

attraction of everything heavy towards its centre, *i.e.* the middle of the world.

Much to the same effect are the expressions of *Vāyu-Purāna*, viz. that noon in Amarāvati is sunrise in Vaisvata, midnight in Sukhâ, and sunset in Vibhâ.

Quotations from the *Vāyu* and *Matsya Purānas*.

Similar, also, are the expressions of *Matsya-Purāna*, for this book explains that east of Meru lies the city Amarāvati-pura, the residence of Indra, the ruler, and his wife; south of Meru, the city Saṁyamanī-pura, the residence of Yama, the son of the Sun, where he punishes and requites mankind; west of Meru, the city Sukhā-pura, the residence of Varuṇa, *i.e.* the water; and north of Meru, the city Vibhāvarī-pura, belonging to the Moon. Sun and planets revolve round Meru. When the sun has his noon position in Amarāvati-pura, it is the beginning of the day in Saṁyamanī-pura, midnight in Sukhâ, and the beginning of the night in Vibhāvarī-pura. And when the sun has his noon position in Saṁyamanī-pura, he rises over Sukhā-pura, sets over Amarāvati-pura, and has his midnight position with relation to Vibhāvarī-pura.

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If the author of the *Matsya-Purāna* says that the sun revolves round Meru, he means a mill-like rotation round those who inhabit Meru, who, in consequence of this nature of the rotation, do not know east nor west. The sun does not rise for the inhabitants of Meru in one particular place, but in various places. By the word *east* the author means the zenith of one city, and by *west* the zenith of another. Possibly those four cities of the *Matsya-Purāna* are identical with those mentioned by the astronomers. But the author has not mentioned how far they are distant from Meru. What we have besides related as notions of the Hindus is perfectly correct and borne out by scientific methods; however, they are wont never to speak of the pole unless they mention in the same breath also the mountain Meru.

A note of the author on the passage from the *Matsya-Purāna*.

In the definition of what is *low* the Hindus agree with us, viz. that it is *the centre of the world*, but their

Brahma-gupta and Varāhamihira on the law of gravitation.