

knew no Sanskrit, it is but charitable to try to believe that he had not seen or heard of the passage communicated above. Davis also knew the book, but he must have had a corrupt MS., for he calls it *Ārsha-Siddhānta*. So much about the *Mahā-Āryabhaṭa-Siddhānta*, containing the lucubrations of some astronomer, who wished to imitate *Āryabhaṭa* of Kusumapura, and followed him at a great distance, both of time and merit.

We owe the knowledge of nearly all the particulars about the predecessors of *Varāha-mihira* to *Bhaṭṭa Utpala*. This astronomer who, as we have had occasion to notice, flourished in the middle of the 10th century of our era, seems to have earned his great reputation\* less by his original compositions than by his commentaries on *Varāha-mihira*. An original work of his is the *Bhaṭṭotpala-Horāśāstra*, a very short treatise in 75 stanzas; a MS. of which is in possession of the Berlin Library, (see Weber's Catalogue 863). Not having this *Horāśāstra* at hand, I cannot affirm whether it be identical with a work sometimes quoted by *Utpala* as his own, and called *Khaṇḍa-khādaka*; very likely it is the same book under another title. A greater reputation has been earned by him in his capacity of commentator. It is not known if he has written a commentary on all the works of *Varāha-mihira*, but as many of these as have been brought to light are provided with one. Those I have seen myself are the *Sanhitāvivṛti* or *Sanhitāvṛtti*, the *Bṛhaj-Jātaka-vivṛti*, that on the *Laghu-Jātaka*, and that on the *Yogayātrā*. Besides these, there is extant and frequently met with, a commentary on the *Shaṭpan-cācīkā*, a work by *Prthuyāsa*, the son of *Varāha-mihira*.

The merits of *Bhaṭṭa Utpala* as a commentator are held

\* Colebrooke (*Alg.* p. XLVI.) mingles his praise with a little censure, saying that the commentator, "in several places of his commentary names himself *Utpala*, quibbling with simulated modesty on his appellation, for the word signifies stone." The taunt is undeserved and rests upon some misconceptions: 1° *Utpala* means no quibble; 2° *Utpala* is to be taken as a proper noun, not as an appellative; 3° even if it were an appellative, it would not mean *stone*, but *nymphæa*; Colebrooke confounds it with *upala*; 4° there is no trace of simulation; 5° there is no trace of modesty.