

Killer Ape Theory Disproved

Man Was Prey; Mutual Aid Prevailed

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a review of

Man the Hunted: Primates, Predators, and Human Evolution, Donna Hart and Robert W. Sussman, New York, Westview Press, 2005

Stanley Kubrick's 1969 movie 2001: A Space Odyssey opens with a primal scene: to the stirring music of Richard Strauss's Thus Spake Zarathustra. With the rising sun in the background, one ape-man lifts a weapon and murders another.

The implication of this is that the human species evolved and rose above the animal kingdom through violence and aggression.

This theory was widely accepted through much of the 20th century both in academic anthropology and in popular-books such as Robert Ardrey's *African Genesis* which presented the theory of Man the Hunter, the Killer Ape, the Demonic Male.

Even then, though, there were dissenters to the reigning view, such as anthropologists Ashley Montagu, Adrienne Zihlman and Nancy Tanner, who rejected Ardrey's bloody view in favor of Woman the Gatherer theory; but, for the most part, Man the Hunter prevailed.

Recently, a remarkable book, *Man the Hunted*, by anthropologists Donna Hart and Robert W. Sussman, puts forth the idea that our ancestors, the earliest hominids, were prey, not predators; hunted, not hunters.

Our ancestors diverged from those of chimpanzees and bonobos five to seven million years ago. They were basically bipedal apes who left the forests for the open savannas. There they encountered many large predators, including saber-toothed tigers, leopards, hyenas the size of bears, giant raptors like the crowned hawk-eagle, and fearsome mega-reptiles.

In these savannas, they were more vulnerable to predation than in the forest. The evidence that early hominids were prey is dramatic: fossil skulls containing holes exactly matching the teeth of big cats and claw marks from giant raptors.

In a 2007 *Newsweek* article, Sharon Begley writes, regarding *Man the Hunted*:

"The realization that early humans were the hunted has upended traditional views about what it takes for a species to thrive. For decades, the reigning view had been that hunting prowess and the ability to vanquish competitors was the key to our ancestors' evolutionary success (an idea fostered, critics now say, by the male domination of anthropology during most of the 20th century). But prey species do not owe their survival to anything of the sort, argues Sussman. Instead, they rely on their wits, and, especially their social skills to survive. Being hunted brought evolutionary pressure on our ancestors to cooperate and live in cohesive groups. That, more than aggression and warfare, is our evolutionary legacy."

Unlike many books on evolution, which are forbiddingly technical and full of mathematical formulas, *Man the Hunted* is very readable. Much of it unfolds like a detective story.

In Chapter 2, “Debunking Man the Hunter,” Hart and Sussman describe how in 1924, Raymond Dart, an Australian anthropologist, discovered the first African hominid fossil, the Taung child, which he named *Australopithecus africanus*.

At first he believed australopithecines were scavengers, but by 1950 he devised a new theory, that the dents and holes in their skulls and bodies found with fossils of game animals, meant these animals had been killed and eaten by the ape-men, who were also killing one another.

Since no stone weapons or tools were found at these sites, Dart hypothesized that these hominids had used the bones, teeth, and horns of their prey to kill even more prey, like Samson killing the Philistines with the jawbone of an ass.

Dart presented this theory in 1953, but the evidence was so unconvincing that at first no well-known journal would accept it, and so it had little influence.

Enter Robert Ardrey, an American playwright. Ardrey visited Dart in South Africa, adopted his theory, and after five years of research, published a series of best-sellers: *African Genesis* in 1961, followed by *The Territorial Imperative* in 1966 and *The Hunting Hypothesis* in 1976.

Ardrey was given to making bizarre statements, such as “the mentality of the single Germanic tribe under Hitler differed in no way from that of early man or late baboon.” Eventually, Man the Hunter theory gained academic respectability when it was endorsed by the famed archeologist, Louis S. B. Leakey. Since that time, it has been academic orthodoxy. Another more recent, book along the same lines is Richard Wrangham and Dale Peterson’s, *Demonic Males: Apes and the Origin of Human Violence*.

But even from the beginning of Man the Hunter theory, there were skeptics. C. K. Brain, another South African, examined the evidence of Dart and found that the holes in the skulls of baboons and dents in skulls of *A. africanus* exactly matched the distance between the canine teeth of leopards, which fit precisely into the fossil skull holes.

In anthropology textbooks published in the 1970s, Dart’s theory was given precedence, but Brain’s alternative was also mentioned.

In the case of fossils of Peking Man (*Homo erectus*), however, these textbooks mentioned only the then prevailing theory that cracks in the back of the skulls of Peking Man were evidence that they were cannibals who used to like to eat each other’s brains. The current theory, however, is that Peking Men were prey of giant hyenas, who like to crack the skulls and eat the brains of their victims in just this way.

Chapter 9 of *Man the Hunted*, entitled “Gentle Savage or Bloodthirsty Brute,” takes on sociobiology.

Going over E. O. Wilson’s book of the same name, which lists so-called human universals as territoriality, aggressive dominance hierarchies, male dominance over females, permanent male-female bonds and the nuclear family, and matrilinearity (or matrilocal), Hart and Sussman argue that none of these are human universals as postulated by Wilson.

They also take on Richard Dawkins’ selfish gene theory and Wrangham and Peterson’s demonic male hypothesis, thoroughly debunking both of them.

What relevancy has *Man the Hunted* for anarchists?

Quite a lot. First of all, *Man the Hunted* is the best confirmation to date, from solid empirical evidence, for Kropotkin’s theory that cooperation is more important than competition in evolution, at least for humans. At the same time, it debunks the Hobbesian myth that we are so naturally aggressive towards our own species that we would tear each other to pieces if it were not for the state.

The type of cooperation implied by the theory is also of interest. On the very first page of *Mutual Aid*, Kropotkin refers to his observations of animal life in the bitterly cold regions of Siberia. He explained that there are two different aspects to the struggle for existence: “the direct one, for food and safety among separate individuals, and the struggle which Darwin described as ‘metaphorical’—the struggle, very often collective, against adverse circumstances.”

The early savannas, with all those ferocious predators, were certainly challenging and difficult environments for our ancestors. In contemporary evolutionary theory, cooperation in such challenging, difficult environments

has been given a special name: byproduct mutualism (so called because the benefit to others is a byproduct of the benefit to oneself).

This is a sort of cooperation from which everybody benefits. An equivalent term is solidarity. Most treatments of animal cooperation deal with kin selection, reciprocity, and the controversial theory of group selection (which is basically about self-sacrificial altruism).

In fact, most of the examples of animal cooperation given in *Mutual Aid* would now be called byproduct mutualism: cooperative hunting by wolves, nesting associations of birds, chirrup calls by sparrows to notify other sparrows when food is available, and so forth.

This type of cooperation is very common among animals. It differs from kin selection in that one cooperates with unrelated individuals of the same species, and from reciprocity in not requiring exact return of benefits or repeated interactions.

The key to mutualism is communication (which is not the same as language). Reciprocity is often described in terms of the Prisoner's Dilemma.

Two prisoners can communicate with the authorities but not with each other. If they both remain silent, they will get a lighter sentence than if they both give state's evidence, and if one snitches on the other, he will get a much lighter sentence than the one who remains silent.

In this situation, a rational selfish individual will betray his comrade, so if both are selfish, they will get a longer sentence than if both are altruistic.

One then asks, how can cooperation evolve if both are selfish (as is assumed)? The answer given by reciprocity theory is cooperation will occur if there are repeated interactions between the same two individuals, as in the game "Tit for Tat." This is called Iterated Prisoner's Dilemma or IPD. An enormous amount of literature exists on the Prisoner's Dilemma.

Most evolutionary biologists reject genetic group selection, and so they either conclude that humans are unlikely to cooperate with non-relatives (a Hobbesian picture), or, if they assume cultural group selection, they assume the animal world is more or less Hobbesian and reject continuity from animals to ourselves.

What is overlooked is that the condition of the Prisoner's Dilemma—the impossibility of communication—is quite artificial. If the prisoners could communicate, they would cooperate with each other by remaining silent and both would benefit. But this condition, that horizontal communication is impossible, is an artificial effect of being in prison. In the real world, people can and do communicate.

While it is true that in our technological society, direct face-to-face communication is becoming rarer, and the system tends to replace horizontal with vertical communication, the possibility of direct, unmediated communication is always there.

In the case of animals, communication is not only possible, but a fact. If, following physicist and systems theorist Fritjof Capra, we define communication as "coordination of behavior," it clearly does not require language and is well within the capacities of animals.

Through communication, we escape from the Prisoner's Dilemma and cooperate in such a way that everybody benefits; and it is this type of communication, solidarity, that enabled our ancestors to survive.

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