

Creationism: The Hindu View

A Review of *Forbidden Archeology*, by Michael A. Cremo and Richard L. Thompson. Badger, CA: Govardhan Hill Publishing. 1994. ISBN 0-9635309-8-4

By Colin Groves

When a big square package, weighing over 3.5kg, arrived in my pigeon-hole, a number of thoughts flitted across my mind. Which student hates me enough to send me a letter bomb? Will the postman sue me because of his hernia? After the package, when unwrapped, proved to contain a 914 page book, I felt like the Prince Regent on being presented by Edward Gibbon with a copy of his "*Decline and Fall of the Roman Empire*": "Another great damn thick square book! Always scribble, scribble, scribble, eh, Mr. Gibbon?". And then that final, heart rending, cry, "Why me?".

There is a letter from the senior author, Michael Cremo, accompanying the book. "Because your work, or that of your colleagues, is discussed in my new book [Forbidden Archeology](#), I am sending you an advance copy." Can this be conspiracy theory as applied to archaeology by someone who feels that The Truth has been suppressed by The Establishment? It can. The letterhead is "Bhaktivedanta Institute, San Diego". Can this be a representative of that other fundamentalism, the Hindu variety? It can.

Remind ourselves what fundamentalist Hindus believe. Like fundamentalist Christians and Jews, they dismiss evolution. Unlike the latter, who believe the world has existed only six to ten thousand years, fundamentalist Hindus believe it has been going for billions and billions of years - far more than geology allows, in fact. And human beings, and indeed all living creatures, have been here all along. But in the event, it is going to make little difference; an apologia will consist of a recital of long-forgotten (long-suppressed, in their view) "evidence" of humans coeval with trilobites and dinosaurs, and arguments that supposed ape/human intermediates really aren't that at all.

But this time we get nearly a thousand pages! Gish, Bowden and Lubenow, the Christian creationists, can't raise even half of this between them. The difference is that Cremo and Thompson have read much, much more of the original literature than the other creationists, and their survey is correspondingly more complete. Yet I can't really say that their understanding is much greater, for all that; their tone of argument is as perverse, they are just as biased.

The fossil and archaeological evidence for human and cultural evolution is not all of consistently high quality. In the nineteenth century, human remains and artefacts were usually found by accident and by amateurs; they would be dug up, removed from context, and presented with a flourish to the nearest "expert". Controlled excavation was not a widely practised art; photography of a find in situ was an unusual occurrence. The finds' stratigraphy was often vague in the extreme; those re-examining their significance in later times had to rely on the fading memories of untrained workmen who had been enlisted by the finder.

This state of affairs improved as archaeology and palaeontology developed, and contextual information came to be recognised as crucial. Today, accidental discoveries are rarities; usually specimens turn up because someone has an idea where to look, given the prevailing geology and landscape, and an excavation is mounted with all kinds of specialists - geomorphologists, geochemists, taphonomists, above all photographers - riding along to ensure that everything about the site and its contents is recorded.

Cremo and Thompson seem not to understand this; they seem to want to accord equal value to all finds. One of many, many "out-of-context" human fossils which they discuss is the Foxhall jaw, a specimen of modern *Homo sapiens* discovered in 1855 and commonly ascribed at the time to the Late Pliocene, when (as we now believe) the human lineage was represented by just a bunch of near-apes called the australopithecines. The jaw was found by workmen, one of whom sold it to Dr. Collyer, a passing American physician, for the price of a glass of beer, and Collyer showed it to the luminaries of the day - Owen, Prestwich, Huxley, Busk - who expressed a variety of opinions, that it could or could not have come from the site and level claimed for it, and so that it could or could not be an example of "Pliocene Man". The jaw not long afterwards disappeared.

The authors quote the palaeoanthropologists Boule and Vallois in 1947: "It requires a total lack of critical sense to pay any heed to such a piece of evidence as this", and I can only agree; but, oddly, Cremo and Thompson disagree. Their opinion has nothing to do with the obvious fact that the whole case for the specimen's Pliocene origin was based on hearsay and supposition, and because the fossil has since disappeared, but because the stratigraphic provenances of other, nowadays widely accepted, fossils - "Java Man" and the Heidelberg jaw - were likewise based on flimsy evidence, and the original "Peking Man" fossils have likewise disappeared!

One has only to turn to their accounts of these fossils, and to read between the lines, to see why these other fossils are today taken seriously whereas Foxhall is not: other "Java Man" and Heidelberg-like fossils are known, whose stratigraphy has been exhaustively studied; excellent photographs, radiographs and casts survive of the lost

"Peking Man" fossils, and others exactly like them have turned up since. But the same sort of non-evidence (Galley Hill, Clichy, Castenedolo, Calaveras, all *Homo sapiens* fossils briefly famous in their day because their finders thought they were Miocene, Pliocene or whatever) is taken seriously by the authors, who then completely miss the point when they imply, or claim boldly, that the evidence for the australopithecines, habilines and so on is also somehow flimsy.

There is an Appendix on the dating of fossils, mainly radiocarbon; Potassium-Argon dating is given the hatchet job in the main text (section 11.6.5). Devastating "exposure" of the alleged deficiencies of radiometric dating is obligatory in all creationist texts on fossils, and this one is no different. There they all are: the 160 million to 2.96 billion year dates for Hawaiian lava flows known to be less than 200 years old; the supposed "cover-up" of discrepant dates; the arguments over the correct date of the KBS Tuff at Koobi Fora, whether it was laid down 2.6, 2.4 or 1.88 million years ago. It is as if Cremo and Thompson think that an invention, as soon as it is made, either works or it doesn't; of course, the understanding of new methodologies - potassium-argon dating like any other - improves as its practitioners make mistakes (and, alas, are often embarrassed enough about their mistakes to keep quiet about them) and learn from them.

Potassium-argon dating and its now more generally used successor, the Argon/Argon method, are by now rather well understood. It is understood, for example, that mineral erupted from a volcano will release its store of radiogenic argon, resetting the "clock", only if it reaches a high enough temperature, and that the lava from deep-sea eruptions is chilled and does not usually reach this temperature; so that if you measure argon in an undersea lava flow (say, for the sake of argument, in Hawaii) you will be measuring what has been stored up over millions and millions of years, not just what has accumulated since the eruption.

It is understood, too, that tuffs are volcanic products brought down by water and deposited alongside other, much older sediments; so that if you simply pick up some grains from a tuff (say, for the sake of argument, at Koobi Fora) you are very likely to get some very ancient ones along with your recent volcanic ejecta, and unless you clean the sample very carefully you will get anomalously high readings because of this mixture. This all seems very obvious nowadays, but the earlier practitioners of the method had to learn it the hard way. And in the main it is not suppressed: their errors are in the literature for all to see, and for creationists to point out with a delighted "see, it doesn't work!".

Now, palaeoanthropology is a speciality of mine, but archaeology is not, so I showed the book to a couple of colleagues whose speciality it is. Dr. Andrée Rosenfeld was not highly delighted, but offered some comments on the book's long, long, discussion

of Eoliths. These are (no, were) supposed stone tools from extremely ancient deposits, believed in by many archaeologists in earlier generations but now universally discounted.

"The problem", Andrée explained, "lies in their selective emphasis and choice of language; have they not heard of semiotics? For example, on p 106 they quote an early objector to eoliths, Worthington Smith in 1892, and totally misunderstand its significance; eoliths can be extracted from any gravel from any period, whether with or without other artifacts, and with any range of patina - eoliths in fact only occur, as far as I am aware, in gravel or similar deposits." That is to say, in any deposit with lots of small stones in it, you are going to find some stones that by chance resemble crude artifacts! "They have not examined eoliths, but present a value laden discussion of the literature. The question is not 'could such fractures arise from hominid action' but could such fractures (or other marks) arise naturally - and if so, they cannot be taken as evidence for hominid presence."

Eoliths are not commonly featured in creationist texts - after all, here are Hindu not Judaeo-Christian creationists - but there are other bits and pieces in the book which I have met with before. On p 811 we have the famous "Meister print", a supposedly shoe-like print, associated with trilobite fossils, in Cambrian deposits in Utah. The junior author, Thompson, examined the print in 1984 and (p 812) saw "no obvious reason why it could not be accepted as genuine" despite the careful arguments to the contrary by a geologist, Stokes, quoted in two previous paragraphs.

Where I had met the Meister print before was in the first edition of a (Christian) creationist pamphlet, *Bone of Contention* by Sylvia Baker, MSc, and where I failed to meet it again was in the second edition of said pamphlet; presumably Ms. Baker learned of Stokes's analysis and quietly dropped it.

Another bit and piece and which I have met with before is a "carved shell from the Red Crag, England (Late Pliocene)", a period long before art was supposed to have existed, of course. This is a shell with what looks like two little round eyes, a simple triangular nose and a slit of a mouth carved into it; it resembles a Halloween pumpkin. Where I had met this one before was in an issue of *Creation Ex Nihilo* some four or five years ago, and I must say that when I saw it there I laughed out loud. Here it is again, just as chuckleworthy, on pp 71-72. See above, under Eoliths.

Andrée Rosenfeld again: "What is curious is that an essentially religious organisation feels the need to justify themselves by recourse to science - but their discourse is scientific, not scientific." In this, they are no different from any other creationists. Try to think ourselves into the mindset of a religious fundamentalist: "I believe in my sacred texts. I am aware that science does not support their veracity. My belief is not

wrong - that is axiomatic - therefore science must be. I must look into this science business, to find out where it went wrong."

The fundamentalist convinces him/her/itself as supposed holes in the scientific fabric turn up, and wow! this can be used to convince others too! It's a kind of top-down learning experience; what is missing is what students get as they learn their science bottom-up: context. That, really, is why it is so difficult to actually open a dialogue with the creationist: why it is that scientists debating with creationists are effective mainly when they are pointing out their opponents' ignorance, stupidity or outright lies. Their opponent - let alone the audience - simply has no conception of context.

A book like this, simply because it is superficially scholarly and not outright trash like all the Christian creationist works I have read, might indeed make a useful deconstructionist exercise for an archaeology or palaeoanthropology class. So it's not without value. You could do worse, to, than place it in front of a Gishite with the admonition "Look here: these guys show that human physical and cultural evolution doesn't work. Therefore it follows that the Hindu scriptures are true, doesn't it?".

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Dr. Andrée Rosenfeld was a Reader in Archaeology at the Australian National University (now retired).

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