DNA Exposes India's Past
Category : July/August 2001
Published by Anonymous on Jul. 01, 2001

SCIENCE

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New theory posits that today's Indians arrived over 50,000 years ago

Genetic evidence isn't just about freeing the unjustly convicted these days or determining whether Thomas Jefferson did or did not have children by his black slave, Sally Hemmings. It's also casting new light on the mid-18th century theory of India's history called the "Aryan Invasion." This, as you may recall having read it in virtually every historical account of India is the pervasive notion that about 1800 bce, hordes of horseback-riding, chariot-driving, light-skinned invaders from the West stormed into India, laying waste the advanced Indus Valley cities, bringing with them Sanskrit, the Rig Veda, the brahmin priest system and every other good thing!

According to one of the most widely-used history books on India, The Wonder that was India, by A.L. Basham, the invading Aryans were, "semi-nomadic barbarians, tall, who tamed the horse, were pastoral, and migrated in bands eastwards, conquering local populations and

intermarrying with them to form a ruling class. They brought with them their patrilineal family system, their worship of the sky gods…." These same people, Basham states, also went westwards, "to become the ancestors of the Greeks, Latins, Celts and Teutons." Just about every aspect of modern Hinduism is attributed either directly to these invaders, or as a result of their interaction with the conquered, likely Dravidian-speaking, people.

The Aryan Invasion theory has been under siege from many sides, especially in the last ten years. Literary, archeological and astronomical evidence simply fail to support it, and critics are quick to point out the very convenient purpose the theory served: to support the British take-over of India at the same time, who were the latest in a series of invaders. Even mainstream historians, some of them students of the renowned Professor Basham, have abandoned it. But many still hold to it, in part because so many aspects of Hinduism have traditionally been explained in the West by this invasion. For example, take this explanation from Basham on the origins of the sudras, or worker caste. "The sudra was in fact a second-class citizen, on the fringes of [the conquering] Aryan society." Such assertions exacerbate caste tension even today.

Now, recent DNA research has a one-word answer for

this invasion theory: "Not." With the theory's fall would go most of the scholarly explanations of the origins of Sanskrit, the Vedas, brahmins, sudras, etc., etc.

That refutation is just one result of a broad re-evaluation of human history as a result of genetic research. The latest theory is called the "recent replacement model." It is based on analysis of "mitochondreal DNA," which is passed from generation to generation only through the mother. Such analysis allows geneticists to trace back a person's ancestry, and determine when one group of people separated from another.

The startling conclusion of this model is that all modern humans can be traced back to migrations out of East Africa, possibly just 50,000 years ago, and certainly no more than 200,000 years ago. Spreading out from the area near modern Ethiopia, they went north to Europe and west to India, then on to China and Australia.

For as-yet-unknown reasons, they completely replaced the existing archaic humans who themselves had previously spread out of Africa two million years before. It must be admitted that neither geneticists nor anyone else are especially clear about how this "replacement" of the earlier humans occurred, and further discoveries

may disrupt current theories and conclusions.

The science of all this is complex, but Professor Richard Villems of the Estonian Biocentre in Estonia explained some of the consequences to Hinduism Today in an e-mail interview. "I am aware of the problem of the Aryan Invasion, and although some of my colleagues still want to see its influence in the Indian maternal lineages, we are very skeptical about it."

"It is not entirely correct," Villems went on, "to say that Indians and Europeans separated some 50,000 years ago. It is, however, appropriate to conclude from this evidence that the maternal lineages of the present-day Indian populations are largely autochthonous, that is, unique to India, and very, very old. Indians are readily distinguished from Europeans, Near-Middle East populations and those living north or east of India." "There are signs," he wrote, "of later admixtures, particularly along the border regions, but this has had only a limited impact."

We asked him about language, specifically the common belief that the presence of languages derived from Indo-European, such as Sanskrit and Hindi, in the north, and the Dravidic languages of the south indicate a racial divide. "There is only a small difference between

the pools of maternal lineages between Indians," replied Dr. Villems, "whether they speak Indo-European or Dravidic languages. Also, the maternal genetic lineages of the Indian tribal populations are the same as the rest of the population." This latter discovery contradicts the theory that "Indians" displaced "tribals" from the plains regions of India at some point in history, pushing them into the hill regions.

What language, we asked, did the ancestors of today's Indians and Europeans speak when they left Africa? "The problem," Villems replied, "with historic linguistics is that their time horizon is at best 8,000 years maximum, because their methods don't yield positive information below this time depth. So you will hardly find anyone who wants to speak about Indo-European or whatever language before that time. A few are 'brave enough' to suggest the split between Dravidic and Indo-European was 16,000 to 19,000 years ago."

"I think that the Aryan Invasion theory," concluded Villems, "in its classical form is dead already, and an attempt to overkill it would perhaps rather scatter our attention from a more complete understanding of the demographic history of India's people."

It is now the job of historians, social anthropologists and

Hindus in general to weed out the vast array of myths generated by the Aryan Invasion theory, beginning with the notion that the people of north and south India are of fundamentally different origin. Right today, there are heated debates over the use of Sanskrit in South Indian temples because it is regarded as an "imposition" of northern brahmins. There are hundreds, if not thousands, of other baseless conclusions about India derived from this persistent but unfounded legend.

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