-zījāt* was prepared by M. F. Quraishi of Lahore but has never been published. Sayyid Samad Husain Rizvi has edited a portion of the work (into ch. 6) with a somewhat cumbersome translation and commentary as "A Unique and Unknown Book of al-Beruni," in *Islamic Culture*, **37** (1963), 112-130, 167-187, 223-245; **38** (1964), 47-74, 195-212; **39** (1965), 1-26, 137-180.

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