

Book Review

Ambivalent War-Lovers?

A review of David Livingstone Smith, *The Most Dangerous Animal: Human Nature and the Origins of War*. St. Martin's Press: New York, NY, 2007, US\$24.95, 263 pp. ISBN-13: 978-0-312-34189-3.

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Almost 200 million human beings, mostly civilians, have died in wars over the last century, and there is no end of slaughter in sight. *The Most Dangerous Animal* asks what it is about human nature that makes it possible for human beings to regularly slaughter their own kind. It tells the story of why all human beings have the potential to be hideously cruel and destructive to one another. Why are we our own worst enemy? The book shows us that war has been with us – in one form or another – since prehistoric times, and looking at the behavior of our close relatives, the chimpanzees, it argues that a penchant for group violence has been bred into us over millions of years of biological evolution.

*The Most Dangerous Animal* takes the reader on a journey through evolution, history, anthropology, and psychology, showing how and why the human mind has a dual nature: on the one hand, we are ferocious, dangerous animals who regularly commit terrible atrocities against our own kind; on the other hand, we have a deep aversion to killing, a horror of taking human life. (from the jacket text).

In the preface of this book, Smith makes it clear that he intentionally refrained from academic jargon: “I wrote this book for a wide audience because understanding war is too important a matter to be left in the hands of an academic cabal... With this broad readership in mind, I have tried to keep my language as clear and nontechnical as possible” (p. xvi). Furthermore, he does not mince words: “This book *is* unashamedly rooted in an evolutionary biological perspective,” even though he acknowledges that explanations of human nature that draw inspiration from evolutionary biology are, at least in the United States, especially contentious.

I must confess that my first reaction after thumbing through the book was to discard it as yet another contribution to what I have called the “Dark-Side-of-Man-industry” (van der Dennen, 2006), and yet another popularization and resurrection of Dart's and Ardrey's *Killer Ape*. But what salvaged it and compelled my reading it in one weekend were two remarkable propositions, which one does not regularly encounter in *Evil Man* and/or *Killer Ape* phantasmagorias: (1) man has a fundamental *ambivalence* vis-à-vis war; and (2) that man has powerful natural *inhibitions* against conspecific killing and that it takes a lot of *self-deception* to overcome these natural barriers. Man, in short, is a *reluctant* killer.

The first proposition is introduced in the preface as follows:

Historically, there have been two broad, sharply polarized views of the relationship between war and human nature. One is that war is human nature in the raw, stripped of the façade of contrived civility behind which we normally hide. In most recent incarnations of this ancient theory, the taste for killing is said to be written in our genes. The other is that war is nothing but a perversion of an essentially kind, compassionate, and sociable human nature and that it is culture, not biology, which makes us so dangerous to one another. In fact, both of these images are gross oversimplifications: both are true, and both are false. Human beings *are* capable of almost unimaginable violence and cruelty toward one another, and there is reason to believe that this dogged aggressiveness is grounded in our genes. But we are also enormously sociable, cooperative creatures with an elemental horror of shedding human blood, and this, too, seems to be embedded in the core of human nature. Strange as it may sound, I believe that war is caused by *both* of these forces working in tandem; it is a child of ambivalence, a compromise between two opposing sides of human nature. (p. xiv)

The second proposition is introduced much later (pp. 141-142):

Earlier in this book I argued that war has probably been a feature of human life from the beginning, and I presented some facts and figures to demonstrate how widespread it is. Now it is time to consider the opposite side of human nature. Human beings have powerful inhibitions against killing one another. Human groups are very dangerous to one another. But there is another side to this story. We are an extremely social species, and it is important to bear in mind that our ancestors triumphed not as individuals, but as members of victorious *communities*. To accomplish this, they needed to maintain a very high level of cohesion and solidarity, which in turn required powerful barriers against in-group violence. The principle is a simple one: if community members are busy killing one another, they cannot present a united front against an enemy. The biologist Robert Bigelow was perhaps the first person to fully recognize the dynamic interplay between in-group cohesion and intergroup violence. We are without doubt, he remarked, the most cooperative and the most ferocious animals that ever inhabited the earth. We cooperate to compete, and a high level of fellow feeling makes us better able to unite to destroy outsiders.

In the remainder of the book, Smith explains how we are able to overcome these powerful barriers against killing fellow humans. I will come back to this, but first I provide a brief overview of the book's content.

*The Most Dangerous Animal* contains a preface, 11 chapters, an appendix, notes, and an index. In chapter 1, "A Bad-Taste Business," Smith quotes Mark Twain – whom Smith considers to be if not his mentor at least his inspirator – as stating, "Man is the only animal that deals in that atrocity of atrocities, war. He is the only one that gathers his brethren about him and goes forth in cold blood and calm pulse to exterminate his kind." To this Smith comments that, in fact, Twain's portrait of human nature is far too charitable:

Men not only march out to slaughter their own kind on a scale so huge that it beggars the imagination, they often do so in ways that are diabolically cruel... Like it or not, war is distinctively human. Apart from the raiding behavior of chimpanzees... and the so-called wars prosecuted by certain species of ant, there is nothing in nature that comes anywhere near approximating it. Despite this, we often

describe warfare as *brutal* (literally “animal-like”) or *inhuman* – conceiving of it as something remote from our true humanity. Another distancing tactic is to treat war as a social illness, a deviation from the naturally peaceable state of humankind, a strange cyclic malady like fever that causes us to periodically shed the garments of civilization and fall prey to the wild beast within (Leonardo da Vinci called it “bestialissima pazzia”, “the most bestial madness”). (pp. 5-6)

Smith makes it abundantly clear that war is not a pathological condition, a malignant disease, or an idiocy. War – mangled bodies and shattered minds – may be terrible beyond comprehension, but is not *senseless*. Wars are purposeful. In trying to answer the question “What is war?,” Smith turns to Heraclitus, Thomas Hobbes, and Helena Valero, who has given a detailed firsthand narrative of raiding by the Yanomami Indians (by whom she had been abducted earlier), the form of warfare probably prosecuted by our prehistoric ancestors (though some scholars consider only battle to be the “true” or “real” form of warfare). This is followed by a discussion of the vague concepts of “terrorism,” “atrocities,” and “genocide” as “words for the dirty side of war,” and a return to Raymond Dart and his ideas of *Australopithecus africanus* as a “Killer Ape.” Though Dart turned out to be wrong, he is given credit by Smith for asking the right question: “The question that needs answering is, ‘What is human nature causes us to choose war?’ Dart gave the wrong answer to the right question.

Dart knew that there had to be *some* evolutionary story explaining the warlike behavior of humankind, but he failed to put his finger on how and why human beings became such proficient killers. Those who in principle reject an evolutionary account of collective human violence must either deny its existence – which is surely a quixotic move – or else provide an alternative hypothesis. So far, no coherent alternative has been suggested. (Strangely, the view of war as a “cultural invention” of some 10,000 years before present, as professed by well-known anthropologists such as Brian Ferguson and Keith Otterbein is not considered a coherent alternative).

In the following chapters, I will argue that war’s allure comes from tendencies inscribed in our genes over evolutionary time, and that violent conflict benefited our ancestors, who were victors in the bloody struggle for survival. This is why the disposition to war lives on in us, and why we periodically yield to it and are drawn into a hell of our own making. (pp. 26-27)

Chapter 2, “Einstein’s Question,” deals with the exchange between Einstein and Freud that was published in 1933 under the title *Why War?* Einstein and Freud thought that war and its related atrocities come naturally to human beings. Smith agrees: “[T]he evidence that I will present to you in this book overwhelmingly supports the naturalness of war... The naturalness of war lies in its role as an innate, biologically based potential: something that nature has built us to be capable of.” (p. 36)

In chapter 3, “Our Own Worst Enemy,” the archaeological evidence of massive violence (cave murals as well as human remains, such as those of the Stone Age cemetery at Jebel Sahaba, Talheim, Ofnet, Roaix, Crow Creek) is presented (here the line between war and other forms of violence in general becomes rather blurred), as well as the more substantial evidence of wars of conquest after the Neolithic revolution. “The early writings from Egypt, Sumer, Greece, Rome, India, and Mesoamerica record slaughter on a grand scale.” (p. 49)

Smith also notes that wars, from biblical times on, were often genocidal, aimed at destroying entire peoples rather than simply defeating an enemy. He mentions the Albigensian Crusade, the Taiping Rebellion, the Islamic conquest of the Indian subcontinent, and the destruction of the pre-Colombian cultures of North and South America. Also in tribal-level warfare, he notes, the goal may be annihilation. Finally, some mortality figures of warfare in these societies are presented.

In chapter 4, “The Origins of Human Nature,” Smith claims that to “comprehend war, we need to understand the biological factors that molded us into what we are” (p. 62). These biological factors are, as will be clear by now, not particularly nice: “The processes that drive the engine of evolution are hideously cruel” (p. 66). In treating animal aggression, it is noted that in the overwhelming majority of cases where animals kill their own kind, they do so in one-on-one encounters, necessitating, in the search for non-human prototypes of warfare, a narrowing of focus to “coalitionary aggression,” i.e., chimpanzees share with us the dubious honor of waging war, in its extended sense.

In my *Origin of War* (1995), I distinguished two broad patterns of primate intergroup violence: the baboon pattern (or battle-type warfare) and the chimpanzee pattern (or raiding-type warfare – often extremely brutal). Smith adopts this distinction, and he notes the many striking parallels between the social behavior of humans and chimpanzees. “The study of chimpanzee behavior can help us answer the question with which Einstein and Freud wrestled in *Why War?*” (p. 80). I consider these to be the crucial paragraphs (pp. 80-82) of the book, so I shall give it due consideration.

Smith points out that this ostensibly simple question, *Why War?*, can be understood in at least three logically distinct but interrelated ways. We can read it as question about the factors that precipitate war - its triggers. We can also interpret it as a strictly biological question: how, if at all, did war contribute to our ancestors’ reproductive success? And we can interpret it as a psychological question: what is it about the human psyche that makes war possible? The answer to the first question is obvious: aggressors seek resources. Human beings fight both for resources and for ideas of resources (Meyer, 1987). Even intangible goods like “national honor” can in the last analysis be understood as shoring up the resource-holding power of the aggressor.

“The second question is also easy to answer,” according to Smith.

Mark Twain concisely described the principle almost a century ago: “We’re nothing but a ragbag of disappeared ancestors.” We inherited our warlike nature from prehistoric bands that were able to kill their neighbors and acquire their resources. These groups flourished while the pacifists withered on the evolutionary vine. Another likely reason why war became part of our nature is its intimate relationship with sex. Not only do warriors acquire females as booty, warrior heroes also have an aura of glamour that makes them especially desirable mates. As a result, they have mating opportunities denied to other men. A penchant for war enhanced men’s reproductive success, which is why it was selected into our behavioral repertoire. (p. 81)

The answer to the third question is more complicated. It is essential to distinguish the adaptive function of war from its motives. “Although the function of war may be to win resources, that is not necessarily what soldiers have in mind when they march off to battle. As Wrangham insightfully remarks, the tendency to attack one’s neighbors can, in principle, be maintained merely by the tendency of

coalitions of successfully raiding males to benefit reproductively, even in unpredictable ways, by weakening the group of neighbors. What matters biologically are the effects of war on individuals' success in spreading their genes. If war enhanced our ancestors' reproductive success (as it almost certainly did) that's enough to account for its continued existence today. (p. 81)

Smith emphasizes that sexual selection is the key to understanding the relationship between male violence and sex: "[T]he masculine warrior mentality is a sexually selected trait, bred into ancestral men by women who preferred warrior mates... This general idea is beautifully, if unwittingly, illustrated by a cartoon that appeared on the front page of the *Women's Journal* during World War I showing a suffragette holding a baby standing next to a fully armed soldier. The soldier says, Women can't bear arms to which the suffragette replies, No! Women bear armies." (pp. 86-87)

The aura of sex-appeal surrounding the fighter is probably universal. One, more malignant, connection between war and sex is the act of rape: "One of the perennial attractions of war is the opportunity to abduct or forcibly copulate with women" (p. 90). Smith explains:

Warriors have a twofold sexual advantage. Not only are they especially attractive to women in their own communities, but they can also sexually coerce the wives and daughters of defeated enemies. These two factors may have worked together to provide particularly violent ancestral men with more reproductive opportunities than their more gentle peers. Following the well-worn path of sexual selection, the sons of these unions would have been likely to have inherited the warlike temperament of their fathers, as - generation after generation - the genes for male violence proliferated through the population. (p. 90)

In chapter 5, "Hamlet's Question," Smith explores the relationship between mind and brain. Our hugely complex brains are composed of hundreds or even thousands of miniature "brains," called "mental modules." The mind is massively modular. Here, and in the next chapters, speaks the cognitive evolutionary psychologist (Smith is also the author of *Why We Lie: The Evolutionary Roots of Deception and the Unconscious Mind* (New York: St. Martin's Press, 2004).

He notes that contemporary cognitive science supports a broadly Kantian concept of the mind. In the next chapter, "A Legacy of Lies," Smith uses the insights of modern cognitive science to explain why and how human beings are able to lie to themselves, and why this capacity turns out to be crucial for understanding war. He explores the architecture of self-deception, which lubricates the psychological machinery of slaughter, providing balm for an aching conscience:

The modular organization of the mind allows for the possibility of *conflict* between its components and, most important, for the possibility that one part of the mind can withhold information from others. It may seem strange to conceive of your brain as an arena in which a number of semi-autonomous entities interact with one another. (p. 113)

Deception, including self-deception, works; in fact, deception pervades the biosphere. Trivers (1976) argued that the capacity for self-deception may have been selected for because it helps us to deceive others. A liar who believes his own lies is far more convincing than one who doesn't.

In chapter 7, “Moral Passions,” perhaps the pivotal chapter of the book, Smith argues that war is arguably *the*, over-riding moral issue. “However, there is another, darker dimension of the relationship between war and morality. Aggressors are often *inspired* by moral feelings. They conceive of war primarily as a moral campaign and a religious, or quasi-religious mission” (p. 129). Smith presents David Hume’s theory of morality. Hume scandalized his contemporaries by arguing that morality is always a matter of passion or feeling and that reason is always a slave to the passions (as did Hobbes before and Mark Twain after Hobbes).

But most people are indifferent to the bulk of human suffering. Why is this? Hume argued that our sympathies are skewed by three biases. The first is a bias toward similarity. Second, we are biased toward those with whom we come into direct contact, and moral feelings conform to the adage “Out of sight, out of mind.” Hume’s third bias is based on kinship. We are moral nepotists, favoring family members over people who are unrelated to us. Hume’s theory suggests that it is natural for human beings to be ethnocentric, xenophobic, and nepotistic. Smith notes that:

Hume’s three principles fit biological theory like a glove. Human nepotism is identical to Hamilton’s “kin altruism”: we favor family members because they share our genes. Hume’s observation that we are biased toward people with whom we have direct contact can be explained by the fact that, as members of the same community, we are enmeshed with them in a web of interdependent, reciprocally altruistic relationships with them. Finally, Hume’s point that we are partial to people who resemble us in behavior or appearance makes excellent biological sense given that these individuals are likely to share our genes or be members of our community or both. It is remarkable that, over a hundred years before Darwin wrote *The Origin of Species*, and two hundred years before the seminal contributions by Hamilton, Trivers, and Alexander, a philosopher with no knowledge evolutionary of biology could get things so right. (p. 141)

In this chapter, Smith postulates that “Human beings have powerful inhibitions against killing one another.” He explains:

Human groups are very dangerous to one another. But there is another side to this story. We are an extremely social species, and it is important to bear in mind that our ancestors triumphed not as individuals, but as members of victorious *communities*. To accomplish this, they needed to maintain a very high level of cohesion and solidarity, which in turn required powerful barriers against in-group violence. The principle is a simple one: if community members are busy killing one another, they cannot present a united front against an enemy. The biologist Robert Bigelow was perhaps the first person to fully recognize the dynamic interplay between in-group cohesion and intergroup violence. “We are without doubt,” he remarked, “the most cooperative and the most ferocious animals that ever inhabited the earth.” (1969, p. 3). We cooperate to compete, and a high level of fellow feeling makes us better able to unite to destroy outsiders. (pp. 141-142)

Furthermore, as a highly *symbolic* species, humans added an entire new dimension to warfare and diabolical cruelty: language and ideology:

No chimpanzee can dream of establishing a master race, of conquering the Holy Land, of seizing nonexistent weapons of mass destruction, or of undertaking a kamikaze mission in exchange for an eternity in paradise. There is no nonhuman

equivalent of notions like manifest destiny... for there is nothing in the cognitive repertoire of any nonhuman species remotely like “right,” “Providence,” or “liberty.” The evolution of language initiated a quantum leap in the complexity of human behavior. We became diabolically symbolic creatures, whose culture-generating brains are a breeding ground for ideas with the power to kill. (pp. 144-145)

In the next chapter, “Reluctant Killers,” Smith elaborates the idea that lust for war and the dread of war coexist within the human heart. Smith marshals a cornucopia of evidence that not only the fear of being killed or injured plays an important role in the desire to escape the horrors of war, but also *the fear of killing*.

Killing at close range is one of the most traumatic aspects of combat, and many men will do almost anything to avoid it. “Intimate brutality,” as Grossman calls it, can have powerful and extremely disturbing psychological consequences... War does violence to the warrior, for in addition to the extremes of terror and fatigue confronting soldiers, they must also find some way of coming to terms with the enormous guilt that arises with the taking of human life. (pp. 151-152)

Stress, seriously debilitating psychiatric symptoms, and post-traumatic stress disorder are rampant among soldiers on the battlefield as well as among veterans. Smith then makes the connection of combat motivation with self-deception:

To perform well in battle without succumbing to malaise, soldiers need a way to blunt the pain of warfare and overcome their natural horror of killing, while at the same time preserving or even enhancing their morale and effectiveness. This sounds like a very tall order, but evolution has endowed us with just this capacity. For this to happen, the soldier must immerse himself in a special form of self-deception. Strange as it may sound, his ability to deceive himself can make the difference between survival and extermination, victory and defeat. As advantageous as this is, it is also very dangerous, because it immobilizes his natural inhibitions against lethal violence and can unleash a torrent of brutality. (p. 160)

In the next chapter, “The Face of War,” the four strands of evidence (the lust in killing, the abhorrence of killing, self-deception, and the modularity of the mind) come together and conspire to make war possible: “We are *ambivalent* about killing, and it is impossible to understand the relationship between war and human nature without taking this into consideration.” (p. 161)

Human beings have the ability to mind-read other human beings. They also have a highly efficient face recognition module (which even has a special niche in the fusiform gyrus of the brain). According to Smith, the mind-reading module is especially sensitive to the sight of humanlike *eyes*. This poses a problem for the soldier on the battlefield because this sight arouses compassion, restrains aggression, and interferes with the business of killing. Killing at a (geographical) distance is a possible solution to this problem, because a soldier who is far enough away cannot see his victim’s face and can avoid recognizing the humanity of his targets. But even in modern warfare, not all fighting can be done from a distance. Some soldiers deal with this by creating a *psychological* distance between themselves and the enemy. “Both forms of distancing are, in the final analysis, forms of self-deception. They are ways of creating and sustaining the illusion that one is not taking human life.” (p. 181)

In the next chapter, “Predators, Prey, and Parasites,” the *dehumanization of the enemy* is elaborated. Perceiving the enemy as nonhuman would liberate us from inhibitions against killing them. How do we perform this trick? There are various forms and degrees of dehumanization, but the most effective ones inspire hate, fear or repugnance. “Killing other people is easiest if there is something about them that makes you *want* to kill them – something that arouses deep aggressive passions” (p. 187). First, we can imagine the enemy as a dangerous, subhuman beast that must be hunted and killed. Smith postulates that the human mind comes equipped with a predator detection module that is switched on by images of dangerous animals. In war, the soldier’s predator detection module can be switched on by other human beings, who are then no longer experienced as human. Perceiving the enemy as a game animal to be hunted and gunned down “for sport” is another way to sidestep the taboo against killing human beings. The hunting metaphor can be found in many memoirs of soldiers. For example, the Battle of the Philippine Sea became immortalized as “the great turkey shoot.”

The third, and last, way of dehumanizing the enemy is to picture him as a parasite, virus, rat, microbe, pest, louse, vermin to be eradicated. “[T]he metaphor of the enemy as a disease or as a carrier of disease, often occurs in war, especially in wars of extermination.” (p. 202)

When the antiparasite module is activated in war, we perceive our enemies as unclean. We equate them with disease, or with vectors of disease such as lice, flies, and rats. We do not hunt rats for sport, and do not mount their heads on the wall as trophies, nor do we eat creatures that we consider to be filthy. We try to wipe them out, to exterminate them completely. It follows that when the antiparasite module is activated and turned against fellow human beings, the stage is set for genocide. (p. 207)

In the concluding chapter, “Humanity Lost and Found,” Smith summarizes his insights into the human mind and its capability to overcome inhibitions against killing and afford protection from the horrendous psychological trauma of war:

Is this analysis is near correct, then our best hope of stopping war is stopping this kind of self-deception, or at least becoming intolerant of it. If we do not take refuge in illusion, we will find it much more difficult to go to war. Abandoning humanity, even for a short time, is a risk, for there is never any guarantee that one will regain it. The longer a man remains in battle, the more difficult it becomes for him to rediscover his humanity, and the greater the danger of breakdown. As with every drug, the effects of self-deception come at a price. The transformations that make war possible can unleash terrible forces within the men that undergo them. War offers unique and forbidden pleasures and satisfactions, which we can glimpse in the writings of men who are honest and reflective enough to give a true account of them. These letters and memoirs spell out thoughts and emotions that sane, civilized human beings are not supposed to have. (p. 213)

Finally, American Civil War General Robert E. Lee was right when he allegedly observed, “It is well that war is so terrible, or we should grow too fond of it.”

This is in many ways a “strange” book, and I often wondered what audience Smith had in mind when writing it. So many themes and topics are squashed together that they sometimes border on sound bytes. But rather than picking petty academic fights, I would like to point to a most extraordinary convergence of ideas.

Last year I presented a paper for the conference of the International Society for Human Ethology (ISHE) in Detroit (2006), in which I made a systematic inventory of the evidence for and against the idea that human males are “natural born killers,” and I concluded that “Several strands of evidence, briefly reviewed here, refute the thesis that human males are ‘natural born killers’ and corroborate the thesis that – except under very extreme conditions of intense agony of terror, dehumanization and brutalization – killing each other is not man’s favorite sport. As many a Vietnam infantry soldier, interviewed by Moskos, testified: I’m a lover, not a fighter” (Moskos, 1969, p. 22). I also emphasized the human ambivalence toward killing conspecifics.

Two months after the publication of Smith’s book, Paul Roscoe published a paper in *American Anthropologist* in which he argued that chimpanzees and humans have an aversion to killing conspecifics. Interestingly, Roscoe used almost the same arguments as Smith, but he added one more:

A third technique is to distort the reality of killing by displacing responsibility for the act onto a spiritual or secular authority. In New Guinea, ancestral or totemic spirits may be represented as the real authors of a kill, the warrior acting merely as the vehicle of their desires... In more centralized societies, holy wars and killings are conducted in the name or service of a deity. Where war is under the control of a hierarchy, responsibility also can be displaced onto secular authorities: The killer was “just following orders. (Roscoe, 2007, p. 489)

So, it looks as if the time is ripe for a major revision of the “natural born killer” explanations of combat motivation in humans (and maybe even in chimpanzees).

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