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THE FIRST INDIANS

Relevant for: World & Indian Geography | Topic: The Earth, its Evolution and Origin of Life on Earth

Early Indians draws *from a fascination with the Harappan civilisation: "Who were the people who built the largest civilisation of their time, and where did they go?" This specific question leads to others, and the scope of the research on India's prehistory expands from finding out who the Harappans were to how Indians came to be. Somewhere along the way, it also becomes clear that the most important revelations are emerging from the new field of population genetics, thanks to analysis of DNA extracted from individuals who lived tens of thousands of years ago. An excerpt:*

When the first group of modern humans walked into India, perhaps no more than a few hundred people in groups of twenty or twenty-five, trekking all the way from the Arabian peninsula over hundreds of years or perhaps even a thousand or more years, did they have a cosmology of their own that tried to explain the inexplicable? And did they have any inkling that they were entering a special place that more than a billion of their descendants would one day call their home? We are unlikely to ever know the answers to such questions, but there are other questions that we can crack with the technology and material evidence that we have. Questions such as: when they entered India, were they walking into a country that they had all to themselves — like the first modern humans in Australia or the Americas — or did they have competition in the form of other members of the Homo species, like in the Levant and Arabia? Did they tangle with each other? Or did they tango? Did our ancestors drive the others to extinction? Did they bring advanced technology — like bows and arrows and spears — or did they come with just a Middle Palaeolithic stone toolkit of scrapers, axes and sharp flakes that could be used as blades? And, of course, what did they look like? Do we have their direct descendants among us today? How big a brood have they left behind? Where can we find them?

Let us start with the most tangible question first. What did they look like? We know that the Onge in the Andaman Islands are descendants of the original Out of Africa migrants who may have mixed less with other groups. But does that mean the First Indians looked like them? That would be stretching things too far.

Today's Onge are as distant chronologically from the first migrants as any of us. This is such an obvious truth that it shouldn't be necessary to say it. But it is surprising how often our mind plays tricks with us. For example, when we think of the earliest modern humans, say, those who existed 300,000 years ago, our mental picture of them may resemble today's Africans. But this is an ill-conceived idea. The Africans of today are exactly as removed from the earliest modern humans as we are and have gone through similar levels of mutation and change as the rest of humanity. They are no closer to the early modern humans than we are. Mutations can change the colour of the skin, the shape of the nose, the texture of the hair, or the slant of the eye — not to speak of such things as the ability to survive at high altitudes (Tibetans) or to stay underwater for long (the Bajau people of south-east Asia).

Similarly, in the case of the Onge too, 60,000 or 65,000 years is a long time for mutations to have done their work, and also for drift and selection pressures to have winnowed the genetic field. What is drift and selection? Genetic drift is the phrase geneticists use to describe the tendency of small sequestered populations to have declining genetic diversity over time. The principle is simple. In every generation, there is a chance that the last person carrying a particular genetic variation may die without leaving an heir. In a large population, the chances of any single genetic variation dwindling down to having just one last representative is low and,

therefore, the effect of drift will be less too. In other words, small populations are likely to lose enough diversity over time and become more homogeneous — or rather, drift towards a uniform genetic standard. So in a given time, drift alone could make a small population look very different from how they used to look.

The word ‘selection’, on the other hand, alludes to the essential process of evolution — the physical environment or the social environment or sexual preferences lending greater genetic success to some traits or mutations and less success to others, thus shaping the evolution of a population in a particular way. So it is highly likely that because of all these — mutations, drift and selection — the Onge today look quite different from what the First Indians looked like. (This is precisely the process — mutation, drift and selection — that makes different population groups separated by distance or other geographical barriers grow genetically distinct over time.)

Until we find a well-preserved skeleton from some 65,000 years ago that we can use to reconstruct the faces of the first migrants, we have only one other, suboptimal option: look for ancient skeletons of modern humans from other regions. And we do have one from the Skhul cave of Israel, although it is dated much earlier, between 80,000 and 120,000 years ago. It is the skeleton of a female modern human, and the reconstructed face shows a person we can easily identify with, but with some distinct differences. Of course, we have no idea what level of difference existed among modern humans in different parts of Africa and the Levant over 80,000 years ago. It is possible that the people who moved into the Arabian peninsula (who would eventually reach south Asia) looked quite different from those who broke into the Levant.

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The Transgender Persons Bill will do more damage than good if passed without revision

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