

trary, the Hindu astronomers were the only class of learned men in their country who had an idea of science being progressive, not stationary or retrogressive. Therefore they thought themselves not only allowed, but called upon, to modify what by observation or otherwise could be proved to be erroneous.

To return to the Pauliṣa-Siddhānta, it must have existed, like some of the other Siddhāntas, in two editions. All the quotations from it are again in Āryá, which to my mind renders it probable that it was not long, say at the utmost 100 years, prior to Āryabhaṭa and Varāha-mihira. Now it is interesting that Utpala quotes a Mūla-Puliṣa-Siddhānta, an "original Puliṣa-Siddhānta," and that this time the verse is in Anuṣṭubh. It is only one verse,* but quite enough to prove that even this "original" work had been adapted to the exigencies of Hindu science, for it gives the number of revolutions of the fixed stars during the Four Ages. Here too we must leave it undecided whether Albírúní had the Mūla-Puliṣa-Siddhānta in view, or the recast.

It would be extremely rash to deduce from these scanty details concerning the five first standard works of Hindu astronomical science any inference as to the probable period of their first composition. As an hypothesis, however, serves to direct the attention to a more definite sphere of investigation, we may roughly date the beginning of the Siddhānta period at 250 A. D., about half way between Garga and Varāha-mihira.

Among the remaining authorities mentioned in the Br̥hat-Saṁhitá there are no more astronomers. Ārya-Vishṇugupta is considered to be the author or publisher of a book on Nativity. He is also called Cāṇakya, so that the fiery minister of Candra-

* It is as follows :

खखाष्टमुनिरामाश्विनेत्राष्टशररात्रयः ।

भानां चतुर्युगेणैते परिवर्ताः प्रकीर्तिताः ॥

The number is 1582237800, which diminished by the number of the revolutions of the sun during the same period (4320000) gives 1577917800, being the number of the civil days.