

valleys of the Hoang-ho westward to the Don and the Danube, and the opposite tendencies of these currents, which at first brought the different races into antagonist conflict in the northern parts of the Old Continent, ended in establishing friendly relations of peace and commerce. It is when considered from this point of view that great currents of migration, advancing like oceanic currents between masses which are themselves unmoved, become objects of cosmical importance.

In the reign of the Emperor Claudius, the embassy of Rachiass of Ceylon came to Rome by way of Egypt. Under Marcus Aurelius Antoninus (named An-tun by the writers of the history of the dynasty of Han), Roman legates visited the Chinese court, having come by sea by the route of Tunkin. We here observe the earliest traces of the extended intercourse of the Romans with China and India, since it is highly probable that the knowledge of the Greek sphere and zodiac, as well as that of the astrological planetary week, was not generally diffused until the first century of our era, and that it was then effected by means of this intercourse between the two countries.* The great Indian mathematicians Warahamihira, Brahmagupta, and perhaps even Aryabhatta, lived at a more recent period than that under consideration ;† but the elements of knowledge, either discovered by Indian nations, frequently in different and wholly independent directions, or existing among these ancient civilized races from primitive ages, may have penetrated into the West even before the time of Diophantus, by means of the extended commercial relations existing between the Ptolemies and the Cæsars. I will not here attempt to determine what is due to each individual race and epoch, my object being merely to indicate the different channels by which an interchange of ideas has been effected.

The strongest evidence of the multiplicity of means, and the extent of the advance that had been made in general intercourse, is testified by the colossal works of Strabo and Ptolemy. The gifted geographer of Amasea does not possess the numerical accuracy of Hipparchus, or the mathematical and

* See Letronne, in the *Observations Critiques et Archéologiques sur les Représentations Zodiacales de l'Antiquité*, 1824, p. 99, as well as his later work, *Sur l'Origine Grecque des Zodiacques prétendus Egyptiens*, 1837, p. 27.

† The sound inquirer, Colebrooke, places Warahamihira in the fifth, Brahmagupta at the end of the sixth century, and Aryabhatta rather indefinitely between the years 200 and 400 of our era. (Compare Holtzmann, *Ueber den Griechischen Ursprung des Indischen Thierkreises*, 1841, s. 23.)