

---

## CURRENT SCIENCE—50 YEARS AGO

---

### The Place of India in Pre-History\*†

THOUGH absolute dating in time is impossible in pre-history a geological chronology can be constructed, and at the time when man appeared glacial deposits were being formed in the north, while in the tropics corresponding climatological changes have resulted in deposits the relation of which to those further north is now being investigated.

The evolution of man's brain from lower to higher levels is reflected in the degree of perfection achieved in the tools he used and, as different types of tools form a sequence agreeing with the sequence of geological strata, they afford the best available evidence of the course of human evolution during the early Ice Age, human fossils being fragmentary and very rare.

In Europe the most primitive tools are called Eoliths or "dawn stones". From these tools, which are so crude as to be scarcely recognisable as such except to a trained eye, the sequence passes through successive stages of finer and finer workmanship in the process of flaking by which they were made, to more useful artifacts upto those of the Neolithic Age of polished stone which in its turn passed into the metal era. Each stage—Chellean, Acheulean, Mousterian, etc.—is named after a type station in Europe, and such cultural stages are well defined and easily recognisable. But the evolution was not smooth, for in Europe two civilisations are found to have alternated, fluctuated and finally merged as the peoples respectively advanced and dominated or fell behind, till at last they were assimilated the one into the other. The first of these groups is called the Core Tool People since they generally used as implements stone cores shaped by

the striking off flakes. The second is called the Flake Tool People, since they used as implements flakes struck off from a core—a difference in method of manufacture involving a fundamental difference in psychology. It seems likely that the Flake peoples of Europe were invaders from Asia and the Core peoples from Africa. The Mousterians were probably a mixture of the two, though there were later invasions from Asia during Upper Palaeolithic and Neolithic times.

A somewhat similar history can be traced in Africa. But there the core technique was definitely dominant while the flake technique did not gain much hold except in the north, where Asiatic influence would be more readily felt. In China, on the other hand, all cultures so far studied are flake cultures, the earliest being rather Mousteroid in form but of a coarser type, though lately a core-pebble culture similar to that found in North India has been reported.

The special importance of India for the proper interpretation of the facts of pre-history lies in her position in the geographical centre for Europe, Africa, China and Jawa, as well as in the many artifacts known to occur there and in the Primate remains of the Siwalik deposits which give grounds for hope that humanid remains may eventually be found there also, especially in view of the hypothesis put forwarded by physical anthropologists that the strenuous climatic conditions resulting from the uplift of the Himalayas were deciding factors in human evolution.

Research in India is also needed to throw light upon the origin of the Asiatic invasions of Europe in Aurignacian and Neolithic times, for it is in India that the earliest proto-Neolithic tools of Asia seem to occur; while the apparent absence of true Asiatic flake cultures from India also calls for further investigation. Though Asia may open the door to a true concept of the pre-history of man, India holds its key.

---

\* A brief summary of the lecture delivered by Mr. T. T. Paterson of the Yale-Cambridge India Expedition, on Thursday, November 28, under the auspices of the Archaeological Society of South India, Madras.

† Published in *Curr. Sci.*, Vol. IV, January 1936, p. 538.

---