Or was it that social leaders previously believed that their own abstention from the moral vices would set an example that would lead others to abstain? If so, there seems little faith in this idea now. Nor is there much confidence today in the idea that the majority should use its political power to repress conduct viewed largely as self-destructive.

Hence, even though the adoption of Prohibition may have temporarily validated the way of life of the old guard and reduced alcohol consumption to boot, it is, because of problems associated with enforcement, widely viewed as a failure. So, too, most people who speak up today in favor of legalizing drugs and prostitution, and are given any serious attention, don't promise that indulgence won't increase. It is rather, they believe, that the gigantic social costs of the current criminalization strategy makes it counterproductive.

Burnham sees mutually reinforcing efforts by advocates of the vices and commercial interests. It can hardly be surprising that where consumer goods and services are involved self-serving capitalists and advertising will also be found. More interesting are the extent to which criminal activities have been supplanted by legalization and social acceptance and the extent to which profits have been reduced to normal levels by taking previously condemned conduct off the illicit list. In short, we would have been better served by Burnham had he given more attention to the competition between legitimate enterprises and criminals.

> Stephen D. Sugarman School of Law, University of California, Berkeley, CA 94720–2499

## The Age of Our Species

Men Among the Mammoths. Victorian Science and the Discovery of Human Prehistory. A. BOWDOIN VAN RIPER. University of Chicago Press, Chicago, 1993. xvi, 267 pp., illus. \$45 or £35.95; paper, \$16.95 or £13.50. Science and Its Conceptual Foundations.

To life scientists, the historical resonance of the year 1859 stems from the publication of Darwin's *Origin of Species*. But another event with remarkable implications for our understanding of life history occurred that year: key scientists recognized that humankind had been on Earth for a disturbingly long time.

This recognition was born from accept-

ance of the stratigraphic co-occurrence of stone tools and the remains of such nowextinct mammals as mammoth and woolly rhinoceros as evidence that humans and the mammals had been contemporaries. For reasons that go back another century, this recognition had profound meaning. As the 18th century progressed, it had become abundantly clear to natural historians that all of Earth's history could not be compressed into the roughly 6000 years provided by a literal reading of Genesis. The solution to the resulting theological quandary was provided in most powerful form in 1778 by the French natural historian Georges Leclerc, Comte de Buffon. Buffon split Earth and human history, making the former ancient while confining the latter to the last 6000 years or so. Equally important, in Buffon's system people did not appear until the Earth had become modern in form.

It had made good theological sense for the creation of humankind to have occurred immediately after the creation of the Earth itself. After all, the Earth had been made for us, and an Earth without people was surely an Earth without purpose. Now, however, the lengthy history of the Earth prior to our creation became evidence of the care that the superintending Creator had taken in preparing a fit habitat for His supreme creation, the human species.

As Buffon left it, this view of human history was immune to empirical test, but that did not last long. By the beginning of the 19th century, the French paleontologist Georges Cuvier had documented the reality of extinction and demonstrated that an entire fauna, typified by the mammoth, had become extinct during the relatively recent past. The end of this extinction event marked the beginnings of the modern Earth. It followed, as Cuvier explicitly recognized, that human remains could not be contemporaneous with the remains of the extinct mammals.

What happened next provides one of the most fascinating tales in the history of any discipline, a tale that has been told with varying degrees of accuracy in a number of popular accounts; by myself, in a book published a decade ago; and now, from a British perspective, by A. Bowdoin Van Riper in Men Among the Mammoths.

Because Van Riper's account focuses on Great Britain, it is far narrower in geographic scope than the issues themselves. We have a right to expect that the geographic narrowness will be balanced by greater depth. Since Van Riper is swimming waters that have been swum before, we have a right to expect that he will at least splash a new route. Happily, we get both of these things, and we get

them in a well-written, thoroughly enjoyable volume.

Among other matters, Van Riper explores three issues that have received insufficient attention in previous attempts to understand the new resolution of the issue of human antiquity that was reached in 1859. First, he examines and distinguishes the roles that British amateurs and "career" geologists played in reaching the new resolution, making clear, for instance, the very different kinds of contributions that each group made in the critical excavation of Brixham Cave in 1858. Second, he carefully explains why those he calls "historical archaeologists" (antiquarians) played no role in the debate over questions concerning human antiquity in Great Britain. Third, he provides an insightful and informative examination of the reaction of the educated British public to the new resolution. In this brief section, he argues that the introduction of higher criticism into Great Britain and the advent of Darwinian evolution combined to lessen the significance of the discovery of a deep human antiquity. "Claims about the age of the human race," he observes, "were tame compared to those that seemed to derive men from monkeys and the Bible from fallible human authors" (p. 182). In this perspective, a deep human antiquity was a lesser evil, and peace was made with it quickly.

I disagree with quite a bit that is in this book. To take but one example, Van Riper emphasizes the geological nature of the archeology that emerged as a result of the new resolution of human antiquity and asserts that in this modern paleoanthropology bears the stamp of its mid-Victorian origins. But, because Cuvier framed the argument in geological terms, the resolution had to be geological, and both British and Continental scientists recognized this. No wonder, then, that the resolution played out in geological terms on both sides of the Channel and that the resultant archeology was heavily interdisciplinary. Indeed, while modern paleoanthropology is dependent on geology, so is modern French Paleolithic archeology. The latter, however, traces its roots back not to such Victorian scientists as Evans and Prestwich but to such quintessentially French contemporaries as Lartet and de Mortillet. Modern interdisciplinary archeology is not derived solely from Victorian Great Britain, and in matters like this (there are others), Van Riper's geographical constraints have let him down.

It is a good sign that I am tempted to go on. A book worth taking issue with is a book worth reading. This one is both.

Donald K. Grayson
Department of Anthropology and
Burke Memorial Museum,
University of Washington,
Seattle, WA 98195