

of human history. It is difficult for any history to write its own beginnings. But prehistory is an exception. The fossils, the river terraces, geochronology, pollen grains and potsherds have left their indelible records. An understanding of the major problems from the point of view of geology, geography, climatology, palaeontology, biology, anthropology, archaeology enables one to develop a perspective of value in one's efforts to understand early human history. Thus in classifying the prehistoric sites, each of the methods enumerated above has its own merits and limitations. As many of the aids enumerated here as possible must be applied to a given site and the cumulative evidence critically evaluated. But the methods are complex. Even the geological ones have not been properly worked out in India. There is an urgent need to build up the necessary technique in collaboration with experts working in various branches, in order to be able to reconstruct India's prehistory which, there is reason to believe, will yield a rich harvest of knowledge. At the present time the Archaeological Survey of India, under expert guidance of Dr. Mortimer Wheeler, is best fitted for this task.

1. The terms "Prehistory" and "Protohistory" have been used somewhat differently by M. C. Burkitt (*vide p. 1. The Old Stone Age* Cambridge University Press, 1933), and by Sir Leonard Woolley (*vide para 19, A Report on the Work of the Archaeological Survey of India, 1939*). This must be clarified for India by an agreed terminology. 2. Sir Leonard Woolley, *Loc. cit.*, para 19. 3. *The*

Foots Collection of Indian Prehistoric and Protohistoric Antiquities, Madras Government Press, 1916. 4. *Studies on the Ice Age in India and Associated Human Cultures*, Carnegie Institution of Washington, Publication No. 493, 1939. 5. Panhanan Mitra *Prehistoric India*, Calcutta University, 1917, pp. 186-87; 190-91. 6. —. *Loc. cit.*, p. 231. 7. Bruce Foote, *Catalogue of Prehistoric Antiquities*, Madras Government Press, 1901, p. vi; Sir Leonard Woolley, *Loc. cit.*, para 19. 8. de Terra and Patterson, *Loc. cit.*, p. 226. 9. —, *Loc. cit.*, pp. 223-31. 10. —, —, *Loc. cit.*, pp. 313-21. 11. Krishnan, M. S., *Geology of India and Burma*, Madras Law Journal Office, 1943, p. 483. 12. De Geer, Gerard, "Glacial Broad-mapping, Sweden—New York Manitoba", *Report of the 16th Intern. Geol. Congr., Washington, 1899, Washington, 1936*, 1, 192-202. 13. Leighton, M. M., "The significance of profiles of weathering in stratigraphic archaeology", *Early Man*. 15. Clark, J. G. D., *The Mesolithic Settlement of Northern Europe*, Cambridge University Press, 1936, pp. 31-4. 16. Cecil Maby, J., "The Identification of Wool and Wool Charcoal Fragments," *Analyst*, 1932, 57, 2-8. 17. Wright, W. B., *The Quaternary, Ice Age*, Macmillan & Co., London, 1937, pp. 450-51. 18. Sears, Paul B., and Glenn, C. Couch, "Humus stratigraphy as a clue to past vegetation in Oklahoma," *Proc. Okla. Acad. Sci.*, 1935, 15. 19. Sennell, I., *Sjrandlinjbestämningar och Markanalys, Fornönnen*, 1932, pp. 40-47. 20. *The Three Ages*, Camb. Univ. Press, 1943.

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DEPARTMENT OF CHEMICAL TECHNOLOGY, UNIVERSITY OF BOMBAY

The Annual Report for 1943-44 of the Department of Chemical Technology of the University of Bombay, gives a very pleasing account of the increasingly rapid growth in its activities, aided by a continuous inflow of generous endowments made for furthering the valuable work carried out by the Department. These endowments have been duly announced in our columns from time to time. As a result the Department is or will soon be able to offer degree courses in Oils, Fats and Soaps, and Plastics, Paints and Varnishes (Sir Homi Mehta endowment of Rs. 7 lakhs), a Pharmacy Laboratory with excellent facilities for advanced teaching and research in pharmaceutical chemistry (Topiwala endowment of Rs. 1.25 lakhs), a fully equipped section in Dyestuff Technology and Laboratories for advanced research in textile chemistry and modern methods of textile finishing (Bombay Millowners' Association—Rs. 3.92 lakhs).

While it is but natural that admission to this Department for the various courses should be primarily available for the graduates of the Bombay University, it is to be regretted that the admissions are restricted exclusively to them (except for 40 per cent. of the seats in the Intermediates and Dyes Section, financed by the All-India Board of Scientific and Industrial Research). For one has only to just contemplate over the effects of a similar dictum regarding admissions to the Massachusetts Institute of Technology, or the technical departments of the Sheffield University, etc.

The section of the Report dealing with research papers published and works in progress indicates that as usual a volume of valuable researches are being carried on by the staff and post-graduate students. In addition, the following schemes are in operation under the auspices of the Board of Scientific and Industrial Research: (i) Preparation of Vat Dyes, (ii) Determination of the Constitution of some Commercial Dyes, (iii) Synthetic Dyes and Modified Shades from Cutch, (iv) Preparation of Aniline from Chlorobenzene.

It is interesting to note that the section for analysis and technical investigations handled last year 209 enquiries involving 451 analytical estimations, and a number of investigations of the type, 'Porosity and thickness of electro-tin plates with a view to ascertain their suitability for storing hydrogenated oils', 'analysis and examination of used photographic solutions for recovery of chemicals', etc. It is rather intriguing to read that "the work of the Section has indicated a general tendency towards unskilled adulteration. Thus starches have been very commonly mixed with tamarind flour, udud dal and even clay. Gums have been found mixed with china-clay or starches; sulphur blacks have been liberally mixed with coal-dust; a sample of sodium sulphate was passed off as barium chloride; castor-oil soaps are being sold as vegetable tallow; and numerous cases of a similar character are being repeatedly detected and reported upon".