

# The Anthropology of Peace and Nonviolence

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Diogenes  
2017, Vol. 61(3–4) 30–45  
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sagepub.co.uk/journalsPermissions.nav  
DOI: 10.1177/0392192116648597  
journals.sagepub.com/home/dio



## Abstract

The pioneering ideas of Glenn D. Paige for a paradigm shift from killing to nonkilling are highlighted. The relevance of anthropology for this paradigm is advanced. The accumulating scientific evidence proves that nonviolent and peaceful societies not only exist, but are actually the norm throughout human prehistory and history. This scientific fact is elucidated through a historical inventory of the most important documentation. Ethnographic cases are summarized of the Semai as a nonviolent society, the transition from killing to nonkilling of the Waorani, and the critiques of the representation of the Yanomami as a killing society. Several of the most important cross-cultural studies are discussed. The assertions of some of the most vocal opponents to this paradigm are refuted. The systemic cultural and ideological bias privileging violence and war over nonviolence and peace is documented.

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“So much depends on our conception of human nature: for individuals, the meaning and purpose of our lives, what we ought to do or strive for, what we may hope to achieve or to become; for human societies, what vision of human community we may hope to work toward and what sort of social changes we should make” (Stevenson and Haberman 1998: 3).

## Paradigm shift

Is a nonkilling society possible? This profound, pivotal, and provocative question was asked in 2002 by Glenn D. Paige in his pioneering book *Nonkilling Global Political Science*. He carefully defined a nonkilling society as a human community from the local to the global levels characterized by the absence of the killing of humans, threats to kill, weapons designed to kill, justifications for using them, and conditions of society dependent upon the threat or use of lethal force for maintenance or change (Paige, 2009).

Paige identifies the empirically verified facts that although humans are capable of both killing and nonkilling most humans are not killers (+99%); nonkilling capabilities already work in a wide

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range of social institutions and situations. Thereby he problematizes the assumption that killing is an inevitable manifestation of human nature, the human condition, and social life. Accordingly, he challenges the very foundational acceptance of war and other forms of violence in society, science, academia, government, politics and other sectors of contemporary life. Moreover, he calls for scientific and scholarly investigation of the actualities as well as possibilities of nonkilling. Also, he advances serious thinking and research through a set of secondary questions as his four-part logic of analysis: What are the conditions, causes, and consequences of killing, nonkilling, and the transition from one to the other in either direction.

Paige asserts that killing is the main source and sustainer of other forms of violence. He challenges the hegemonic industrial-military-media-academic complex by calling for liberation from killing through a paradigm shift from the ideology and politics of killing to those of nonkilling. Paige (2009: 127) asserts: "The time has come to set forth human killing as a problem to be solved rather than to accept enslavement by it as a condition to be endured forever." Independent confirmation of Paige's assessment comes from the World Health Organization based on three years of research consulting 160 experts in the world and concluding that human violence is a preventable disease to be treated as a public health problem (Krug et al., 2002).

During recent years this largely new perspective has generated increasing attention, research, publications, affirmation, acclaim, and practical projects in peace studies and far beyond as documented on the website for the Center for Global Nonkilling which includes numerous free books. Coming decades will reveal if the accelerating momentum and manifold ramifications of this revolutionary paradigm shift continue.

Anthropology is in a strategic position to help address Paige's primary and secondary questions as well as other aspects of his work, the focus of this article. Is a nonkilling society possible? The anthropological answer is a definitive yes, and the prime ethnographic case is the Semai. They are also most pertinent for the secondary question of the conditions, causes, and consequences of nonkilling. The case of the Waorani addresses the transition from killing to nonkilling, while that of the Yanomami deals with killing, or more precisely, its misleading representation by one anthropologist. Beyond these three cases, additional seminal evidence from cross-cultural comparisons and other research are presented. All of this is solidly grounded in the most substantial, sophisticated, and objective scientific work of an international cohort of respectable and responsible pioneering scholars (Sponsel, 2010a). This article ends with a rebuttal of some of the opponents of this paradigm who are recognized most aptly as apologists for war or peace resisters. Because of limited space primatology and archaeology are not considered, but some key publications are cited.<sup>1</sup>

Below the term nonviolence is usually used because it is more inclusive than nonkilling and far more common in the literature. Nonviolence is defined as the rejection of any beliefs, values, attitudes, and actions that might harm others. Peace is the dynamic ongoing process of valuing and nourishing life through pursuing every aspect of nonviolence while devaluing and avoiding any kind of violence. War is systematic intergroup armed conflict involving mass murder rationalized as justified (Gelvin, 1994).

## **Semai**

The Semai of Malaysia were studied independently by Robert Knox Dentan (1997), and by Clayton A. and Carole J. Robarchek (1998), each for more than two years. They arrived at the same conclusion; the Semai are a nonviolent and peaceful society. Their conclusion confirms the understanding of the Semai themselves. Nonviolence is the ethos of their society, its pivotal organizing principle and focus. Violence of any kind terrifies any Semai. They view violence as stupid and senseless. Their response to force is passivity or withdrawal, not return force. The Semai

affirm that they do not act with anger, they never hit another person or fight. Nonviolence and self-restraint are pivotal social values that individuals learn from childhood. Children are never hit, and they observe only nonviolent adults as their role models. Nevertheless, naturally some tensions and conflicts arise as in any group. Disputes that are pursued are resolved through compensation, by community discussion until emotions and concerns subside, or with adjudication by respected elders. Recognition of mutual dependence, cooperation and sharing, and fear of dangers from external forces maintain social solidarity (also see Dentan, 2000).

Diverse outsiders have noted for more than a hundred years that the Semai abhor violence. Inflated estimates of homicide rates by some authors are invalid (e.g., Knauff, 1987, Fry, 2006: 73). However, outside of their own society a fraction of the Semai were recruited by the British during the early 1950s for counterinsurgency against communists. They were ordered to kill non-Semai and complied. This is the only known exception of killing by Semai. Subsequently these recruits were reintegrated fully into their home community as nonviolent and peaceful individuals (Dentan, 1997: 55–59, 133). *The nonviolent and peaceful character of the Semai has never been successfully challenged* (Benjamin et al., 2012).

## Waorani

In the Ecuadorian Amazon the Waorani (a.k.a. Auca) provide a significant case of a transition from violence to nonviolence. Clayton and Carole Robarchek (1998a) pursued fieldwork among the Waorani who have long had a reputation for intergroup violence through a cycle of blood feuds with revenge raids. However, after missionaries revealed to the Waorani that their society could be nonviolent and peaceful, they rapidly transformed themselves accordingly. This transition from a killing to a nonkilling society reveals the plasticity and adaptability of human nature and the overwhelming dominance of culture over biology. Furthermore, it demonstrates how a society's cultural construction of its worldview, values, and attitudes has practical consequences as these are manifest in behavior. Later the Robarcheks (1998b) systematically compared the traditional Waorani and Semai, having worked with both. They are quite similar in their culture and ecology, except for their traditional worldview which clearly makes all of the difference. Incidentally, earlier research by Peter Broennimann (1981) independently described the transformation of the Waorani.

It is noteworthy that most Dani of New Guinea made a similar transition from killing to nonkilling (Heider, 1997: 172). Indigenous societies in many parts of the world that engaged in some kinds and degrees of violence, and in some cases warfare were “pacified” by European colonials, albeit often violently (e.g., Rodman and Cooper, 1979). The multitude of cases in which in one way or another societies were transformed from killing to nonkilling demonstrates that killing is not some inevitable innate drive of human nature. However, peace is a dynamic process that is neither perfect nor absolute; some killings have still occurred among Dani and Waorani.

## Yanomami

One of the foremost anthropological students of warfare, R. Brian Ferguson, is among those who have called for a serious reconsideration of representations of some cultures as engaged in chronic and endemic tribal warfare. In a book Ferguson co-edited with Neil L. Whitehead (2000) ethnohistory and other lines of evidence proved that much of what has been presumed to be traditional “primitive” or tribal warfare was actually generated at least in part by colonialism. Even if warfare existed prior to Western contact, often it was modified and intensified by external forces. These assertions challenge much of the ethnological record of warfare along with the presumption that human nature is inevitably warlike.

Ferguson (1995) extended this provocative perspective in a most exhaustive, meticulous, and penetrating systematic study of the historical, ethnohistorical, and ethnographic literature on the Yanomami (a.k.a. Yanomamo, Yanomama) of the Brazilian and Venezuelan Amazon. He demonstrates that for centuries Yanomami have been influenced by the political economy of regional, national, and international systems, first directly on the periphery of their territory, and then indirectly by influences spreading inward. He focuses mostly on intervillage conflict generated by competition in situations of differential access to metal trade goods (also see Ferguson, 1992).

In another critical reconsideration of Yanomami warfare, I (Sponsel, 1996, 2010b) systematically question the scientific validity of Napoleon A. Chagnon's (1968) depiction. Furthermore, the analysis even questions whether any Yanomami aggression can be realistically characterized as warfare, rather than simply blood feuding with raiding as one tactic, a phenomenon more reminiscent of the famous historical case of the Hatfields and McCoys in Appalachia. This reexamination of Chagnon's ethnography also reveals that within his own description there is considerable information about nonviolence and peace among the Yanomami, although it is mostly overshadowed by his fixation on aggression, the latter quite unlike any of the other more than four dozen anthropologists who have worked with the Yanomami (also see Sponsel, 1998, 2006a, 2006c).

The characterization of the Yanomami as "the fierce people" in the subtitle of the first three editions of the case study by Chagnon persists in his representation of their culture in the text through all six editions, even though the subtitle was dropped after the third edition. (The editions are 1968, 1977, 1983, 1992, 1997, and 2012.) However, in the subtitle of Chagnon's (2013) memoir he stigmatizes the Yanomami as a "dangerous tribe." His overgeneralizations, stereotyping, and exaggerations have been repeatedly challenged by numerous and diverse anthropologists who have worked with the Yanomami (see Conklin, 2013). For instance, Kenneth Good (1991: 69), who lived almost continuously in Yanomami communities for more than a dozen years, writes: "As I began to understand this better, I got increasingly upset about Chagnon's 'Fierce People' portrayal. The man had clearly taken one aspect of Yanomama behavior out of context and in so doing has sensationalized it. In the process he had stigmatized these remarkable people as brutish and hateful" (also see Good, 1991: 13, 55–56, 73, 174–175).

More recently, in response to the brief frenzy of publicity in the media with the publication of Chagnon's (2013) memoir, Survival International posted this statement on February 26, 2013:

We, the undersigned, have all worked with Yanomami Indians for prolonged periods at different times during the last five decades. We have closely witnessed them to be a generally peaceable people, who, as many traditional people do, occasionally engage in inter-village conflicts (ritualized raids and duels). Yet the casualties of these culturally controlled conflicts are extremely low if compared with those of the violence and contamination inflicted on the Yanomami by the gold miners and cattle ranchers who invade their lands. We absolutely disagree with Napoleon Chagnon's public characterization of the Yanomami as a fierce, violent and archaic people. We also deplore how Chagnon's work has been used throughout the years – and could still be used – by governments to deny the Yanomami their land and cultural rights [<http://assets.survivalinternational.org/documents/920/yano-2013-anthropologists-letter.pdf>].

This statement was signed by 19 anthropologists who have lived with the Yanomami, several for many years longer than Chagnon. This should wake up the anthropological community and others, perhaps even some of Chagnon's defenders and those in the media and general public who lack adequate information and many of whom are remarkably gullible. (For additional statements and information see Corry, 2013a; for a wide survey of works on the "brutal savage." see [www.survivalinternational.org/articles/3272-brutal-savage-myth](http://www.survivalinternational.org/articles/3272-brutal-savage-myth).)

In an extraordinarily controversial article in *Science* Chagnon (1988, 1997) marshalled his data to argue that Yanomami men who kill more have more wives and children, thus higher reproductive

fitness. Furthermore, he generalized this assertion to the whole of human evolution, albeit without any cross-cultural analysis in support: “Violence is a potent force in human society and may be the principal driving force behind the evolution of culture” (Chagnon, 1988: 985). Chagnon’s argument for adult male Yanomami as little more than gene-driven automata has been meticulously and thoroughly refuted independently by numerous anthropologists on theoretical, methodological, and substantive grounds (Albert, 1989; Beckerman et al., 2009; Corry, 2013a; Ferguson, 1989; Fry, 2006: 184–199; Lizot, 1989; Miklikowska and Fry, 2012; Moore, 1990). There is also the bias of the sexism of ignoring women in Yanomami society, except as passive machines for production and reproduction (cf. Foster and Derlet, 2013).<sup>2</sup>

From the foregoing clearly the representation of the Yanomami by Chagnon, one of the most widely cited accounts of tribal warfare, is seriously questioned by several independent researchers, thereby also problematizing the stereotypical demonization of so-called “primitive” or tribal societies and of human nature more generally. However, the apologists for war and peace resisters, like Edward O. Wilson and Steven Pinker discussed shortly, among other partisans, blindly accept Chagnon’s representation of the Yanomami as a “primitive” tribal society engaged in chronic endemic warfare while completely ignoring all of the numerous and diverse critiques.

## Comparisons

The Semai, Waorani, and Yanomami are single indigenous cultures. Five decades of accumulating ethnographies and cross-cultural comparisons demonstrate that peaceful societies are not rare. Ashley Montagu (1978) in his *Learning Non-Aggression* compiled the first set of ethnographic cases on nonviolent and peaceful cultures: Australian Aborigines, Fore, Inuit, !Kung San, Mbuti, Semai, and Tahitians. Montagu (1978: 5) identifies 14 additional nonviolent and peaceful societies: Arapesh, Birhor, Hadza, Hopi, Ifaluk, Lepchas, Land Dayaks, Papago, Punan, Tikopia, Todas, Veddahs, Yami, and Zuni. He concludes that, “given the existence of such non-aggressive societies, together with the wide range of aggression among other societies, it is obvious that aggression is learned cultural behavior, instead of any biologically determined innate drive.” Furthermore, he mentions that many nonliterate peoples have readily abandoned fighting, raiding, and warfare (Montagu, 1978: 9).

It should be pointed out that another book by Montagu (1976), *Nature of Human Aggression*, is one of the earliest rebuttals of biological reductionism and determinism reflected in such pseudoscientific stereotypes as Man the Hunter, Man the Warrior, Killer Apes, Beast Within, and Demonic Males. He dismissed such simplistic constructions as “the myth of innate depravity.”

Montagu (1905-1999) was a biological anthropologist, widely respected in academia, and prominent as a public intellectual as well including in television interviews. Yet the apologists for war and peace resisters are either ignorant of his work, or purposefully chose to ignore it because it would automatically invalidate their advocacy posturing (Sponsel, 2006b; also see Mead, 1940).

Since Montagu’s pioneering work on the anthropology of peace in the 1960s and 1970s, a substantial body of literature has been accumulating and advancing further scientific documentation, encompassing at least five sets of ethnographic case studies (Evans Pim, 2010; Fry and Bjorkqvist, 1997; Howell and Willis, 1989; Kemp and Fry, 2004; Sponsel and Gregor, 1994); four major monographs (Dennen, 1995; Fry, 2006; Kelly, 2000; Melko, 1973); an annotated bibliography of 47 peaceful societies (Bonta, 1993); and since 2005 an encyclopedic website describing 25 peaceful societies and offering a wealth of other related information ([www.peacefulsocieties.org](http://www.peacefulsocieties.org)). Dennen (1995) lists 152 peaceful societies. So far well over a hundred nonviolent and peaceful societies have been identified and documented, some in great detail, and many confirmed by independent researchers. It is likely that many more such cultures exist historically and even more in prehistory.<sup>3</sup>

Beyond the previous citations, several outstanding comparative studies demonstrate the reality of numerous nonviolent and peaceful societies. David Fabbro (1978) researched the seminal article titled "Peaceful Societies" in the *Journal of Peace Studies*. The societies were the Copper Eskimo, Hutterites, Islanders of Tristan da Cunha, Kung, Mbuti, Semai, and Siriono. He noted that they are characterized by a small intimate community, egalitarian social structure, generalized reciprocity, group consensus in decision making, and nonviolent values and conditioning. Violence, war, external threats, social stratification, regular political leadership, police, and the military were all absent.

Bruce D. Bonta (1996: 404–405) independently confirms Fabbro's attributes of nonviolent and peaceful societies while further elaborating on them with a more extensive cross-cultural sample. He proves that the worldview, ethos, values, attitudes, practices, institutions, and customs of nonviolent and peaceful societies are fundamentally different from those that are violent and warlike. The former differ in their perceptions of human nature, conflicts, dispute resolution, and intolerance of violence. Bonta observes that peacefulness is a condition of human society characterized by a relatively high degree of interpersonal harmony; little if any physical violence; effective strategies for the nonviolent resolution of conflicts and even for averting violence; a commitment to avoiding violence with other societies; and strategies for the enculturation and socialization of children to cultivate and pursue nonviolent ways. Furthermore, Bonta identifies six strategies for the nonviolent resolution of conflicts: self-restraint, negotiation, separation for avoidance, intervention, meetings to reduce tensions, and humor. Bonta (1996: 414) stresses that: "The basic reason for peacefulness in these societies is that people are strongly opposed to actual physical violence and firmly in favor of nonviolence.... Violence is never acceptable.... Peacefulness is an absolute commitment for them."

In the detailed analysis "The Natural History of Peace: A Positive View of Human Nature and Its Potential" Sponsel (1996), as an experimental heuristic exercise, marshaled evidence and arguments from all four subfields of anthropology to demonstrate the opposite of the "myth of innate depravity." He concluded that: 1. While conflict is inevitable and ubiquitous, violence is not. 2. Human nature has the psychobiological potential to be either nonviolent and peaceful, or violent and warlike. 3. Nonviolence and peace prevailed in most prehistoric and non-state societies. 4. War is not a cultural universal. 5. Consequently, the potential for the development of a more nonviolent and peaceful world is latent in human nature. Incidentally, this essay was developed from a paper presented in a small conference titled "What Do We Know About Peace" in which only two others out of a dozen participants addressed nonviolence and peace directly, Kenneth Boulding and Johan Galtung. The rest of the participants concentrated on violence and warfare, a phenomenon typical of the systemic bias described shortly.

Raymond C. Kelly (2000) in *Warless Societies and the Origin of War* provides a most sophisticated and detailed critical analysis. He develops a general model for the evolution of war that is firmly grounded in cross-cultural comparison and tested with the archaeological record. Kelly (2000: 121–124, 160) makes the extremely important observation that: "The origin of war is a question of enduring interest because the conclusions reached are of central relevance to our conceptions of human nature, and such conceptions inform the political philosophies that shape and legitimize our social institutions."

According to Kelly (2000: 10), the hallmark of the origin of warfare is not only capital punishment or blood revenge. Kelly (2000: 147–148) finds that almost all societies in the Upper Paleolithic lacked war; the earliest definitive evidence of war is from Nubians around 12,000–14,000 BC; warfare was rare to absent until very late in human prehistory, around 7,500–7,000 BC; it was related to the development of farming with sedentary villages, thereafter competition over trade routes, and finally to states as centralized and hierarchical political organizations.

The few thousand years of occasional warfare is extremely recent for the human species with an evolutionary heritage extending back more than two million years (cf. Keeley, 1996; LeBlanc and Register, 2003; Otterbein, 2009; Pinker, 2011; Wilson, 2012).

Warfare is absent in nomadic foraging bands (Kelly, 2000: 44–45, 56–57). They possess only minimal social groups, like the universal nuclear family and local community; no higher level of social organization nor any subunits; lack concepts of group liability; avenge murder doesn't lead to blood revenge feuding; group membership is fluid rather than fixed; and food storage is absent. In contrast, more sedentary or specialized forager societies have a segmented hierarchy and concepts of group injury, liability, and responsibility that combine as the basis for feuding or warfare (Kelly, 2000: 46–48). Unlike Kelly, most previous studies have failed to distinguish between unsegmented and segmented forager societies. Aspects of warfare occur in segmented forager societies. On this basis some authors have asserted that this applies to all forager societies which is invalid and misleading. (Also see Fry, 2013: 8; Fry and Soderberg, 2013; Kelly, 2013).

The absence of warfare for nomadic hunter-gatherer bands known in history from ethnography and in prehistory from archaeology is extremely significant because such societies composed 99% of human existence on the planet. Almost everything that might be identified with human nature probably evolved during this period under the aforementioned conditions. This scientific fact alone would invalidate every assertion about the universality inevitability of warfare in human societies.

It is most pertinent that completely independently of Kelly, a nuclear physicist, Stephen S. Younger (2008, 2012), published a most sophisticated comparison of island societies in the Pacific by applying his expertise with computer models and simulations. One of his conclusions with significant evolutionary implications is that small-scale egalitarian or non-segmented societies are far more likely to survive if they avoid violence than if they pursue it.

Douglas P. Fry through numerous publications over more than two decades proves that humans are fully capable of living in nonviolent and peaceful societies, and that violence and war are not universal and inevitable. Furthermore, he demonstrates that much of past and recent scholarship is biased by a presumption of some kind of “beast within.” He identifies this as the “Man the Warrior Myth,” the nebulous assertion that war is ancient, universal, natural, normal, and inevitable. Fry argues that this myth is irrefutably contradicted by both reason and evidence. He ascribes this myth to a cultural bias that includes Western assumptions about human nature; is an unconscious and unexamined assumption; results in selectivity and advocacy in the representation of war; and exaggerates aggression. It pivots on careless thinking that loosely defines war broadly as simply any intergroup aggression and thereby conflates it with interpersonal violence and blood feuding.

Fry recognizes two antithetical models of human nature. The Man the Warrior model is advocated by sociobiologists and evolutionary psychologists, among others. In it male competition for reproductive fitness generates belligerent militarism and warfare. Fry's penetrating critical analysis reveals the cultural bias, selective use of evidence, and muddled thinking driving this model. He proves this for Chagnon's representation of the Yanomami. The second model recognized by Fry is the Nomadic Forager Pacifist. Here natural selection generates nonviolent conflict management and helps maintain peace (cf. Bonta, 1997).

Baszarkiewicz and Fry (2008: 1560–1561) help transcend some problems with identifying a society as merely either nonviolent or violent through their idea of a peace-to-war continuum. In a nonviolent society, violence and even killing may occur, but only very rarely. Even in a violent society like America, most individuals are not violent and never kill. Furthermore, it may help to envision both intrasocietal and intersocietal variation along this continuum, recognizing that most societies fall somewhere along it rather than at either pole, but that their position may shift in either direction depending on their specific circumstances. Thereby this continuum transcends absolutist and essentialist thinking in terms of either-or, all-or-none, always-or-never.

According to Fry, various combinations of factors facilitate conflict management in different societies: avoidance, tolerance, negotiation, self-redress, friendly peacemaking, mediation, arbitration, adjudication, and repressive peacemaking. Fry emphasizes that human adaptive plasticity and international governance can generate more peace in the future. He recommends that peace may be facilitated through extending nonviolent conflict management from within democracies to international relations by recognizing interdependence (economic, security, and environmental); cultivating cross-cutting ties; and strengthening the United Nations and regional alliances (Fry, 2006).

Fry, like Kelly, Younger, and others, is not in any way opposed to science, biology, or evolution; indeed, his publications clearly embrace all three. He is critical, objective, systematic, holistic, and comparative. His work is driven by fact and reason, not political ideology. Moreover, aspects of the work of Fry and others are affirmed and further developed by the latest research of numerous scholarly scientists from different subfields of anthropology and from other disciplines (Bonta, 2013; Fry, 2013; Evans Pim, 2009, 2010).<sup>4</sup>

## Magicians

In various ways and degrees some anthropologists and others appear to be magicians as apologists for war because they blame some vague human nature as an excuse for war and other forms of violence, instead of recognizing the primacy of the specific contexts as well as the political, moral, and personal choices that are the actual determinants. They are also peace resisters because they neglect, if not completely ignore, the record of nonviolent and peaceful societies that has accumulated over five decades. Cultural anthropologist Robert B. Edgerton (1992) in *Sick Societies: Challenging the Myth of Primitive Harmony*; archaeologist Lawrence H. Keeley (1996) in his book *War Before Civilization*; primatologist Richard Wrangham with Dale Peterson (1996) in *Demonic Males: Apes and the Origins of Human Violence*; primatologist Michael P. Ghiglieri (1999) in *The Dark Side of Man: Tracing the Origins of Male Violence*; and archaeologist Steven A. Le Blanc with Katherine E. Register (2003) in *Constant Battles: The Myth of the Peaceful, Noble Savage* are among numerous anthropological publications in a genre arguing that war is ubiquitous in time and space as an inevitable manifestation of human nature and evolution (cf. Sponseel, 2012: 21–30). Furthermore, they assert that the evolutionary trajectory and psychobiology of *Homo sapiens* inevitably generates territoriality, competition, hostility, violence, and warfare within and between human societies. Some recognize their political ideology as deceptively disguised as science and scholarship, whether intentional or not. It publicizes and celebrates the Man the Warrior model wherein the human predator naturally turns inward to prey on its own species, thereby becoming the premier killer ape (cf. Ardrey, 1976; Fry, 2011; Sussman, 2013).

Keeley, for example, aims to expose and refute the so-called “pacification of the past” by supposed liberal anthropologists. However, he carelessly defines war so broadly as to be meaningless (cf. Otterbein, 2009). Although an archaeologist, he ignores the very serious limitations of the evidence from prehistory. He constructs biased interpretations of “data.” On the other hand, Keeley appears oblivious to the substantial literature irrefutably documenting nonviolent and peaceful societies.<sup>5</sup>

This mindset with the accompanying mantra of “innate depravity” has persisted since at least the era of journalist Robert Ardrey’s *African Genesis* (1961), *Territorial Imperative* (1966), and *Hunting Hypothesis* (1976), and for that matter, since Thomas Hobbes (1651) *Leviathan* and long before. Psychoanalyst Sigmund Freud (1930) in *Civilization and Its Discontents* and ethologist Konrad Lorenz (1966) in *On Aggression* contributed to it as well in both the scientific and public arenas. Philosopher James Kern Feibleman in his *The Destroyers: The Underside of Human Nature* (1987) is another example. This reflects the so-called realist political ideology denigrating human



nature (Berry, 1986; Clark, 2002; Curtis, 1980; Kegley and Raymond, 1999; Kupperman, 2010; Sahlins, 2008; Sponsel, 2007).

Recently this perspective has been perpetuated in biologist Edward O. Wilson's (2012) *The Social Conquest of Earth* in the chapters revealingly called "Tribalism Is a Fundamental Human Trait" and "War as Humanity's Heredity Curse." He equates tribalism with universal "groupist behavior" which is some vague kind of presumed hardwired or inborn tendency for in-group social identity that is inexplicably somehow automatically correlated with its territoriality, hostility, and aggression toward any out-group. Wilson (2012: 62) claims: "Our bloody nature, it can now be argued in the context of modern biology, is ingrained because group-versus-group was a principal driving force that made us what we are. In prehistory, group selection lifted hominids that became territorial carnivores to heights of solidarity, to genius, to enterprise. And to fear. Each tribe knew with justification that if it was not armed and ready, its very existence was imperiled. Throughout history, the escalation of a large part of technology has had combat as its central purpose." Then Wilson (2012: 65) reveals that: "It should not be thought that war, often accompanied by genocide, is a cultural artifact of a few societies. Nor has it been an aberration of history, a result of the growing pains of our species' maturation. Wars and genocide have been universal and eternal, respecting no particular time or culture."

Wilson's reasoning may be a logical construction, but it is a speculative "just so story" reminiscent of nineteenth-century evolutionists in anthropology and other disciplines devoid of any convincing empirical proof let alone any acknowledgement of the substantial contrary scientific evidence just sampled in this article. This is fiction, not science. It is surprisingly simplistic and reductionist biological determinism, especially by an otherwise reputable and sophisticated scientist and prominent public intellectual. Such gross generalizations naturalizing and normalizing war and other forms of violence are directly contradicted by the tremendous variation within and among tribal and other societies from prehistory to the present. If some kind of an instinctive drive for aggression actually existed as Wilson fantasizes, then far more violence including warfare would prevail.

It is noteworthy that there is also significant evidence from psychology contradicting the Demonic Male and related speculative and specious models. For instance, military personnel must be trained systematically to kill, it does not come naturally. Avoiding euphemisms and to be candid, warfare, what amounts to serial and mass murder committed by some military personnel that is rationalized for justification and celebrated as heroic, is solely the product of programming, it is not generated by any hardwiring in the genes. Despite rigorous training, preparation, and indoctrination, including both desensitizing the soldier and dehumanizing the enemy, most military personnel do not kill, even on the battlefield. Only about 20% of combat soldiers fire their weapons. Those who do kill usually suffer some lingering emotional problems thereafter, and in many cases post-traumatic stress disorder. Shooting can even be more traumatizing than being shot. Surprisingly, even operators of drones (unmanned aircraft) that appear to antiseptically kill humans from a distance, like in a video game, may well suffer emotionally. In short, ordinarily there is a natural psychobiological as well as social inhibition against killing another human. Selective pressures likely facilitated nonviolence and peace as successful adaptations in human evolution (Evans Pim, 2009: 327–340, 359; Fry, 2006, 2013; Hughbank and Grossman, 2013).

Fry perceptively and usefully identifies and discusses in detail seven ways that evidence of nonviolent and peaceful societies is disputed, denied, or ignored by those who are recognized in the present article as magicians who are apologists for war and peace resisters: "1. Stridently emphasize violence and simply ignore all evidence to the contrary.... 2. Set an impossible standard, such as requiring a peaceful society to be absolutely and totally free of all forms of aggression across time, find a few real or apparent exceptions to the impossible standard, and then dismiss the society in question as clearly NOT peaceful.... 3. Count any type of conflict as if it were aggression.... 4. Cite an inflated homicide rate to exaggerate violence.... 5. Regarding warfare in particular, make clever

use of terminology to exaggerate the number of societies that engage in war.... 6. Apply cases of violence or war from a certain place or time to a totally different place or time.... 7. Create a bogus peaceful society, then destroy your creation” (Kemp and Fry, 2004: 185–204; cf. Evans Pim, 2010).

When the very substantial evidence for the natural history of nonviolence and peace that has been accumulating through five decades sampled in the present article is totally ignored by apologists for war and peace resisters among others, then there can be only two logical conclusions: (1) either the author is entirely unaware of the relevant literature and thus has failed to pursue adequate research to provide an objective and balanced approach, or (2) the author is disingenuous in intentionally avoiding contradictory evidence and arguments. In either of these two conclusions, some might opine that the author in question is irresponsible and unworthy of the designation scientist or scholar. Moreover, in some situations, privileging the study of war and other forms of violence to the total exclusion of any consideration of nonviolence and peace might tend for some readers to naturalize, normalize, legitimize, and celebrate violence and war, and thereby might indirectly facilitate them, even if inadvertently.

One of the most recent public broadcasts by a peace resister is *The Better Angels of Our Nature: Why Violence Has Declined* by Steven Pinker (2011). Basically he argues that violence has declined in more recent periods of history by grossly inflating violence in prehistory, while totally ignoring any of the accumulating substantial literature sampled in this article on nonviolent and peaceful societies. Pinker’s work has been refuted by several independent researchers as pseudoscience (Corry, 2013b; Ferguson, 2013; Fry, 2013: 15–20). In instances like Wilson and Pinker, some may even wonder if they are not merely inadvertently blinded by cultural biases and/or political ideology, but engaged in fraudulent science (Smith, 2013, Williams, 2012).

## Other obstacles

There are yet more obstacles to peace studies and Paige’s paradigm. There is a persistent systemic bias privileging attention to, and tragically often even the pursuit of, violence and war in Western culture, and especially in America. It is in part a product of the industrial-military-scientific-academic-media complex, most of all in the USA. The bias also reflects some variants of Christianity as well.<sup>6</sup>

Science and scholarship are not necessarily entirely apolitical and amoral, and they can be biased by culture, religion, ideology, politics, economics, personality, and other factors. Nevertheless, it should be obvious that focusing exclusively on violence and war to the total neglect of nonviolence and peace can be biased and misleading, even though it happens habitually as previously exposed (e.g., Kurlansky, 2006; Martin et al., 2012).

This bias is an empirical fact. It can be demonstrated quantitatively in the domains of the public, academy, sciences, peace studies, and anthropology. For instance, in a survey of articles in the *Journal of Peace Research*, Hakan Wiberg (1981) revealed that from 1964–1980 there was only a single article on peace out of 400, the one previously mentioned by Fabbro (1978). As a more recent example, in the *Encyclopedia of Violence, Peace, and Conflict* (Kurtz, 2008), out of a total of 289 entries, just 10 (3.5%) are on nonviolence while only 29 (10%) are on peace, the rest focused on various aspects of violence and war. Table 1 presents more data proving this bias from a search for key words on December 14, 2013, of several independent sources for public media (Amazon.com and Google.com) and from indexes for the literature in anthropology (Abstracts in Anthropology, and AnthroSource of the American Anthropological Association). AnthroSource monitors publications in 32 periodicals. The grossly disproportionate amount of attention to violence and war over nonviolence and peace is obvious. Furthermore, even many of the citations that appear under peace are overwhelmingly, if not exclusively, about conflict, violence, and/or war.

**Table 1.** Quantitative Data on Systemic Bias Privileging Violence and War.

Indicator	Violence	Nonviolence	War	Peace
Google.com	90 million	2.53 million	543 million	202 million
Amazon.com	44 488	2 519	559 404	96 098
Abstracts in Anthropology (2001–2013)	1 114	6	1 803	408
AnthroSource (AAA)	508	2	566	145

This blatant discrepancy is most troubling because it is simply impossible to achieve a more nonviolent and peaceful society by ignoring these phenomena. As an analogy, health and illness are necessarily complementary concepts. Exclusively studying only disease is insufficient, if the concern is with health, and the converse holds as well. Moreover, when the components of nonviolence and peace in a society are neglected, then reality can be distorted to the point of being fallacious and that may have serious practical consequences (Sponsel, 1998, 2010a, 2010b).

Beyond academia, at a practical level this bias can also discourage concerns for peace and peace activism. This is compounded by the thesis broadcast of the aforementioned magicians. If war is an inherent tendency in human nature, then it seems to be inevitable, unalterable, and unavoidable. This persistent malaise may well contribute to some government leaders prioritizing military over diplomatic solutions to conflicts; pursuing an arms race; spending excessive amounts of money on weaponry instead of other needs like medical research and education; and even considering pre-emptive strikes (cf. Fry, 2006: 251, 262; Fry, 2013: 5).

Yet another obstacle is that many authors writing about war and peace myopically pursue the negative concept of peace as merely the absence of war. They focus on direct violence, violent resolution of conflict, war as natural, defense of nation, and superficial symptoms instead of ultimate causes, the so-called realist perspective. In contrast, the positive concept of peace is far more inclusive. It focuses more on human rights, defense of humanity, structural or indirect violence, the ultimate causes of violence and war, nonviolent conflict resolution, and peace as natural, the so-called liberal perspective. Peace is much more than only the absence of war, just as life is much more than the absence of death (Sponsel, 1994).

Ultimately, many of these contrasts reflect a fundamental difference in political ideology in spite of the overt pretense by most scientists of being apolitical and amoral. In America the “realist” or conservative tends to pessimistically view humans as evil and driven by selfish instincts; international politics as solely competition for power and national interests; war as inevitable; everything as subordinated to national interest; defensive strength as necessary to deter or conquer enemies; and violence as the most effective means of resolving conflicts. In contrast, in America the “idealist,” liberal or leftist tends to optimistically view humans as good; altruism as natural; international politics as cooperation for mutual interests and principles; peace as inevitable and predominant; national and international interests as usually coinciding; international associations as indispensable; and nonviolent conflict resolution as most desirable and effective (Kegley and Raymond 1999: 20–21, 245). Of course, individuals and groups may not neatly fall into one category or the other, depending on the specific circumstances and issues involved.

While some degree of influence from a researcher’s political ideology may be likely, it can and should be tempered to try to avoid serious bias. However, in some instances it can drive research to the degree that not only is it biased, but seriously misleading and maybe even dangerous. Scholarship and science that advocates and celebrates the universality, normality, and inevitability of war and other forms of violence as a product of human nature and/or evolution to the total

neglect from either ignorance or intentional disregard for the accumulating abundance of rigorous scientific and scholarly documentation from the ethnography and ethnology of nonviolence and peace, may be condemned by some as unprofessional, irresponsible, unethical, and reprehensible.

## Conclusions

Nonviolence and peace are not rare, although they are rarely acknowledged, this despite the progressively accumulating documentation over five decades. Cultural and ideological biases in the West, and especially in America, tend to view human nature as innately competitive, territorial, and aggressive. This reinforces and is reinforced by the industrial-military-scientific-academic-media complex, particularly in the United States. Mass murder, especially in the form of warfare justified by whatever rationalizations, is a mostly recent aberration in human evolution and prehistory, and is uncommon in history as well.

As the absence of war among traditional nomadic foragers who occupy 99% of human existence and other considerations reveal, nonviolence and peace are ubiquitous instead of violence and war. There are numerous historically known societies like the Semai where homicide and other forms of violence are extremely rare while war is absent. In addition, there is tremendous variation in the manifestation of violence, nonviolence, war, and peace among the some 7,000 cultures in the contemporary world that renders indefensible and irresponsible simplistic generalizations about these phenomena as well as about human prehistory, human evolution, human nature, and tribes. Even societies like the Yanomami, where some interpersonal and intergroup aggression occurs in various ways and degrees, this aggression is not ubiquitous. For any society to survive there are indispensable attributes like sociability, cooperation, reciprocity, altruism, and empathy that dissuade people from regularly engaging in violence including warfare. Daily social interactions that are life-enhancing far outnumber any that are life-degrading. Life-enhancing behaviors must have been selected for in the course of evolution. There are also societies like the Waorani that have been transformed from killing to nonkilling, thereby demonstrating the plasticity and adaptability of human nature as well as the overwhelming power of culture over biology. When nonviolence and peace are not taken into account, then considerations about human evolution, human nature, the human condition, cultures, religions, culture history, and conflicts are seriously deficient and can even be grossly misleading.

Nonviolence and peace surely merit just as much serious, systematic, and empirical scrutiny as violence and war, if the aforementioned biases can be transcended by those anthropologists and others who would like to legitimately identify themselves as scientists and scholars. Paige (2009: 126) asserts that every individual can be a center for global nonkilling to facilitate the transition to a nonkilling world. Surely this applies to anthropologists as well as others in contributing to this paradigm shift through their teaching, research, and publications to advance nonviolence and peace. You cannot promote something by ignoring it.

## Notes

1. The main points raised in this article are substantiated in far more detail in the citations in the bibliography, see especially Fry (2013).
2. For a critique of evolutionary psychology see McKinnon (2005).
3. For the historical record of periods of peace for a century or more in 52 mostly state level societies, see Melko (1973).
4. For reviews of historical aspects of anthropological contributions to peace studies see Dentan (2012), Kehoe (2012), and Sponsel (1994). For reviews of the anthropology of war studies see Ferguson (1984, 2007); Otterbein (1999); and the responses to the latter by Dentan (2002), Sponsel (2000), and Whitehead (2000).

5. For further discussion about Keeley, see Haas and Piscitelli (2013).
6. For extensive documentation of the American culture of belligerent militarism, see Andreas (2004), Churchill (2003), and Davies (2013).

## References

- Albert B (1989) Yanomami violence: Inclusive fitness or ethnographer's representation. *Current Anthropol.* 30(5): 637–640.
- Andreas J (2004) *Addicted to War: Why the U.S. Can't Kick Militarism*. Oakland: AK Press ([www.addicted-towar.com](http://www.addicted-towar.com)).
- Ardrey R (1961) *The Territorial Imperative*. New York: Atheneum.
- Ardrey R (1976) *The Hunting Hypothesis*. New York: Atheneum.
- Baszarkiewicz K and Fry DP (2008) Peaceful societies. In L. Kuntz (ed) *Encyclopedia of Violence, Peace, and Conflict*. Oxford: Academic Press, pp. 1557–1570.
- Beckerman S, Erickson P, Yost J, Regalado J, Jaramillo L, Sparks C, Iromenga M and Long K (2009) Life histories, blood revenge, and reproductive success among the Waorani of Ecuador. *Proceedings of the National Academy of Sciences*, 106(20): 8134–8139.
- Benjamin G, Dentan RK, Macdonald C, Endicott KM, Steinmayer O and Nowak BS (2012) Violence: Finding peace. *Science*, 338: 327.
- Berry CJ (1986) *Human Nature*. Atlantic Highlands, NJ: Humanities Press International.
- Bonta BD (1993) *Peaceful Peoples: An Annotated Bibliography*. Metuchen, NJ: Scarecrow Press.
- Bonta BD (1996) Conflict resolution among peaceful societies: the culture of peacefulness. *J. Peace Res.*, 33(4): 403–420.
- Bonta BD (1997) Cooperation and competition in peaceful societies. *Psychological Bull.*, 121(2): 299–320.
- Broennimann P (1981) *Auca on the Cononaco*. Basle: Birkhauser.
- Chagnon NA (1968) *Yanomamo: The Fierce People*. New York: Holt, Rinehart and Winston.
- Chagnon NA (1988) Life histories, blood revenge, and warfare in a tribal population. *Science*, 239: 985–992.
- Chagnon NA (1997) Sticks and stones. In L. Betzig (ed) *Human Nature: A Critical Reader*. New York: Oxford UP, pp. 100–102.
- Churchill W (2003) *On the Justice of Roosting Chickens: Reflections on the Consequences of U.S. Imperial Arrogance and Criminality*. Oakland, CA: AK Press.
- Clark ME (2002) *In Search of Human Nature*. New York: Routledge.
- Conklin BA (2013) Last of the Stone Age warriors. *Amer. Anthropologist*, 115(4): 671–713.
- Corry S (2013a) The Emperor's new suit in the Garden of Eden, and other wild guesses: Why can't Napoleon Chagnon prove anything?. Available at: [www.truth-out.org/opinion/item/18795-the-emperors-new-suit-in-the-gard-en-of-eden-and-other-wild-guesses-or-why-cant-napoleon-chagnon-prove-a-nything](http://www.truth-out.org/opinion/item/18795-the-emperors-new-suit-in-the-gard-en-of-eden-and-other-wild-guesses-or-why-cant-napoleon-chagnon-prove-a-nything)
- Corry S (2013b) The Case of the "Brutal Savage": Poirot or Clouseau? Why Steven Pinker, like Jared Diamond, is wrong. Available at: <https://www.opendemocracy.net/stephen-corry/case-of-%E2%80%98brutal-savage%E2%80%99-poirot-or-clouseau-why-steven-pinker-like-jared-diamond-is-wro>
- Curtis M (1980) *Human Nature in American Thought: A History*. Madison: University of Wisconsin Press.
- Davies NJS (2013) The tragic history of U.S. military supremacy. *Z Magazine*, 26(12): 21–23.
- Dennen JMG van der (1995) *The Origin of War*. Groningen: Origin.
- Dentan RK (1997) *The Semai: A Nonviolent People of Malaya*. New York: Holt, Rinehart and Winston.
- Dentan RK (2000) The Semai of Malaysia. In L. E. Sponsel (ed) *Southeast and East Asia: Struggles to Survive and Thrive*. Westport, CT: Greenwood Press, pp. 209–232
- Dentan RK (2002) Hawks, doves, and birds in the bush: A Response to Keith Otterbein, Neil Whitehead, and Leslie Sponsel. *Amer. Anthr.*, 104(1): 123–127.
- Dentan RK (2012) "Honey Out of Lion": Peace research emerging from mid-20th-century violence. In AB Kehoe and PL Doughty (eds) *Expanding American Anthropology 1945–1980: A Generation Reflects*. Tuscaloosa: University of Alabama Press, pp. 204–220.
- Edgerton RB (1992) *Sick Societies: Challenging the Myth of Primitive Harmony*. New York: Free Press.
- Evans Pim J, ed (2009) *Toward a Nonkilling Paradigm*. Honolulu, HI: Center for Global Nonkilling.

- Evans Pim J, ed (2010) *Nonkilling Societies*. Honolulu, HI: Center for Global Nonkilling.
- Fabbro D (1978) Peaceful societies: An introduction. *J. Peace Res.*, xv(1): 67–83.
- Feibleman JK (1987) *The Destroyers: The Underside of Human Nature*. New York: Peter Lang.
- Ferguson RB (1984) Introduction: Studying War. in Id. (ed) *Warfare, Culture and Environment*, pp. 1–81. Orlando, FL: Academic Press.
- Ferguson RB (1989) Do Yanomamo killers have more kids?. *Amer. Ethnol.*, 16(3): 564–565.
- Ferguson RB (1992) Tribal warfare. *Scientific American*, 266(1): 108–113.
- Ferguson RB (1995) *Yanomami Warfare: A Political History*. Santa Fe, NM: School for Advanced Research.
- Ferguson RB (2007) Eight points on war. *Anthropology News*, 48(2): 5–6.
- Ferguson RB (2013) Pinker's List: Exaggerating prehistoric war mortality. In DP Fry (ed) *War, Peace, and Human Nature: The Convergence of Evolutionary and Cultural Views*. New York: Oxford UP, pp. 112–131.
- Ferguson RB and Whitehead NL, eds (2000) *War in the Tribal Zone: Expanding States and Indigenous Warfare*. Santa Fe, NM: School of American Research (2nd ed.).
- Foster J and Derlet M (2013) *Invisible Women of Prehistory: Three Million Years of Peace, Six Thousand Years of War*. North Melbourne: Spinifex Press.
- Fry DP (2006) *The Human Potential for Peace: An Anthropological Challenge to Assumptions About War and Violence*. New York: Oxford UP.
- Fry DP (2011) Anthropology, war, and peace: Hobbesian beliefs within science, scholarship, and society. In LA McNamara and RA Rubenstein (eds) *Dangerous Liaisons: Anthropologists and the National Security State*. Santa Fe, NM: School for Advanced Research, pp. 185–201.
- Fry DP, ed. (2013) *War, Peace, and Human Nature: The Convergence of Evolutionary and Cultural Views*. New York: Oxford UP.
- Fry DP and Bjorkqvist K, eds (1997) *Cultural Variation in Conflict Resolution: Alternatives to Violence*. Mahwah, NJ: Lawrence Erlbaum.
- Fry DP and Soderberg P (2013) Lethal aggression in mobile forager bands and implications for the origins of war. *Sci.*, 341: 270–273.
- Gelvin M (1994) *War and Existence: A Philosophical Inquiry*. University Park: Pennsylvania State University Press.
- Good KR (1991) *Into the Heart: One Man's Pursuit of Love and Knowledge among the Yanomami*. New York: Simon and Schuster.
- Haas J and Piscitelli M (2013) The prehistory of warfare: misled by ethnography. In DP Fry (ed) *War, Peace, and Human Nature: The Convergence of Evolutionary and Cultural Views*. New York: Oxford UP, pp. 168–190.
- Heider K (1997) *Grand Valley Dani: Peaceful Warriors*. Fort Worth, TX: Harcourt Brace (3rd ed).
- Howell S and Willis R, eds (1989) *Societies at Peace: Anthropological Perspectives*. New York: Routledge.
- Hughbank RJ and Grossman D (2013) The challenge of getting men to kill. In DP Fry (ed) *War, Peace, and Human Nature: The Convergence of Evolutionary and Cultural Views*. New York: Oxford UP, pp. 495–513.
- Keeley LH (1996) *War before Civilization*. New York: Oxford UP.
- Kegley Jr CW and Raymond GA (1999) *How Nations Make Peace*. New York: St Martin's Press.
- Kehoe AB (2012) Legitimizing peace studies. In AB Kehoe and PL Doughty (eds) *Expanding American Anthropology 1945–1980: A Generation Reflects*. Tuscaloosa: University of Alabama Press, pp. 192–198.
- Kelly RC (2000) *Warless Societies and the Origin of War*. Ann Arbor: University of Michigan Press.
- Kelly RL (2013) From the peaceful to the warlike: Ethnographic and archaeological insights into hunter-gatherer warfare and homicide. In DP Fry (ed) *War, Peace, and Human Nature: The Convergence of Evolutionary and Cultural Views*. New York: Oxford UP, pp. 151–167.
- Kemp G and Fry DP, eds (2004) *Keeping the Peace: Conflict Resolution and Peaceful Societies Around the World*. New York: Routledge.
- Knauff BM (1987) Reconsidering violence in simple human societies. *Current Anthropol.*, 28(4): 457–500.
- Krug EG, Dahlberg LL, Mercy JA, Zwi AB and Lozano R (2002) *World Report on Violence and Health*. Geneva: WHO, [www.who.int/violence\\_injury\\_prevention/violence/world\\_report/en/](http://www.who.int/violence_injury_prevention/violence/world_report/en/)
- Kupperman JJ (2010) *Theories of Human Nature*. Indianapolis, IN: Hackett.

- Kurlansky M (2006) *Non-Violence: The History of a Dangerous Idea*. New York: Random House.
- Kurtz L, ed (2008) *Encyclopedia of Violence, Peace, and Conflict*. San Diego, CA: Academic Press (2nd ed).
- LeBlanc SA and Register KE (2003) *Constant Battles: The Myth of the Peaceful, Noble Savage*. New York: St Martin's Press.
- Lizot J (1989) On warfare: An answer to N. A. Chagnon. *Amer. Ethnol.*, 21(4): 845–862.
- Lorenz K (1966) *On Aggression*. New York: Bantam.
- Martin DL, Harrod RP and Perez VR, eds (2012) *The Bioarchaeology of Violence*. Gainesville: University of Florida Press.
- McKinnon S (2005) *Neo-Liberal Genetics: The Myths and Moral Tales of Evolutionary Psychology*. Chicago: Prickly Paradigm Press.
- Mead M (1940) Warfare is only an invention, not a biological necessity. *Asia Mag.*, 40: 402–405.
- Melko M (1973) *52 Peaceful Societies*. Oakville: Canadian Peace Research Institute.
- Miklikowska M and Fry DP (2012) Natural born nonkillers: A critique of the killers-have-more-kids idea. In C Daniel and J Evans Pim (eds) *Nonkilling Psychology*. Honolulu, HI: Center for Global Nonkilling, pp. 43–70.
- Montagu A (1976) *The Natural History of Aggression*. New York: Oxford UP.
- Montagu A, ed (1978) *Learning Non-aggression: The Experience of Non-literate Societies*. New York: Oxford UP.
- Moore JH (1990) Reproductive success of Cheyenne war chiefs: A contrary case to Chagnon's Yanomamo. *Current Anthropol.*, 31: 322–330.
- Otterbein KF (1999) A history of research on warfare in anthropology. *Amer. Anthr.*, 101(4): 794–805.
- Otterbein KF (2009) *The Anthropology of War*. Long Grove, IL: Waveland Press.
- Paige GD (2009) *Nonkilling Global Political Science*. Honolulu, HI: Center for Global Nonkilling.
- Pinker S (2011) *The Better Angels of Our Nature: Why Violence Has Declined*. New York: Viking.
- Robarchek CA and Robarchek CJ (1998a) *Waorani: The Contexts of Violence and War*. Fort Worth: Harcourt Brace College Publishers.
- Robarchek CA and Robarchek CJ (1998b) Reciprocities and realities: Worldviews, peacefulness, and violence among the Semai and Waorani. *Aggressive Beh.*, 24: 123–133.
- Rodman M and Cooper M, eds (1979) *The Pacification of Melanesia*. Ann Arbor: University of Michigan Press.
- Sahlins M (2008) *The Western Illusion of Human Nature*. Chicago: Prickly Paradigm Press.
- Smith R (2013) Should scientific fraud be a criminal offense?. BMJ Group Blogs, [blogs.bmj.com/bmj/2013/12/09/richard-smith-should-scientific-fraud-be-a-criminal-offence](http://blogs.bmj.com/bmj/2013/12/09/richard-smith-should-scientific-fraud-be-a-criminal-offence)
- Sponsel LE (1994) The mutual relevance of anthropology and peace studies. In LE Sponsel and TA Gregor (eds) *The Anthropology of Peace and Nonviolence*. Boulder, CO: Lynne Rienner, pp. 1–36.
- Sponsel LE (1996) The natural history of peace: A positive view of human nature. In TA Gregor (ed) *The Natural History of Peace*. Nashville, TN: Vanderbilt University Press, pp. 95–125, [www.peacefulsocieti-es.org/Archintr/spo96int.html](http://www.peacefulsocieti-es.org/Archintr/spo96int.html)
- Sponsel LE (1998) Yanomami: An arena of conflict and aggression in the Amazon. *Aggressive Beh.*, 24(2): 97–122, [nku.edu/~humed1/dark-ness\\_in\\_el\\_dorado/documents/0603.pdf](http://nku.edu/~humed1/dark-ness_in_el_dorado/documents/0603.pdf)
- Sponsel LE (2000) Commentary on Keith Otterbein's "A History of Research on Warfare in Anthropology". *American Anthropologist*, 102(4): 837–840.
- Sponsel LE (2006a) Darkness in El Dorado controversy. In HJ Bix (ed) *Encyclopedia of Anthropology*, 2. Thousand Oaks, CA: SAGE, pp. 667–673.
- Sponsel LE (2006b) Ashley Montagu. In HJ Bix (ed) *Encyclopedia of Anthropology*, 4. Thousand Oaks, CA: SAGE, pp. 1620–1622.
- Sponsel LE (2006c) Yanomamo. In HJ Bix (ed) *Encyclopedia of Anthropology*, 5. Thousand Oaks, CA: SAGE, pp. 2347–2351.
- Sponsel LE (2007) Human nature. in P Robbins (ed) *Encyclopedia of Environment and Society*, 3. Thousand Oaks, CA: SAGE, pp. 886–889.
- Sponsel LE (2010a) Reflections on the possibilities of a nonkilling society and a nonkilling anthropology. in J Evans Pim (ed) *Nonkilling Societies*. Honolulu, HI: Center for Global Nonkilling, pp. 17–52.

- Sponsel LE (2010b) Into the heart of darkness: Rethinking the canonical ethnography of the Yanomamo. In J Evans Pim (ed) *Nonkilling Societies*. Honolulu, HI: Center for Global Nonkilling, pp. 197–240.
- Sponsel LE (2012) *Spiritual Ecology: A Quiet Revolution*. San Diego, CA: Praeger.
- Sponsel LE and Gregor T, eds (1994) *Anthropology of Peace and Nonviolence*. Boulder, CO: Lynne Rienner.
- Stevenson L and Haberman DL (1998) *Ten Theories of Human Nature*. New York: Oxford UP (3rd ed).
- Sussman RW (2013) Why the legend of the killer ape never dies: The enduring power of cultural beliefs to distort our view of human nature. In DP Fry (ed) *War, Peace, and Human Nature: The Convergence of Evolutionary and Cultural Views*. New York: Oxford UP, pp. 97–111.
- Wiberg H (1981) JPR 1964–1908 – what have we learned about peace. *J. Peace Res.*, XVIII(2): 111–148.
- Whitehead NL (2000) A history of research on warfare in anthropology. *Amer. Anthr.*, 102(4): 834–837.
- Williams Jr RA (2012) *Savage Anxieties: The Invention of Western Civilization*. New York: Palgrave Macmillan.
- Wilson EO (2012) *The Social Conquest of Earth*. New York: W.W. Norton and Co.
- Younger SJ (2008) Conditions and mechanisms for peace in pre-contact Polynesia. *Current Anthropol.*, 49(5): 927–934.
- Younger SJ (2012) *Calculating Chiefs: Simulating Leadership, Violence, and Warfare in Oceania*. Saarbrücken: Lambert.