

vides a crucial starting point for our narratives of human evolution.

There is a kernel of truth to the author's grumbling about the ubiquity of the 98% figure in the popular science media and the animal rights literature. Marks himself points out, though, that the number is usually cited as a mere rhetorical device. The case for the usefulness of chimpanzees in studies of human behavioral evolution is based primarily on cognitive and behavioral similarities between these two species—not on the 98% statistic. The same is true for the argument that apes are deserving of legal protection beyond that offered to other nonhuman animals (an idea that is anathema to Marks).

At several points, Marks moves away from the genetic data, and into the realms of behavior and cognition in order to argue that such similarities are illusory. His lack of expertise in these fields is evident, and his treatment of them is cursory and superficial. For example, he relies upon experimental work by Daniel Povinelli to establish that the chimpanzee mind models the world in radically different ways from the human mind. He neglects to mention serious methodological problems with Povinelli's data (including the fact that his experiments were all done with juvenile chimpanzees), and completely overlooks a burgeoning literature in comparative psychology (from experimentalists like Michael Tomasello and Brian Hare), suggesting that chimpanzees and humans share complex mental attributes (including aspects of theory of mind) not documented in other primates, including gorillas. Marks also expresses disbelief that lethal intergroup aggression and territoriality are important features of chimpanzee society, maintaining that these are cultural projections of western primatologists. Given the concordance of accumulated data from decades of research at field sites across East and West Africa, such wishful thinking is simply no longer tenable.

Unfortunately, the frequency with which Marks commits serious errors of omission, and introduces straw men into the debate, will make it difficult for most scholars familiar with the field to take this book seriously. It is one thing to disagree with an interpretation of a data set; it is quite another to pretend that the data do not exist. And even non-specialists will quickly key into the fact that Marks oversimplifies or dichotomizes complicated issues in unhelpful ways for the sake of scoring debating points. A few readers might appreciate Marks's bombastic prose purely on the level of rhetoric. Readers seeking an honest, topical review of what chimpanzees can tell us about human evolution are advised to look elsewhere.

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CAPTIVATING LIFE: A NATURALIST IN THE AGE OF GENETICS.

By John C. Avise. Washington (DC): Smithsonian Institution Press. \$24.95. ix + 212 p; ill.; index. ISBN: 1-56098-957-2. 2001.

Individuals who write autobiographies need sufficient ego to undertake such a project and a good life story to sustain it. Ego suffuses this book. By his own admission, John Avise has had a career devoted to an "unprecedented marriage of genetics and natural history" that people who lack a "fascination with nature usually cannot begin to fathom" (p 1). Yet, Avise's career follows a path well trodden by many other ecologists, evolutionary biologists, and naturalists of his generation.

The author has been a major participant in the molecular "revolution" of population genetics, and is one of the founders of the subdiscipline of phylogeography. His early work with isozymes, and more recent research on molecular markers, all conducted across an exceptionally broad range of taxa, earned him election to the National Academy of Sciences in 1991, at the tender age of 43. The goal of this autobiography is to explain to others how he came to be entranced with nature and scientific research.

Unfortunately, it is not clear for whom this book is written. Given current demographic trends, few readers will have grown up in rural communities or have had experiences actually contacting nature as opposed to viewing it on the Web. Draft deferments, which were instrumental in the choice of many individuals (including Avise) to attend both college and graduate school, are a thing of the past. Aspiring scientists who, like Avise, were hooked on nature at a young age and are already on a defined career path, will easily find themselves in his narrative, but others are unlikely to relate.

On the other hand, it is refreshing to read a scientist being upfront about his struggle with Vietnam-era politics and his nature-based reasons for seeking conscientious objector (CO) status. The half-page essay excerpted from his application for CO status is worth the price of the book and succinctly sums up his entire career. It also stands the test of time, and is as relevant now as it was 32 years ago: "I determined to pursue studies in natural resources in the hope of strengthening convictions that man and the earth could only survive by harmonious interactions. . . . I therefore cannot allow myself to be a part of practices which must, if continued, ultimately destroy the earth" (p 37).

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