

careful job of reporting, based upon his own first-hand experience, all that meaningfully could have been said by us about the lines up to press time. In a little segment on the 'Earthwatch spiral' (named for this reviewer's work group and source of funding), he correctly explains the results of our own experiment at trying to construct a modern-day Nazca line: that while the lines, like Rome, could not all have been built in a day, their construction surely need not have consumed vast numbers of man-hours. Much to the disappointment of advocates of advanced prehistoric technology, we also proved the lines could have been built just as straight as we see them today without levels, sighting instruments, bisectors or protractors. And, he cautiously reports Clarkson's results that the straight lines may have been laid down 500 years after the animal figures.

Oddly enough, the data and the accompanying detailed arguments relating to all of this recent research have not yet appeared in print. This means that the interested reader, his appetite sufficiently whetted by Hadingham's disclosures, must now literally wait for the news 'officially' to happen even though he already knows that it did.

The remainder of Hadingham's book is taken up with what the ancient Nazqueños actually did (besides make enigmatic desert markings). They built the great capital of Cahuachi with its huge adobe pyramids and plazas near the lines on the bank of the Nazca River; they also wove beautiful textiles, fashioned the ceramics for which they are justly famous and, of course, practised religion (about which we know next to nothing). One chapter with the particularly provocative title of 'Headhunters and hallucinogens' (subtitles: 'Revolt of the head shrinkers' and 'Sex, death and severed heads') details the nature of the trophy-head cult (head drawings are common accompaniments to Nazca ground figures and are frequent subjects painted on ceramics).

Hadingham's discussion of the ceque system of cuzco, which has been singled out by this reviewer, as well as by Zuidema and Urton, to establish the pan-Andean importance of the concept of radially (one of the dominant structural features of the lines on the desert), is altogether too brief and does not say enough about concepts of social order present in this ingenious cosmo-geographic mnemonic mapping scheme that overlay the Inca capital.

Why build the lines if not principally to point to astronomical objects? The author leaves the correct impression that they were, at least in part, intended to be walked upon, that they really functioned as ritual pathways, that there may yet be an element of calendrical orientation present in them, and that they were probably related to mountain worship, for mountains were the source of water, the most precious of all commodities to the ancient Nazca culture. And Hadingham gives a good account of the studies of

mountain shrines throughout the Andean area. thus, he makes us well aware that there is no single answer to the question of why the lines were constructed. The most sensible answers we shall arrive at concerning who built the lines and why are sure to come only from an interdisciplinary approach that goes beyond the clinical computer analyses of fitting dimensions and directions to *ad hoc* constructs, one that delves more deeply into the nature of the culture. Hadingham makes this quite clear.

Following a chapter on other giant ground effigies around the world (we are not sure what to draw from this brief, well-illustrated presentation except that cultic practices often necessitate art on a grand scale), Hadingham reaches a brief (one-page) conclusion, something like that stated above. The lines were a part of the religious practice of a culture, 'symbols of an active participation in the supernatural, made possible by an individual's altered state of consciousness'. this is quite a general statement on the nature and meaning of Nazca ritual and it is a long way from being proven.

To discuss contemporary religions other than one's own is a difficult task. To probe a foreign religion, now extinct, that offers us practically no remains, is virtually impossible. Hadingham has done well in updating a very complex set of interdisciplinary problems for his public. What he has to say on the Nazca lines and other peruvian remains is, to repeat, a breath of fresh air.

Reading Hadingham's book, the lay person will at least be forced to confront Peruvian culture. He will realize that just as the pyramids on the Nile's west bank cannot be analysed without knowing something of the people who inhabited its fertile valley, so, too, the lines on the elevated desert flanking the north bank of the Nazca River must be conceived as one of the fruits of labour of the people who lived and farmed that ecologically fragile region. And, finally, that reader will be treated to a set of explanations for the lines that makes far more sense than the short-cut 'they were like us' accounts he usually sees paraphrased in the tabloids.

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Reference

AVENI, A.F. (ed.). Forthcoming. *The Lines of Nazca*. Philadelphia: American Philosophical Society.

Charles H. Faulkner (ed.). *The prehistoric native American art of Mud Glyph Cave*. Knoxville: University of Tennessee Press, 1986. x + 124 pages, 4 tables, 7 figures, 29 plates, \$12.95 hardback.

This brief but interesting book documents an unusual

find: a dank cave in eastern Tennessee whose soft, clay-covered walls still preserve drawings made by prehistoric people. The 'glyphs', mostly incised with a finger or a stick, occur in a relatively inaccessible part of the cave and cover both sides of a passage more than 100 m long. Individual designs run the gamut from simple squiggles to recognizably anthropomorphic and zoomorphic representations. On some parts of the wall the drawings are so densely packed as to defy separation into discrete themes or motifs. There are also numerous instances of deliberate erasure and superposition that suggest an intricate history of use. Radiocarbon dates on the remains of ancient torches and hearths indicate that most, if not all, of the drawings were made by Mississippian peoples around the 13th century AD.

The book contains eight chapters, each written by a different set of authors. The first three chapters describe the discovery of the cave and the field work that subsequently took place there; written in an anecdotal style, these chapters provide a good sense of exactly how one goes about mapping caves and taking photographs while 'surrounded by jagged rocks, squishy mud, dripping water, and a subtle, numbing cold' (p. 22). The next three chapters are analytical, dealing respectively with radiocarbon dates, marks on the walls made by animals, and the drawings themselves. The last subject – the core of the book – is treated in some detail by J. Muller. Although documentation of these drawings is not always as comprehensive as one would wish, it serves admirably for the 'preliminary outline' that this chapter was intended to present; also extremely useful is Muller's erudite comparison of the Mud Glyph Cave corpus with Mississippian styles found elsewhere on more durable media. The final two chapters place Mud Glyph Cave in a broader context by summarizing the

evidence on other rock-art and cave sites in the southeastern USA; especially intriguing is P.J. Watson's suggestion (in chapter 8) that the Native Americans' use of deep caves in this area changed through time. Beginning in the Late Archaic period, caves were used as a source of minerals and medicines. By the Mississippian period, they had largely become places of contact with the supernatural.

In short, this volume provides an interesting glimpse of a rarely preserved form of Mississippian ceremonialism and can be read profitably by anyone interested in prehistoric art.

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Robin Lane Fox. **Pagans and Christians in the Mediterranean world from the second century AD to the conversion of Constantine.** London: Viking & New York: Knopf, 1986. 799 pages, 5 maps. £17.95 hardback.

It is an astonishing fact that this book is the first substantive attempt at studying Christian and pagan practice together within the framework of Roman life in the Empire. Almost 800 pages may make Lane Fox's book seem intimidating at first sight: once into the text, one is loathe to leave it. Every page, it seems, is alive with new or unfamiliar material, new conjunctions of information and fresh insights. So vast a storehouse of facts and incidents could easily have remained just that: a useful and recondite repository. What we are given instead is a work of considerable literary merit as well as massive and judicious scholarship. Religious life and practice in the Roman world is not everybody's favoured reading. But to

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