Rejected Enlightenment

Cult Archaeology and Creationism. Understanding Pseudoscientific Beliefs about the Past. FRANCIS B. HARROLD and RAYMOND A. EVE, Eds. University of Iowa Press, Iowa City, 1987. xii, 163 pp., illus. $20. Based on a symposium, 1986.

Aside from its obvious application to technology, of what value is science? Many supporters of science would answer that it enlightens us about our world, providing better explanations of natural phenomena than did ancient myths. Unfortunately, few people, even among the educated, care much for the enlightenment science offers, and many prefer the comforting stories of traditional religion or the exciting fantasies of pseudoscience. One category of popular myth can be called cult archeology, crank notions of human prehistory exemplified by Erich von Däniken's theory that civilization was brought to Earth by extraterrestrial astronauts. Another is creationism, the repackaged Biblical literalism that continues to assault the public schools and the legislatures. Although the product of a meeting (of the Society for American Archaeology) presenting the work of 11 scholars, this book is a well-organized and unified monograph on these two antiscientific subcultures.

William H. Stiebing argues that cult archeology functions the way myth did in primitive societies, resolving psychological dilemmas and providing simple, clear-cut answers for the unknown or unknowable. Further, like other forms of pseudoscience, it expresses popular resentment against intellectual elites. If so, there will always remain a large market for it, and the penetration of scientific thought into the popular mind will be blocked. Alice B. Kehoe notes that "scientific creationism" is rooted in an age-old cultural tradition, drawing strength from politically activist fundamentalist Protestantism, and is thus practically invulnerable to intellectual refutation. Saying that mainstream science is not a search for transcendent "truth" but the piecemeal discovery and testing of empirical hypotheses, she acknowledges the strategic advantage enjoyed by those who evangelize against science.

Why would anybody accept a crank theory like von Däniken's? Perhaps people lack analytic skills, the capacity to think statistically, or practice in rigorous testing of hypotheses, thus being unable to criticize wild claims. Or they may simply lack the information on which to base a sound judgment. However, a survey of 419 Canadian college students reported here by Thomas Gray showed little difference between beginning and advanced students in belief in ESP, UFOs, astrology, reincarnation, or von Däniken's theory. His panel study of a hundred students showed that belief dropped somewhat after a course specifically attacking these notions, but it rebounded substantially over the following year. Intellectual immaturity may have little to do with acceptance of pseudoscience or occultism, and the power of education to prevent belief appears quite limited.

To understand the factors favoring pseudoscience, Kenneth Feder, Luanne Hudson, Francis Harrold, and Raymond Eve administered a survey to 979 students at five colleges across the United States. Geographic differences regarding cultism are slight and may merely reflect regional variations in creationism which opposes belief in reincarnation and extraterrestrial visitations. Other variables failed to explain belief, including sex, religion, ethnicity, parents' education, rural versus urban upbringings, and reading habits. Belief in creationism, and consequent rejection of evolutionary theory, was reduced by exposure to factual science programs on television and (not surprisingly) was supported by conservative religious ideology. Being taught about evolution did seem to reduce acceptance of creationism, but few respondents had a correct understanding of the theory of natural selection.

Though filled with intriguing findings, the chapters based on these studies leave much to be desired as scientific reports. Results are typically given in bar graphs rather than tables, even when they are correlation coefficients, and tests of statistical significance are seldom offered. Satisfactory statistical reliability was achieved by a "cult scale" consisting of four items: UFOs are actual spacecraft from other planets; Bigfoot (Sasquatch) is a real creature roaming the woods in the Pacific Northwest; aliens from other worlds visited Earth in the past; and ghosts really exist. But we are told precious little about the associations linking these items or tying them to others more specifically about cult archeology. The possibility that responses to the occult items reflect whims of the moment rather than serious beliefs is not adequately tested, and the survey would have benefited from inclusion of standard acquiescence and social desirability bias scales.

Throughout the book, discussions of creationism fail to make much use of the extensive social scientific research on religious fundamentalism or on modern theories of religion. Many major surveys have included an item on evolution, the resulting publications have often discussed its statistical associations, and several of the original data sets are available for further analysis. I hope the authors of this book will prepare more detailed reports for the professional journals, connecting their work more solidly to the substantial social-scientific literature on deviant belief, reactionary religion, and radical cultism.

For teachers who would consider tackling these issues in the classroom, Suzanne Knudson Engler has practical wisdom based on her own experience. Laurie Godfrey, John Cole, and Stephen Williams argue that academics need to confront creationism and fantastic archeology far more vigorously than they do at present. In their concluding chapter, the editors blame believers' cognitive biases, uncritical reporting by the mass media, deficiencies in science education, and such sociocultural factors as the longing for security and competition for social status.

Despite the scientific limitations of this book, it reminds us of the constant challenge to science from other cultural forces in society. Perhaps few people find scientific models of nature particularly rewarding, and the capacity to provide rewards may be a far more compelling virtue of belief systems than abstract, intellectual purity. This may be especially so in areas, such as human prehistory, where science has no direct practical applications for everyday life. From the Greco-Roman civilization to the present day, there has been a nagging debate over the role of historians. Should they spin politically and psychologically satisfying myths, or should they search for the elusive goal of objective accuracy? However committed to objectivity we may be, a substantial segment of the public votes for myth over science.

WILLIAM SIMS BAINBRIDGE
Department of Sociology,
Illinois State University,
Normal, IL 61761