

## Book Reviews

MAN THE HUNTED: PRIMATES, PREDATORS, AND HUMAN EVOLUTION. By Donna Hart and Robert W. Sussman. New York: Westview Press. 2005. 312 pp. ISBN 0-8133-3936-7. \$27.50 (paper):

The influence of predation on primate behavior and sociality has generated significant controversy among physical anthropologists, fueled principally by a want of satisfactory empirical data. However, recent studies focusing on predators, rather than prey, have confirmed that for some primates predation represents a significant source of mortality. Additionally, new experimental approaches have permitted field researchers to manipulate the perceived risk of predation and to examine behavioral responses to such risk in detail. Hart and Sussman's book ostensibly represents a timely contribution, purporting to summarize for a popular audience the influence of predation on primate, and specifically human, evolution. Sadly, this engaging premise rapidly deteriorates into a recycled critique of "Man the Hunter" that mires itself in a simplistic dichotomy between *predator species* and *prey species* and all but completely ignores the modern anthropological literature on hunting and meat eating.

A single question pervades Hart and Sussman's book: "Were early humans bold hunters or were they fearful prey?" (p. 5). And early on the authors invest the answer with grave moral significance. Viewing humans as a predatory species descended from an "oppressive killer ape" (p. xv), they argue, inevitably leads to a belief that "humans are slaughter prone assassins by nature" (p. xviii) and that violence is unavoidable. Seeing humans as a prey species, on the other hand, is morally instructive, because it highlights our cooperative instincts and suggests that we "are just one of many, many species that had to be careful, had to depend on other group members, had to communicate danger, and had to come to terms with being merely one cog in the complex cycle of life" (p. xvi). "Let's quit accepting our spurious heritage as Man the Hunter," they urge, "to excuse why we start wars, torture others, and scorch the earth" (p. xviii).

Feet firmly planted in the naturalistic fallacy, the authors proceed to present evidence from both living primates and the fossil record that our ancestors were frequent meals for a variety of predators and thus a prey species. Their data comprise an exhaustive catalog of predation on humans and nonhuman primates by lions, tigers, bears, hyenas, wolves, pythons, crocodiles, sharks, Komodo dragons, and crowned hawk eagles, as well as a profusion of anecdotes from the popular media on everything from African schoolchildren savaged by raptors to American cyclists carried away by mountain lions. Occasionally this exercise produces fascinating nuggets, such as a discussion of why European wolves prey on humans but North American wolves do not. The authors are too polite to play these grisly episodes for their full tabloid potential, however, so the overall result is weirdly monotonous: Teacher mauled by crocodile? Check. Cattle herder smothered by python? Check.

This litany of human carnage is interspersed with fossil evidence for carnivore wear on the remains of various

human ancestors. Here the biases of the authors are apparent as they uncritically accept any indication of carnivore damage as proof of predation. For example, signs that *Homo erectus* remains at Zhoukoudian were processed by the extinct hyena *Pachycrocuta* are taken to show unambiguously that "*Pachycrocuta* preyed on hominids in the area, and then brought pieces of their prey home to the cave" (p. 102). That *Pachycrocuta* may have scavenged hominids that died in some other fashion is never considered. Similarly, carnivore tooth marks on a jaw at Dmanisi generate the conclusion that the hominid there "wasn't a powerful hunter, and wasn't a competitor with the indigenous wolves for grazing animals ... The little Dmanisi hominid acted like prey and was viewed as such" (p. 95).

One might well question why Hart and Sussman do not similarly consider the abundant evidence of cut marks from stone tools on faunal remains from various African assemblages as evidence of predation by hominids; however, on this issue they remain silent. This aspect of the archaeological record is omitted entirely, and it is left to poor Raymond Dart to present the case for hunting by hominids. One searches the bibliography in vain for references to Isaac, Bunn, Blumenschine, Kroll, Potts, Plummer, and many others who have documented signs of hominid butchery in the fossil record.

The authors' deafness to the issue of hunting by hominids seems largely a result of their curious and rigid dichotomy between prey animals and predator species. Hart and Sussman's basic premise is that any indication of predation can be taken as *prima facie* evidence that a species is a prey animal and, thus, not a predator species. Consequently, once it is established that early hominids were occasional prey items, it becomes unnecessary to even consider the evidence that they may have been hunters. However, this assumption is clearly at odds with observations of modern carnivore behavior. Interspecific killing is frequent and well documented among carnivores, accounting for 40–60% of mortality in several species and 68% in one cheetah study. Hyenas kill wild dogs, coyotes kill ferrets, mountain lions kill coyotes, foxes kill badgers, and lions kill hyenas, to list but a few examples. Sometimes the victims are consumed; sometimes they are not. But the fact that a coyote in Yellowstone shows all the fearful vigilance of a prey species when wolves are about, and may even end up as a wolf's dinner, says absolutely nothing about that coyote's effectiveness as a predator. Presumably this was true for human ancestors as well.

Hart and Sussman cling tenaciously to their predator species-prey species distinction, however, even as it leads down some bizarre paths. One might expect, for example, that the massive data set on chimpanzee hunting would be welcomed as verification that predation is an important source of mortality for a primate species (red colobus monkeys). However, viewing chimpanzees as effective predators conflicts with the authors' general notion of primates as prey species and their specific view of chimpanzees as prey items for leopards and lions. Thus, Hart and Sussman deny that chimpanzees are naturally predators, citing—oddly enough—Craig Stanford's data that in some years Gombe colobus suffer 30% mortality from chimpanzee predation. "How can such high rates of chimpanzee predation ... be anything other

than an aberrant situation?" they ask. "It is obvious that this chimpanzee predation on monkeys is a recent and unnatural phenomenon" (p. 54). What the authors omit here is the fact that Stanford's work shows significant variation in colobus mortality from year to year, with high mortality years followed by low mortality ones. Furthermore, the 30% figure that Hart and Sussman quote is not for Gombe colobus, but for colobus groups in the center of the Kaskela chimpanzees' territory. Stanford's data suggest a distinct source-sink dynamic in which colobus groups in the border zones between chimpanzee communities suffer less predation and enjoy larger group sizes than those more centrally located. Similar temporal and spatial variation in colobus predation rates has been reported from other long-term study sites, and it is anything but obvious that chimpanzee predation on monkeys is a "recent and unnatural phenomenon."

Unfortunately, this casual approach to the scientific literature extends to a range of issues. An entire chapter is devoted to debunking the idea that lethal intergroup aggression by male chimpanzees is part of an evolved behavioral strategy. Hart and Sussman are concerned that chimpanzee aggression might offer support for the killer ape hypothesis, so they maintain that escalated aggression in chimpanzees is: (1) much rarer than suggested by chimpanzee fieldworkers, and (2) the result of human provisioning. Sussman has produced these arguments in previous publications, and it is telling that he chooses here to overlook recent reviews by Richard Wrangham and Michael Wilson that provide patient, detailed, and persuasive refutations of his claims. Instead, the authors refer only to Wrangham's ten-year-old popular book, *Demonic Males*, as though it provides the sole evidence for lethal intergroup aggression in chimpanzees.

Exasperating omissions of this kind are so frequent in *Man the Hunted* that portions of the book almost seem to exist behind glass. The penultimate chapter offers a lengthy critique of sociobiology that could have been written in 1976. Modern students of behavioral ecology will find this section almost embarrassing to read, so

grossly anachronistic is the authors' apparent understanding of the field. And it's hard to know what to make of statements like: "many scientists, scholars, and members of the general public have a view of our ancestors as bloodthirsty brutes, not just defending themselves but aggressively entering into combat with every living creature" (p. 190). Do they really? Or was this just true in 1965? Never mind. What's the point in actually engaging with the modern anthropological literature when one can kick around Raymond Dart and Robert Ardrey?

Regardless of one's sympathies toward Hart and Sussman's general approach, it may ultimately prove irrelevant to the underlying question of what effects a history of hunting might have had on human evolutionary psychology. For whether australopithecines and their immediate successors were hunters or hunted, even Hart and Sussman concede that by 400,000 years ago there is ample evidence of hunting in the fossil record. And if 50,000 years is sufficient for a new species to evolve, then surely 400,000 years represents adequate time for natural selection to have shaped novel psychological and cognitive adaptations in the human lineage. What these might be—and the extent to which they were influenced by a hunting and gathering lifestyle—is the focus of much current research. But readers interested in these issues will find little to draw them to the current volume. And those seeking a historical perspective on "Man the Hunter" will find an infinitely more nuanced and interesting treatment in Matt Cartmill's excellent *A View to a Death in the Morning*.

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