Looking for lost footprints

Eighteen scientists from different disciplines bring our understanding of early human occupation of South Asia up to date

TONY JOSEPH

The last decade has been eventful in terms of our understanding of human evolution and the peopling of the world. Along with new archaeological discoveries, the rapidly advancing science of population genetics and ancient DNA sequencing are filling in a lot of the blanks and are turning what were once hypotheses into theories based on facts. For example, we now know that all modern human populations outside of Africa came from a small sub-section of the African population that moved out into Eurasia around 70,000 years ago. We also know that the earliest evidence for modern humans, Homo sapiens, goes back to 300,000 years ago, earlier than previously thought. We have found out that Homo sapiens interbred with their genetic cousins, Neanderthals and Denisovans, and that most of us today carry some of their genes.

What about India?

Amidst all this, how much has our understanding of the peopling of India, whether by our hominin predecessors or modern humans, improved? The book that will answer the question is titled Beyond Stones and More Stones: Defining Indian Prehistoric Archaeology Volume 1. Edited by Ravi Korisettar, The Mythic Society, Bengaluru (₹1,200).

Beyond Stones and More Stones: Defining Indian Prehistoric Archaeology Volume 1

Edited by Ravi Korisettar
The Mythic Society, Bengaluru

Digging deep: The biggest challenge in trying to grasp Indian pre-history is the measly availability of fossils. (GETTY IMAGES/ ISTOCK)

This could be the likely work of Homo erectus that evolved in Africa around two million years ago and then quickly spread through the world. In India, there is a proliferation of stone tools, especially in the period 800,000 to 200,000 years ago, and these indicate that archaic humans preferred places like the Siwaliks, the Vindhyan basin of central India, the forested zones of Chhota Nagpur, and the Bhit, Kaladgi, Cuddapah and Kortallayar basins of southern India — all of them with plentiful supply of raw materials for making stone tools, dependable sources of water, and easy availability of animals and plants.

By the time Homo sapiens came out of Africa in what can be called the Out of Africa 2 episode, the descendents of Out of Africa 1 had split into multiple families: Neanderthals, Denisovans and Homo floresiensis, to name some. There has been some debate about when modern humans moved out of Africa. Genetics says that all modern humans outside of Africa originated from a single migration out of Africa around 70,000 years ago. The earliest fossil evidence of Homo sapiens in South Asia is not in India, but in Fa Hien caves in Sri Lanka, dated to 38,000 years ago. In India, the earliest fossil dates between 12,000 and 20,000 years ago and is from Jwalapuram — coastal and riverine pathways, “reaching different parts of the subcontinent at different times.”

Modern find

In Jwalapuram, the authors note the first appearance of stone microblades around 38,000 years ago and their persistence from then on. (Microblades are often used to make composite tools such as knives with a wooden or bone handle.) These tools are closely associated with modern humans and the authors say that modern humans could have moved into the area 40,000-35,000 years ago. Did they meet the earlier inhabitants when they moved in? It would have been infinitely interesting to know, but there’s no answer as of now. The book may not be an easy read for anyone without an abiding interest in archaeology but for others, it is a treasure because of the many gems it contains: such as anthropologist Sheela Athreya’s chapter that deals with the relationship of modern day tribal populations to the aboriginal inhabitants of South Asia as Sushama G. G. Deo and S.N. Rajaguru’s chapter dealing with the question of whether there are paleolithic settlements submerged in the continental shelf. Some chapters are highly technical, such as those dealing with the chronology of Toba tuffs or the monsoon changes in the subcontinent over the last 200,000 years, but highly useful as well. This book stops short of the transition to Neolithic and the beginnings of agriculture in South Asia, but that is only because these have been kept for Volume 2.

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