# Masculinity and War

# R. Brian Ferguson

Why is war so closely associated with men? Is it an expression of male nature or a product of culture? This survey of masculinity and war considers the proposition that men are predisposed to kill male outsiders, which led to war throughout our species' evolutionary history and selected for additional gender characteristics. Claimed support from study of chimpanzees, archaeology, and mobile foragers is challenged, supporting the conclusion that war is a relatively recent development in our species. Earlier cross-cultural insight into gender-based role segregation is incorporated into a cultural materialist framework, addressed to both the commonality that war is male and to the many exceptions and variations. A sex-based division of labor leads to socially defined men's work, which fosters masculine personalities. Masculinity is culturally antecedent to war but is exapted for combat when war is present, and then powerfully shapes and is shaped by war. Ethnographic cases and ethnological statistics show that socialization for military masculinity is pervasive in war-making societies but variable in what masculinity means, and if and how women participate in war. The next section considers contemporary variations on military masculinities and their harmful impact on women. Finally addressed is why nonwar killing is typically by men.

War is a male practice, one of those obvious gender dichotomies that turns out to be not so binary. Much research related to this essential has raised the contradictions, the nonconforming women in war (DePauw 2000; Elshtain 1995; Enloe 1983). Focus on masculinity itself is secondary to the focus on women. Within anthropology, the typically male character of war is implicit, a given. Gutmann's (1997) broad review of the anthropological literature found practically nothing addressing masculinity and war. For a course I teach on the anthropology of war, I found no general reading to assign. This paper is one step toward addressing that gap, combining my own research with other relevant observations I could find.

The most comprehensive compilation of scattered anthropological findings on war and gender comes from political scientist Joshua Goldstein. He examines and rejects ideas that the cross-cultural exclusion of females is due to innate biological tendencies. While differences in some fitness measures are real, many women are more physically capable of war making than many men. He sees the best explanations of gendered war roles as including "small, innate biological gender differences in average size, strength, and roughness of play [and] cultural molding of tough, brave men, who feminize their enemies to encode domination" (Goldstein 2001:406). Key for him is "a tendency towards childhood gender segregationmarked by boys' rougher group play-[which] works against the later integration of capable women into warfighting groups" (403). This paper expands those conclusions but relates them to broader issues of war, theory, and human nature.

Basic questions addressed begin with these: Why is there usually such clear military specialization by males and exclusion of females? What are constants, and what varies? Did Darwinian selection produce men who are primed to kill outside men, and is that an ultimate cause of the ubiquity of war?

Or did evolution favor behavioral plasticity, with social construction of the masculine warrior? If the latter, why is the dichotomy nearly—yet not entirely—universal? First up is a challenge to the neo-Darwinian perspective, concluding that making war is not an evolved aspect of masculinity but an acquired one.

# Neo-Darwinian Perspectives

I take no position on whether or how males may be "more aggressive" than females. The behavioral literature is complex, with different and noncomparable definitions and measures; and the literature on internal biology starting with hormones is even more so. Basic conclusions do not seem near. The issue for this paper is not about which sex is slightly more or less aggressive and how, but whether males have an evolved, innate tendency to kill members of other groups—which I dispute. Such an evolved inclination seems to be supported by several major lines of research: primatology with chimpanzees patrolling and raiding neighbors; archaeology with a high rate of violent deaths; and ethnology with a tribal universe of extensive, deadly warfare. Evolutionary psychological theories rise upon those ideas.

# Evolutionary Psychology

Many and varied hypotheses link a male penchant for war and other evolved male tendencies (e.g., Berenson and Markovits 2014:11; Daly and Wilson 1994:278; Tooby and Cosmides 1988). The common ideas are that war was a way for men to obtain resources and mates and that war itself acted as a selection mechanism for other specific psychological traits in women and men (see Ferguson 2013a:114).

R. Brian Ferguson is Professor in the Department of Sociology and Anthropology and Graduate Program in Peace and Conflict Studies of Rutgers University-Newark (Newark, New Jersey 07102, USA [bfergusn@newark.rutgers.edu]). This paper was submitted 13 XI 19, accepted 31 VIII 20, and electronically published 22 XII 20.

A good example of this line of theory is VanVugt and colleagues' (McDonald, Navarrete, and VanVugt 2012) "male warrior hypothesis." "Men may possess psychological mechanisms enabling them to form coalitions capable of planning, initiating and executing acts of aggression on members of outgroups (with the ultimate goal of acquiring or protecting reproductive resources)" (671-673). The violence that flows from this evolved penchant hypothetically selected for other masculine tendencies they identify in contemporary psychological tests. Men are found more xenophobic and ethnocentric than women and more likely to dehumanize outsiders. Men more than women prefer group-based social hierarchies, leading to "social conservatism, racism, patriotism and the explicit endorsement and support for wars of aggression" (671-673). They more intensely associate with "their tribal groups" such as sports teams. Men are more motivated to support and defend the in-group and are more ready to cooperate against external threats. They are less inhibited about engaging in aggressive intergroup behaviors such as preemptive strikes. Corresponding war-selected behavioral predispositions are proposed for women.

Most studies offering similar views on the evolved character of human males claim support by what is seen as a consistent pattern of violence from primatology, archaeology, and ethnology. Contrarily, my own and other research finds none of those support an inborn inclination to kill outsider males, but instead indicate a plastic, flexible nature that turns to war through a combination of culture and circumstances.

## Chimpanzees

The titles tell the story: Demonic Males (Wrangham and Peterson 1996) and The Dark Side of Man (Ghiglieri 1999). Supposedly men share with chimpanzee males a propensity to bond and collectively attack outsiders, especially males, which can be rivals for food or mates. This involves wary patrolling of territorial edges to keep females from contact with outside males, and it propels deep penetrations into neighboring rangeland, with deadly attacks on vulnerable solo males. This was selected because it is advantageous for male reproducers, inherited from our last common ancestor, and providing the template for human war.

Three positions are relevant for the question of male nature leading to war. (1) It is common practice for chimpanzee males to seek and kill "rival" males of neighboring groups. (2) Killing is not responsive to human disruption but instead expresses evolved adaptive tendencies for increasing reproductive success. (3) Males are the killers. The adaptive position is recently argued by 30 researchers from 18 chimpanzee research sites, using data from 426 observation years (Wilson et al. 2014), which is widely cited as discrediting the argument that killing is unusual and reflects human impact (Ferguson 2011; Power 1991; Sussman 2013).

The first point is contradicted by the extended data tables in Wilson et al. (2014; see Ferguson 2018:80). In their 426 ob-

servation years, males killed only 21 adult males and 6 adult females of other groups. Of the 27, 15, or 56%, come from just two times and places, Gombe 1974–1977 and Ngogo 2002–2006. These nine outlier years have a kill rate of 1.66 per year, versus .03 per year for the remaining 417 years. Those are the only two "wars" recorded. (The case of Mahale, where larger M-group supposedly killed off smaller K-group, in fact has no direct evidence of any intergroup adult killing.) Warlike killing of outside male "rivals" is not normal.

The other two points require the detailed documentation provided in *Chimpanzees*, "War," and History: Are Men Born to Kill? (Ferguson, forthcoming). Although human disturbance is not shown in the simple statistics they devise, it is very apparent in detailed historical contextualization of every reported killing. Killing is not normal or typical adult male behavior.

Still, most deadly violence is by males. That could be seen as consistent with evolved violent masculinity. Another possibility is a biosocial explanation, revealed by comparison of chimpanzees and bonobos. They exhibit an overlapping spectrum of behaviors, but a major pattern difference is that adult female bonobos are at rough status parity with males. In stark contrast to chimpanzees, females gang up on males that aggress against females. This is rooted in a productive ecology and differences in sexual biology that enable greater female association, but that explanation is left for the book. No species difference in innate proclivity to violence is indicated.

As with chimpanzees, higher-status male bonobos have more mating opportunities. But for chimpanzees that is pursued by aggressive and often coalitional challenges of other males, while for bonobos mating success comes from individuals sticking close to mother. Chimpanzee social organization is conducive to deadly violence by males competing for higher status. I argue that male "display violence" directed at defenseless individuals (even killing within-group infants), is employed to intimidate potential male rivals. Yet only a few males are real bullies, what in human terms could be called "supermasculine." Male chimpanzees are not born to kill, but with a combination of human disturbance, social organization, and personality, they sometimes do. The chimpanzee/bonobo record contradicts the idea that war expresses inborn male predispositions handed down from our last common ancestor.

# Archaeology

After publication of Keeley's War before Civilization (1996), followed by LeBlanc and Register (2003) and Bowles (2009), and championed by Pinker (2002, 2011) and Gat (2006, 2015), it has been widely accepted that across archaeological populations, roughly 25% of adult males died violently. Those figures come from cherry-picking and even double counting the most violent cases (Ferguson 2013a:113–116).

Comprehensive survey of relevant cases from broad world areas produces a very different finding. For North America (Ferguson 2006), Europe and the Near East (Ferguson 2013b),

and elsewhere (Ferguson 2008), evidence suggests that war began at very different times in different places, ranging from more than 10 to less than 2 millennia ago. My hypothesis (Ferguson 2013b:192) is that origins of war occur with accumulation of conducive preconditions, including greater density, sedentism, bounding, hierarchy, and concentrated material value, sometimes aggravated by climatic reversals (and see Haas and Piscitelli 2013; Kelly 2013). Yet those can be counterbalanced by other preconditions that facilitate resolution of conflicts without collective killing, including mechanisms of integration across local groups and of managing conflicts short of collective killing (Fry 2007:213–229).

Over time around the world, as war preconditions developed in more places, war began and spread outward. Ancient states ginned up tribal militarism, but more warrifying was the spread of European colonialism from the sixteenth century onward. That came on top of global climatic perturbations of the Medieval Warm and Little Ice Age, which saw sometimes extreme intensification of war in many world areas (e.g., Arkush and Tung 2013; Bamforth 2006; Nunn 2000). This is why late archaeology and ethnohistoric observations show us a nonstate universe filled with war.

- 1. This is a controversial topic, but debate may be at a tipping point. Those arguing for deeper antiquity of war (e.g., Allen and Jones 2014; Kissel and Kim 2018) are not claiming anything like 25% casualties in general but that war might have occurred among some very ancient hunter-gatherers. No argument. Humans have always been capable of war and possibly did make war in some times and places, long, long ago. The earliest known war is associated with what seem to be relatively settled and dense, complex hunter-gatherers. Those became more common with the "broad spectrum revolution" from the early Holocene, like the lagoon dwellers killed at Lake Turkana (Mirazón Lahr et al. 2016) or the marsh exploiters of Jebel Sahaba (Wendorf 1968; see Ferguson 2006:482-483). But there might have been complex hunter-gatherers at times long before that, beyond our archaeological vision. The issue is not whether there was ever war through tens of millennia of prehistory, but whether evidence suggests that it was common or normal, reflecting and selecting for innate masculinity. Early archaeological findings are solidly against that.
- 2. The ancient Southern Levant (southern Syria, Lebanon, Jordan, and Israel) contrasts to the Northern Tigris region or Anatolian plateau, where signs of war appeared in the tenth and sixth millenniums, respectively. In the Southern Levant there is no good evidence for war in skeletal, settlement, or technological remains, from the Natufian ca. 13,100 BC up to the Early Bronze Age 3200 BC. Then war signs suddenly appear in abundance. This shift coincides with the advent of pharaonic imperialism in the area, which I surmise led to local peoples dividing and fighting each other, an early example of tribal zone dynamics (Ferguson and Whitehead 2000). Before that, I hypothesize that preconditions of peace and a developed system of conflict management prevented intergroup combat (Ferguson 2013b:226-227). I did not know when making that argument that the Southern Levant is also notable for an absence of evidence of patriarchal social relations. Human remains and artistic representations provide "little evidence to suggest that Neolithic societies in the southern Levant were organized hierarchically in terms of gender" (Peterson 2010:260). This suggests that another enabling precondition of war may be elevated patriarchy.

It is clear from the global archaeological record that across human history, being a man does not mean being a warrior. A warrior impulse is not embedded in male DNA; nor has coping with war been a long-term selection mechanism for masculine characteristics.

## Nonstate Peoples and Hunter-Gatherers

Claims for innate male tendencies to kill outsiders draw from ethnography, where well over 90% of known peoples engage in war. This contrast with the early archaeological record results from millennia of war development, ratcheted up by war-inducing effects of European expansion (Ferguson and Whitehead 2000). For instance, the "fierce" Yanomamo described by Chagnon are cited by many neo-Darwinian theorists (even when Chagnon's own writings do not support their claims [Ferguson 2001]), the putative reproductive success of killers has been thoroughly debunked (Miklikowska and Fry 2012), and recorded wars are less explained by conflicts over women or revenge than by conflicting interests in access to Western manufactures and other contact disruptions (Ferguson 2015).

But even in the often violent ethnographic universe, Fry and Söderberg (2013) meticulously marshal cross-cultural data to establish that mobile forager band societies (aka simple hunter-gatherers) sometimes have killings but rarely war, because severe conflict is managed below that level. In peaceful societies, local belief systems reinforce cooperation instead of competition or contest across social behavior (Bonta 1997). In those societies, the role of influential men may be to prevent or contain violence. This topic of hunter-gatherer violence is large, complicated, and contentious and will be considered in future work. For now Fry and Soderberg on mobile foragers is sufficient to show that ethnography contradicts the idea of war being an evolved aspect of human existence.

Like primatology and archaeology, ethnography demonstrates that war is not the normal expression of being a man (see Fuentes 2012:114–154). Contrary to neo-Darwinian expectations, each shows that killing outsiders is not typical but appears in relation to social patterns and historical circumstances that tilt highly plastic behavioral potentials toward deadly violence.

This raises an obvious question: If war is not selected into male genes, why is it that when war exists, combat is so much a male specialty? An alternative social theory can answer that.

# A Social Theory on War and Masculinity

My general approach to war utilizes a modified version of Harris's (1979) cultural materialism, which categorized social phenomena into Infrastructure, Structure, and Superstructure. Infrastructure covers a population's demography and interface with the physical environment through technology and associated labor, its modes of production and reproduction. Structure is patterned social life—economics, social

organization from kinship to class, and politics. Superstructure encompasses belief and motivational systems. As modified (Ferguson 1995a), this synthetic approach recognizes that an endless number of questions may be asked about war and enables their combination within an internally consistent paradigm. Its causal framework is of a nested hierarchy of progressively more limiting constraints from Infrastructure through Superstructure, but each domain consists of countless interacting subsystems, all with their own logics and dynamics, and substantial determinative autonomy.

Applied simplistically to the topic of war, Infrastructure accounts for what kinds of issues will be worth fighting over and basic parameters of how war can be fought. Structure determines if and how scarcity develops into a casus belli, how allies and enemies are defined, and the processes leading to and through war. Superstructure provides cognitive orientation within the constraints already described, shaping perceptions and decisions to attack and the meaning of violence. This broad approach has been practically applied to understanding war in historical change among the Yanomami (Ferguson 1992), the comparative consequences of war across Amazonia (Ferguson 1994), and holistic understanding of connections between war in society in 13 ancient and medieval states (Ferguson 1999).

Intended as a flexible tool for addressing divergent understandings of war, in this essay this theoretical mainframe incorporates others' research to focus on war and masculinity, addressing both why combat is so regularly a male specialty and why the connection of masculinity to war is so variable. Simply put, the gender specialization of war originates in an Infrastructurally constrained, sex-based division of labor, Structurally elaborated in male social roles, and Superstructurally manifested in gender norms that define combat as masculine.

# Basic Insights

Ortner (1972:5) saw that the "secondary status of woman in society is one of the true universals, a pan-cultural fact." This universality she attributes to the body as a situation. Women are marked with the tasks of pregnancy and nurturance, which as opposed to male tasks puts them in subordinate position—in a Levi-Straussian sense closer to nature than culture and practically associated with domestic life. From that start, she derives basic characteristics of female versus male psyche, explicitly as an alternative to genetic determination of character.

Eagly and Wood (2003) lean more toward Marxism than Structuralism and elaborate that idea into a cross-cultural, division-of-labor theory, directly contrasted to expectations of evolutionary psychology. In their "biosocial theory," the main sex difference is the compatibility or incompatibility of different kinds of work with the female role of giving birth and nursing children, with task specialization complemented by male size, speed, and upper body strength, and in less clear-cut ways by hormonal and developmental differences (Wood and Eagly 2015:469). In their theory,

men's accommodation to roles with greater power and status produces more dominant behavior, and women's accommodation to roles with lesser power and status produces more subordinate women. . . . Women and men seek to accommodate to these roles by acquiring role-related skills. . . . The psychological attributes and social behaviors associated with these roles have been characterized in terms of the distinction between communal and agentic characteristics. (Eagly and Wood 2003:275)

To put these ideas into a cultural materialist framework: an Infrastructural reproduction-based sexual division of labor generates a Structural complex of expected roles for adult men, and these male roles foster Superstructurally broad characteristics of male identity—that is, masculinity.

While varying enormously in content from one people to another, this totalistic dichotomy is panhuman, yet war is not. Masculinity is antecedent to war. But making war, and especially combat, is incompatible with being pregnant or nursing. Thus when war exists, it is men's work. To borrow an evolutionary term, masculinity is "exapted" for the functional demands of combat.

Being concerned with both constants and variations, this only accounts for the big constant: war is usually but not always male. A social explanation continues on to variations and exceptions. Even the fundamental military division of labor is not universal. When war is prominent, not all men are warriors much less killers (Grossman 1995), nor do they aspire to be. Cross-culturally, some women take part in war, sometimes in combat.

On war and masculinity, the thread from Infrastructure through Structure to Superstructure shapes and is shaped by all the other patterns of social existence. Comparatively, other things are *not* equal. Probably the biggest factor shaping the association of masculinity and war is the character and intensity of wars being fought, and that has its own causality. Military masculinity is shaped by all other expectations of what it means to be a man. Across and even within societies, gender identities have many variable aspects and schema. Cultural materialist causality is probabilistic, dealing in likelihoods, not certainties. In my modification, all constraints ultimately leave space for agency, decisions of individuals that can alter the course of history, especially regarding war.

The remainder of this paper explores variation in masculinity and war, starting with ethnography. Selected cases show how expectations of men in war differ greatly from one people to another and how those expectations are inculcated in both boys and girls from birth to adulthood.

# Growing Up with War

A question commonly asked is, Even if physical biology makes men in general suitable for war, why don't some physically strong and fast, nonpregnant and nonmother women, join men in combat? One answer is that some do, but they are far more rare than physical potential would allow. The broader answer is that with gender roles built into a sociocultural system, infants categorized as boy or girl are socialized for adult responsibilities in war as they grow up. Being a warrior or not is *culturally* wired into both, but that may come with complications and options.

That is evident in earlier ethnography of war. Holistic studies on indigenous peoples autonomously waging "traditional" war (albeit invariably affected by European intrusion), were almost all written by men. Cases here were selected because of attention to child-rearing in relation to "being a man" and military practice. No claim is made of them as representative of the ethnographic universe, however that could be construed. Rather they are offered to break any notions of uniformity, to illustrate variation in gender and war. The only female perspectives on these cases I could find are included herein. A critical feminist reconsideration of the ethnographic literature on "tribal war" is certainly in order.

#### Northern Plains

A good place to start noting complexities is neighboring Crow and Cheyenne peoples, postcontact horse nomads of the Great Plains. In the nineteenth century war was pervasive. Voget (1964) calls it the central integrating institution of Crow culture. Boys practiced hunting to become expert with bow and arrow. Praised by adults, they aspired to the glories of a successful warrior. Cheyenne boys and girls set up "enemy" villages, with boys practicing raiding and girls fleeing with possessions (Llewellyn and Hoebel 1941:242-243, 246-247; Lowie 1956:36). "A result of all this training was that the best of the Cheyenne youths had for their highest ambition the wish to be brave and fight well; and hence they desired always to be going to war." When Crow Bed was about to go on his first raid, his grandfather told him, "When you meet the enemy, if you are brave and kill and count a coup, it will make a man of you, and the people will look on you as a man." Men could choose to join one of six different warrior sodalities, some joining as teenagers (Grinnell 1972a:123, 119, 1972b:48-51).

The connection of gender, violence, and war was variable and nuanced. Men should be vigorous in hunt and war and competitive in counting coup and taking scalps (Grinnell 1972b:29–38; Hoebel 1978:77, 80, 95). But some men "overdo the warrior role in an institutionalized form of extreme exaggeration" (Hoebel 1978:102). They pledge to die in battle. Legendary is a "Crazy Dog" of the Crow, Rabbit Child. Unable to bend one knee because of a war wound, he swore the vow. Word spread, and everything about him came to be seen as magnificent—his dance, his singing, his face, even his horse. He kept his oath (Bauerle 2003:27–38).

Tribal chiefs, though warriors too, were quite different, with "an even-tempered good nature, energy, wisdom, kindliness, concern for the well-being of others, courage, generosity, and altruism." When one chief was told that his wife had gone off with another man, he "merely filled his pipe and passed it to

the other men, saying he had not fault to find with her . . . remarking almost casually 'A dog has pissed on my tipi'" (Hoebel 1978:43–44). Despite the cultivation of aggressive, competitive men, violence had to be controlled. A homicide within the group was considered "a crime against the nation" that "bloodied the Sacred Arrows," thus endangering all (Llewellyn and Hoebel 1941:132).

Among Plains peoples, a man whose inclinations or spiritual vision called in a different way could become Two-Spirit, who in dress and social function was female—even though a man who showed cowardice could be compelled to wear women's clothing. Two-Spirits were not warriors but in some situations fought valiantly. Sometimes an established warrior chose this path. Among the Cheyenne, they ran the Scalp Dance, consistent with their general status of mediating with the spirit world. The prospect of success in a war party was enhanced by the accompaniment of a Two-Spirit (Callender and Kochems 1983:443–444, 448–449; Fulton and Anderson 1992; Hoebel 1978:83; Lowie 1956:48).

Across the Plains, women were often victims of war, killed or captured. For Crow, a woman's status hung on the warrior accomplishments of her husband (Voget 1964:503–504). Women praised the valorous and shamed those who held back. Women often accompanied men on raids. When the situation demanded, they fought and could lead in mutilating dead enemies (Ewers 1994:326, 328–329). Some women even joined Cheyenne male warrior sodalities for social purposes (not raiding) and were called "female soldiers." Women who went to war with their husbands formed their own military society (Grinnell 1972a:157, 1972b:47, 50). Woman Chief of the Crow was a captive Gros Ventre who became a war leader and then a chief (Ewers 1994:328–329). But in choosing combat, she was a rarity.

Lakota anthropologist Beatrice Medicine (1983), from scattered, fragmentary reports—men wrote the ethnographies and histories—agrees that across North America war was a male activity but found that different peoples had alternative pathways for females to participate. In sum, masculinity was tightly bound up with war, but with variation on how masculinity was performed and substantial flexibility in gender choices. War was not exclusively masculine. In the following four cases, it was—but what masculinity entailed differs.

#### Yanomami

Gender choices are more constrained among the Yanomami, slash-and-burn horticulturalists of Venezuela and Brazil rainforests. Those living around the juncture of the Orinoco and Mavaca Rivers became famous as war makers in the work of Napoleon Chagnon. "Yanomamo society is decidedly masculine" (Chagnon 1977:81). There are no reports of women participating in war parties, and although they may be captured, they are rarely killed by raiders. Boys are encouraged to strike out aggressively, girls to tend to their brothers. Women respond quickly to demands of husbands, who frequently hit

them with hands or sticks. Young men preen before raiding but frequently bail out, leaving older men to the dangerous work (81–85, 130–132).

Tiffany and Adams (1994) delineate and excoriate Chagnon's decidedly male biases. Ramos's (1995:43) portrayal of life among Yanomami who were not involved in active war was much less male centered, and men established their reputations not through killing but shamanism, persuasiveness, and ceremonialized dialogues between villages that negotiate political or economic matters—under close scrutiny and exhortation by their wives.

History must be incorporated for understanding local variation in war and gender relations. Women of Chagnon's area were greatly diminished in status relative to men, partly because in an environment highly disturbed by circumstances of Western contact, warfare and belligerence became much more characteristic of men. With families shattered by disease, new families could be constructed by force, with women captured or coerced (Ferguson 1999:220–223). Yet even in the anomic Orinoco-Mavaca area, not all men chose to be warriors. Many men never went on a raid (Chagnon 1988:987, 989). Different men of influence sagely counseled peace or rashly advocated war. In one exemplary case, the belligerent Fusiwe, reacting to his youngest wife's taunts that he was afraid, provoked a war that killed him (Ferguson 1995b:226–227, 235–236, 397–398).

#### Shavante

For the Akwe-Shavante of Central Brazil, "even among the four-year-olds there is a tendency for boys and girls to play separately. When they play together the boys order the girls about. If they are shooting with bows and arrows the girls are given the task of retrieving the arrows. . . . Boys' games meanwhile grow progressively rougher. The six-year-olds enjoy wrestling and throwing each other about" (Maybury-Lewis 1974:72). Soon boys are eager to enter in the bachelors' hut, while girls their age are already betrothed. In a few years, young men are

regarded as the warriors of the community. They do not have to prove themselves by special deeds of valor so that they are shamed and inconvenienced by periods of comparative peace. They enjoy the prestige of being warriors, and therefore the potential fighting men of the community, simply by being in the young men's age-grade, and need never actually do battle to establish their reputations in the eyes of their fellow Shavante . . . they are supposed to be warlike and handsome . . . the whole community takes a pride in them when they dance and sing. (Maybury-Lewis 1974:141–142)

#### Meru

For the Meru of Mount Kenya, oral history reconstructed the militarization of boys preparatory to an adulthood of cattle raiding—not for themselves but to be handed over to their

senior kin. "Hardening" involved developing physical strength and endurance of pain. "Quickening" was mastering battle tasks and mental acuity. Urges for sexual gratification and material accumulation were repressed. The youth learned subordination to the group, to see success in terms of his age-set, to be subordinate to elders, and to follow traditions.

As they approach the age of military participation, their individual self-worth was ground down by rituals of sub-mission and loyalty to the group (Fadiman 1982:49–54, 71).

Their reward for conforming was expressed in the conditional approval of their seniors. . . . Such feelings of security, however, could have been only temporary, for . . . this process seems to have been intended to place the group-mentality so carefully created, within a larger context of perpetual insecurity . . . the young were taught that life's sole purpose was to strive upward. . . . Meru society envisioned no other role for its young than their progressive militarization. (72)

#### Engo

Enga of the New Guinea Highlands provide another permutation on military masculinization. Boys are taught that too much contact with women is harmful, and they start spending nights with their fathers. Fathers encourage aggressiveness, as teams of boys make mock hamlets and try to overrun the other. Boys are weaned on men's talk about martial valor, combat skills, and judging allies and enemies. Around the age of 16 years, they join clan bachelor associations and enjoy more formal training for combat (Meggitt 1977:60–63). Rituals and harangues bolster resolve and enthusiasm, but in a society where war is normal, some men hanker for combat. Yet men who choose not to step to the front lines are not penalized. Everyone knows they contribute to social life in other ways (Wiessner 2019:229–230).

Wiessner (2019:226–233) and colleagues' very long-term reconstructions put this generational military structure in historical motion. A population explosion caused by introduced sweet potatoes was followed by widespread, destructive war, set off by young men fighting. Elders whose trade interests were harmed by this chaotic violence managed to bring youth under control by channeling them into bachelor cults. Young men who followed rules prospered and displayed their martial prowess to women and other men in highly regulated Great Wars. The Great War system collapsed around 1940, but elders continued to restrain younger male ambitions. Then newly introduced guns gave unattached young killers a free hand. This sweeping perspective highlights how the role of aggressive young men in war can change dramatically over time.

#### Semai

The Semai of Malaya are well-known exemplars of a nonviolent society. War is not practiced, and even interpersonal anger between adults is considered a danger to the whole community (Dentan 1968:56-58; Robarchek 1990). In contrast, Ilongot, who raided people like Semai to take heads (see Gibson 1990), sought those trophies to attain or maintain parity with other adult men and felt heavy with shame if they did not (Rosaldo 1983). Semai child-rearing is instructive. One childhood game

seems to be a sort of symbolic rehearsal for refraining from violence. In this game children of both sexes from two-to ten-year-olds flail away wildly at each other with long sticks, assuming dramatically aggressive postures. Yet the sticks always freeze inches away from the target. . . . Similarly, the usual pattern of play wrestling is to throw the opponent almost but not quite to the ground. Again, no one gets hurt. . . . Incidentally, there seem to be no indigenous games that involve competition. (Dentan 1968:59)

"The Semai do not deliberately punish aggression in children. Young children sometimes try to hit adults but are fended off with laughter or a threat. . . . They thus have little personal experience with human violence." Parents do not permit fighting among children. Children learn of this disapproval by "the open shock of adults when a child loses its temper. In the latter case, an adult immediately snatches up the angry child and carries it off wailing to its house" (Dentan 1968:61).

#### Dahomey

A last case from historical ethnography is the West African state Dahomey, the unparalleled illustration of elite female military units (Edgerton 2000:15-21). For almost two centuries prior to French conquest-which purged women from public life and killed the "amazons"—the elite of the army were women. Their units totaled up to 5,000 and by all accounts were superior fighters to male units. Initially, as they transformed from palace guards to an army, they were female captives, but over time more were conscripts picked for their physical strength. Young girls were attached to adult units as apprentices. They had to cut ties with family and swear chastityexcepting with regard to the king-meaning pregnancy and child-rearing was ruled out. In a ceremony marking their entry into the army, a priestess cut their arms, caught the blood in a polished human skull, which they drank, swearing never to betray each other. They were tall, strong, and walked with swagger.

Little is known about their private or later lives, but the social role of female warriors after training, hardening, and combat was literally on parade. "In an impressive testimonial to gender stereotyping, the Amazons also chanted, again and again, that they had become men: 'As the blacksmith takes an iron bar and by fire changes its fashion so have we changed our nature. We are no longer women, we are men.'" "After an Amazon killed and disemboweled her first enemy, she was proud to be told by other woman soldiers that she was a man" (Edgerton 2000:26)

"Regiments made up exclusively of women were known in many parts of Africa from the Sudan to Zimbabwe, and in much of West Africa and Angola," but they are poorly described (Edgerton 2000:140). For the question of why Dahomey went so far with women warriors, see Edgerton (2000:121ff.). Of interest here, he looks out comparatively to the question of women's status in society and their participation in war. In Dahomey women had relatively high status, were able to own property and divorce husbands, and occupied high social positions. But those women did not become warriors. What is suggested by Dahomey and Plains peoples is a loose association: where women are greatly subservient to men, there will be no women warriors. Where they have high social positions, some may participate in war, somehow. But one thing is clear from Edgerton's portrayal: women are physically and psychologically capable of fighting and killing as organized units of soldiers.

# Gender and War in Archaeology

Were warriors exclusively male before written history? In some situations, violent trauma appears in female remains. But how so? What were the contexts of wounding or killing females? Much, no doubt, was violence against victims or raids, but women also accrued trauma from violence at home (Martin and Frayer 1997; Martin, Harrod, and Pérez 2012). What should not be discounted is the possibility that females with trauma were active fighters themselves.

Burial evidence from the eighth to the tenth century suggested Viking women warriors (Gardela 2013), but that idea was resisted. "The image of the male warrior in a patriarchal society was reinforced by research traditions and contemporary preconceptions. Hence, the biological sex of the individual was taken for granted." Recent genomic evidence seems to confirm a woman warrior (Hedenstierna-Johnson et al. 2017:5). Raffield (2019) joins medieval texts with archaeology to show that the violent, contentious, militaristic masculinity that was vividly displayed by men in war and daily life was inculcated in boys' toys, games, and play. Yet although "hvatr (vigorous or manly)" most often refers to men,

some women have attempted to achieve social ascendancy by behaving in a way considered *hvatr*. The sagas indicate that some women who openly defied social conventions by wearing men's clothing and carrying weapons . . . were not only tolerated but admired. . . . Women participated in warfare as combatants, and in one case a woman is noted as commanding a viking fleet in Ireland . . . some women were active participants in the martial cultures of the Viking Age. (Raffield 2019:820)

From the sixth through the fourth centuries BC, north of the Black Sea—the lands Greeks associated with Amazons—many elite burials have been found of women with military gear (Guliaev 2003). Two millennia earlier in the same area, among the pastoral Yamnaya, females in high-status mound burials numbered about the same—20%—as female warriors

in later graves (Anthony 2007:321-329). Women may have been warriors for thousands of years.

Many reports of varying reliability place warrior women in ancient societies of North Africa and across Asia (Mayor 2014). I add one more candidate, central Amazonia before colonization, for whom the river was named.<sup>3</sup> The lesson? We should not assume that females whose skeletal remains suggest death in war were passive victims. Some may have been warriors.

# Comparative Observations

Sticking just with ethnography, with Yanomami, Shavante, Meru, and Enga, war is for men only. But on the Plains, both men and women had culturally patterned options regarding war; among Semai war was categorically rejected even for men; and in Dahomey, selected women surpassed men as soldiers. Archaeology suggests even more variation, with war usually absent in earliest horizons. Socialization for war making varied greatly in what is encouraged, taught, or prohibited for both boys and girls. Adults foster aggressiveness, anger, rough-and-tumble, bravery, and martial skills of boys by toleration, praise, or reward—not so for girls. Boyhood competitiveness carries on in exploits of adult warriors, in societally specific ways and with options. For young men, showing off for young women is a frequently noted factor, as young women often look for valor in prospective husbands.

Beyond these examined cases, cross-cultural statistics indicate that the presence of war leads to socializing boys for violence.

3. In 1541-1542, Francisco de Orellana's expedition went down the Maranon River, which becomes the Amazon (Medina 1988). He heard stores of Amazon kingdoms, of women who captured men to service them (Medina 1988:102, 214, 434, 437). The chronicler Carvajal did not claim to visit those realms, but one time below the Madeira River, he recounts a battle with Amazon foes leading the men of one of their local tributaries. "We ourselves saw these [ten or twelve] women, who were there fighting in front of all the Indian men as woman captains, and these latter fought so courageously that the Indian men did not dare to turn their backs, and anyone who did turn his back they killed with clubs right there before us . . . [they] did as much fighting as ten Indian men, and indeed there was one woman among those who shot an arrow a span deep into one of the brigantines." The Spaniards prevailed and found seven or eight of their bodies. Expecting doubt, Carvajal stresses, "I am talking about something which I [actually] saw." We could dismiss this as myth making, and such was bluntly accused by a contemporary. But the objection to Carvajal was about these being really Amazons, like the Greeks imagined. He did not doubt women warriors. "That the women there should take up arms and fight is no novelty, for in Para [a peninsula in Venezuela], which is not very far off, and in many other parts of the Indies, they used to do that; I do not believe either that any woman burns and cuts off her right breast in order to be able to shoot with the bow, because with it they shoot very well" (26). I would add that Carvajal's account rings true in terms of European-indigenous contacts of that period; and in general, early explorers' accounts now receive more ethnohistoric credit than they did a few decades ago.

In all of the multivariate analyses described here, socialization for aggression is a very strong and significant predictor of homicide/assault, overshadowing the effects of the other socialization variables. . . . The various kinds of statistical evidence presented here are consistent with the theory that socialization for aggression is likely to be consequence (not a cause) of war, that people will want their sons to be aggressive when they have a lot of war and they need to produce courageous warriors. (Ember and Ember 1994:642–643)

From another cross-cultural study: "Hypermasculinity may not necessarily be deviant, may be expected, may be tolerated, and in many cases appears to be actively encouraged among boys, adolescents, and adult males" (Chick and Loy 2001:14).

Basic features of Structure may encourage violent masculinity. Fraternal interest groups of socially bonded men fostered by patrilocal postmarital residence, polygyny, and patrilineality correlate with greater interpersonal violence within groups, feuding, internal war, and rape (Otterbein 1994). Adams (1983) notes that tribal societies differ categorically: in some, only men can actively participate in war; in others, it is mostly men, but sometimes some women join in various ways (as on the Northern Plains). What explains this difference? With endogamy within war-making units, women sometimes participate in "external wars." With exogamy among enemies, a wife may have personal connections to adversaries and divided loyalties and so are entirely excluded. Then women may be so "polluting" they cannot even touch men's weapons. Male exclusivity is socially conditioned.

Cross-culturally, frequent war makes rape more likely. "Raiding other groups for wives is significantly associated with the incidence of rape . . . as is the presence of an ideology which encourages men to be tough and aggressive. Finally, when warfare is reported as being frequent or endemic . . . rape is more likely to be present" (Sanday 1981:23).

My comparative "War and the Sexes in Amazonia" (Ferguson 1988) begins with Infrastructural variables as foundation for Structural and Superstructural patterning of how men are organized for war, against whom, and whether women are objects of violent contention. Comparative cases show that

patrilocality and fraternal interest groups are favored by an ideology of male superiority based on the social character of men's work in production and war, and by the dynamics of competition and conflict over resources. Matrilocality is favored by cooperative female production effort, by a subsistence pattern involving seasonal dispersal and regrouping, and by parents' interests in adding sons-in-law to their households. These production considerations can lead to matrilocality even in situations of local conflict over resources, which combination produces institutional and behavioral complications. Matrilocality is also favored by longer distance war, especially offensive warfare. The strongest determination of either residence pattern is when the implication of production and conflict coincide. (Ferguson 1988:152–153)

In sum, ethnology (and archaeology) show that where war is practiced, the connection and character of masculinity and war varies greatly from people to people, shaped by society's Structural patterns and inculcated through childhood socialization. The biological Infrastructure of reproduction and production leads to the great commonality of war being male practice, but within that is great room for exception and difference.

Structure does not end with kinship. Hierarchy, stratification, and class in all their specifics affect relationships between masculinity and war. From the small ad hoc fighting parties of coresidential "kin militias" (Reyna 1994:40–41), increasing social scale and hierarchy sees both new forms of military organization (Otterbein 1985) and a declining "military participation ratio" of men who fight in war (Andreski 1971). Ancient and medieval states typically had elite war specialists and compelled masses who ran at the first chance (Ferguson 1999). Those gross contrasts only begin to suggest how expectations of masculinity and war can vary within complex societies. That is a lot to consider.

# Contemporary Military Masculinities

But space is tight. So the last part of this survey turns to the area where most work is being done today, sampling feminist/gender studies of contemporary military masculinity. Army organization within larger societal patterns and historical conjunctures creates forms of war that frame gender possibilities. Situationally variable and sometimes rapidly shifting constructions of manliness, ostensibly about killing men, often encourage direct harm to women.

#### Sierra Leone

Commonalities and variations in how masculinity relates to both men and women in combat are in high relief in feminist scholarship about "New Wars" (Chinkin and Kaldor 2013), national violence fought by nonstate, irregular military forces, often along lines of social identity (see Ferguson 2003). Grotesque displays of manhood by young fighters often include institutionalized rape. Sierra Leone is a prime example.

The Revolutionary United Front practiced particularly horrific violence, beyond rape to sexual mutilation (Duriesmith 2013). Local traditions of masculinity involved membership in secret societies, an established family and recognized social position inside a patrimonial system that disintegrated with national circumstances of modern underdevelopment. Many young men had no hope to attain locally valorized manhood. Duriesmith argues that these young men violently rejected the old male gerontocracy, while exaggerating manhood with extreme violence and domination over women. Masculinity, not ethnicity, he argues, fostered this gruesome war (which he also argues for South Sudan's Peoples Liberation Army) (Duriesmith 2017).

Even girls and young women who were captured or voluntarily joined and became combatants had to act out this malignant masculinity. Many were raped or faced rape and death if not seemingly enthusiastic killers. Show sorrow and be gang raped and killed. "We were like slaves, very dirty. So to ask about women fighting! Some were even braver than some men" (Coulter 2008:55). Young men excluded from traditional masculinity protested with a hypermasculine brutality and forced girls and young women to mimic that masculinity, even killing family, or have inflicted on them what they saw inflicted on others.

# Democratic Republic of Congo

In the eastern DRC, war against rebels is notorious for extremely high rates of rape by both sides. In interviews, decommissioned male fighters grappled with what they saw and did, offering convoluted, conflicting, and inconsistent narratives to justify something they understood to be wrong. So "lust rapes" were expressions of natural sexual drives that were necessary to maintain masculine focus on combat. "Evil rapes" were motivated by the craziness of personal backgrounds and of war (Baaz and Stern 2009). Boys socially channeled into a totalistic military world learned masculinity that emphasized domination and violation of a sexually subordinated other. To remain within the solidarity of the group demanded going with that flow (Trenholm et al. 2012).

Yet the professional army of the DRC has many women soldiers. Military males divide "the army into different gendered spheres: the masculine sphere of combat, understood as the real army, and the rest—the sphere of feminine support" (Baaz and Stern 2012:8). Yet inside this institution, women strive to show they are as capable of violence as men and seek out opportunities to demonstrate. When given orders, "We started to shoot them, shot and shot. And from then on (my) spirit changed" (14). Loyal to the army, they too excuse "lust rape" as "understandable" (15).

#### Eritrea

In Eritrea's revolution and war with Ethiopia-more "classic" than "New" war-gender expectations and relations were very different (Bernal 2000). Due to military exigency, a Marxist nationalism calling for an end to women's repression, and early female volunteer fighters who excelled, women grew to about a third of national forces, some second generation. They fought on front lines in integrated units with no tasks divided by gender. A news reporter was told that women fighters were more deadly-"women rarely take prisoners" (Fisher 1999:A8). But during breaks from combat, men still expected women to cook while they played cards. Back in civilian life, former soldiers first walked with masculine swagger and an intense gaze. Acting that way, they could not find husbands. "A man thinks, 'She has fought and killed. She is more man than me'" (Bernal 2000:65). So they went back to more acceptable femininity. Bernal sees their military participation not as transforming gender expectations but as temporarily erasing the

feminine. That did not carry over into civilian life, despite national ideology.

# Masculinity and Leaving War

The imperative need to reconstruct militarized masculinities is exemplified by disarmament, demobilization, and reintegration of former combatants in Colombia (Theidon 2009), although this is a much more widespread problem. Colombia's military was sustained by a hegemonic masculinity that was aggressive, violent, misogynistic, and weaponized. Traditional disarmament, demobilization, and reintegration protocols leave that untouched. As fighters went home, postwar violence against women escalated dramatically. This must be brought into postwar resolution priorities. Hopefully "what is constructed can be transformed" (Theidon 2009:34).

That was tried for British peacekeepers, following criticism of sexual exploitation in peacekeeping operations (Duncanson 2009). Trying to redefine masculinity, soldiers were trained that masculinity for peacekeeping is *tougher* than for war fighting. Curtailing impulses to promote impartiality, control of force, making friends, chatting—that is masculine. As peacemaking is militarized, military masculinity was repurposed but still remained gender hierarchical.

#### The Contemporary United States

For the United States the categorical denigration of James Webb's (1979) "Women Can't Fight" became a manifesto for gender prejudice and harassment at the US Naval Academy (Burke 1999). It is now officially US policy that women can fight, and possibilities should open for integrating women into combat roles, although progress is slow (Swick and Moore 2018). Studying women in ROTC found that both men and women "drew upon traditional understandings of masculinity and femininity in order to delineate between men's work and women's work, linking masculinity and soldiering in a fundamental and inextricable way that is always in juxtaposition to femininity." Neither sex questioned larger norms or saw them as assigned gender scripts but, rather, saw them as natural attributes. As one cadet put it, masculine meant "don't flinch, steady, that cool under pressure attitude, always fighting to prove something." While thinking about femininity, "the word 'supportive' keeps coming up" (Silva 2008:947).

A long-term objection to women in combat roles is not whether women can fight but whether they should, because of their impact on male solidarity. Van Creveld (2000) connected women in national militaries with a decline of their fighting ability. The 1994 US decision to keep Army combat units closed to women was justified in terms of the "unique bonds" necessary for mortal combat, which "are best developed in a single gender all male environment" (Goldstein 2001:194–195). Anthropologist Anna Simons (1997a:186, 1997b) wrote: "In war, let men be men." Bragging about sex is the way fighting men bond, as the only topic where they could not be proven

wrong, while not creating any interpersonal friction within the unit. "This type of male bonding may seem irrelevant to the national defense. But talking about sex is an incomparable way for soldiers to prove they can compete. Adding women to combat units would obviously alter, if not completely stop, these discussions" (Simons 1997b).

This sort of masculinity contributes to the intractable problem of sexual harassment in the military. At the three US military academies, despite major efforts at reform the "number of unreported sexual assaults surged by nearly 50 percent—to 747 during the 2017–2018 academic years, compared with 507 in 2015–2016" (Cooper 2019:A21). It certainly contributes to the intersection of rank and gender, since combat experience is necessary for promotion (Kelty, Kleykamp, and Segal 2010:185–186). It may foster higher rates of domestic violence within military spheres—"male veterans who had been in combat (a relatively small subset of all veterans) were more than four times as likely as other men to have engaged in domestic violence" (Lutz 2004:17).

Dominant or hegemonic forms of masculinity that are drilled into military recruits (see Eisenhart 1975) include emphasis on status and achievement, toughness and aggression, restricted emotionality, self-reliance, and dominance/power/control. These are argued to combine in attitudes conducive to rape, so that "our refusal to give up war ensures that rape cannot be eradicated" (Zurbriggen 2010).

# Findings on Militarized Masculinity

Two decades of feminist research supports a view of masculinity and war close to that argued in this paper, though without the cultural materialist theory. Eichler (2014:81–82) summarizes:

Across the world, men make up the vast majority of armed forces and state leaders engaged in war. But as feminist international relations scholars argue, this does not mean that men are innately militaristic, and, by corollary, that women are naturally peaceful. Instead, the link between masculinity and the military is constructed and maintained for the purpose of waging war. Militarized masculinity, at its most basic level, refers to the assertion that traits stereotypically associated with masculinity can be acquired and proven through military service or action, and combat in particular. . . . At the core of feminist theorizing is the insight that these perceived gender differences are socially constructed rather than biologically inherent. . . . While militarized masculinities tend to be defined in hierarchical opposition to women and femininities by reinforced unequal gendered relations of power, they must also be understood in their diversity and variability over time.

Masculinity is a malleable category but always connected to war—when war is present. Within masculinity can be mixed and contrary themes, in both hegemonic and protest varieties, partly related to the specific demands of war making. It is "a fluid and shifting category, complex, and intersectional and... naming it contributes to the process of its construction . . . [as does] performance and interpretation" (Partis-Jennings 2017:1–3). This binary gender opposition gives people a framework for thought, a reference point in a logic of contrasts, both between men and women and among men. Masculine is not feminine, and feminine is not suited for combat. In providing an elementary structure of thought, masculinity prepares boys growing into manhood to risk life and to kill (Hutchings 2008).

This paper adds primatological, archaeological, and ethnological evidence against males having an evolved tendency to kill and a theoretical framework grounded in an Infrastructure of reproduction and production, Structurally ramified through a social division of labor, and Superstructurally encoded as expectations of masculinity, all impressed upon human nature evolved for plasticity. This theoretical perspective accounts for both the basic sex-based dichotomy in war making and a world of exceptions and variations. Infrastructure is not destiny.

# "What Is It with Men?"

Every time we learn of another particularly horrible killing, people ask, What is it with men? Considering masculinity and war may provide *part* of an answer.

For reasons from panhuman to locally particular, in hitherto existing war-making societies, a boy child is socially categorized and raised with the expectation that when grown he may be called on to dominate and kill. It is all around him. Girls learn that is not their fate and are channeled away from physical violence and into submission. How this is taught and internalized and what options exist vary enormously from place to place, but the categorical difference is always present. The currents that enculturate a potentially lethal masculinity run much deeper than any immediate prospect of fighting. Men, not women, are killers.

To be clear, I am not suggesting any explanation of why mass, serial, domestic, or criminal killing actually occurs. More specific explanations are needed at many levels, from societies, through situations, to individuals. The question addressed here is, Why is it almost always men? Growing minds get the message in countless ways: to kill is manly.

That is the way it has been in war-making societies. What about the future? When it comes to masculinity in war, the future will be interesting times. Around the world, gender definition is being radically upended. War too is changing, from the Infrastructure on up. Both combat and birth sex may no longer attune with the conventional attributes of military masculinity. And the anthropological record makes clear that war itself is not inevitable. I am not making any predictions.

## Acknowledgments

I want to thank the Wenner-Gren Foundation and especially Laurie Obbink and Danilyn Rutherford and the organizers of this symposium, Agustín Fuentes, Matt Gutmann, and Robin Nelson, who doubled as my editors. Thanks also to my colleagues in Sintra, whose commentary made this rough attempt at a platform for research more passable, particularly Sally Merry, who was a pleasure to learn from. And my deepest thanks go to my wife, Leslie Farragher, who helped me think through all of this.

## References Cited

Adams, David. 1983. Why are there so few women warriors? Behavior Science Research 18:196–211.

Allen, Mark, and Terry Jones, eds. 2014. Violence and warfare among huntergatherers. Walnut Creek, CA: Left Coast.

Andreski, Stanislav. 1971. Military organization and society. Berkeley: University of California Press.

Anthony, David. 2007. The horse, the wheel, and language: how Bronze-Age riders from the Eurasian steppes shaped the modern world. Princeton, NJ: Princeton University Press.

Arkush, Elizabeth, and Tiffiny Tung. 2013. Patterns of war in the Andes from the Archaic to the Late Horizon: insights from settlement patterns and cranial trauma. Journal of Archaeological Research 21:307–369.

Baaz, Maria Eriksson, and Maria Stern. 2009. Why do soldiers rape? masculinity, violence, and sexuality in the armed forces in the Congo (DRC). International Studies Quarterly 53:495–518.

— 2012. Fearless fighters and submissive wives: negotiating identity among women soldiers in the Congo (DRC). Armed Forces and Society. https://doi.org/10.1177/0095327X12459715.

Bamforth, Douglas. 2006. Climate, chronology, and the course of war in the Middle Missouri region of North American Great Plains. In The archaeology of warfare: prehistories of raiding and conquest. Elizabeth Arkush and Mark Allen, eds. Pp. 66–100. Gainesville: University Press of Florida.

Bauerle, Phenocia, ed. 2003. The way of the warrior: stories of the Crow people. Lincoln: University of Nebraska Press.

Benenson, Joyce, with Henry Markovits. 2014. Warriors and worriers: the survival of the sexes. New York: Oxford University Press.

Bernal, Victoria. 2000. Equality to die for? women guerilla fighters and Eritrea's cultural revolution. PoLAR 23:61–76.

Bonta, Bruce. 1997. Cooperation and competition in peaceful societies. Psychological Bulletin 121:299–320.

Bowles, Samuel. 2009. Did warfare among ancestral hunter-gatherers affect the evolution of human social behavior? Science 314:1293–1294.

Burke, Carol. 1999. Pernicious cohesion. In It's our military, too! women and the U.S. military. Judith Hicks Stiehm, ed. Pp. 205–219. Philadelphia: Temple University Press.

Callender, Charles, and Lee M. Kochems. 1983. The North American berdache. Current Anthropology 24:443–470.

Chagnon, Napoleon. 1977. Yanomamo: the fierce people. 2nd edition. New York: Holt, Rinehart & Winston.

———. 1988. Life histories, blood revenge, and warfare in a tribal population. Science 239:985–992.

Chick, Garry, and John W. Loy. 2001. Making men of them: male socialization for warfare and combative sports. World Cultures 12:2–17.

Chinkin, Christine, and Mary Kaldor. 2013. Gender and new wars. Journal of International Affairs 67:167–187.

Cooper, Helene. 2019. More assaults unreported on campuses of academies. New York Times, February 1, A21.

Coulter, Chris. 2008. Female fighters in the Sierra Leone war: challenging the assumptions. Feminist Review 88:55-72.

Daly, Martin, and Margo Wilson. 1994. Evolutionary psychology of male violence. In *Male violence*. John Archer, ed. Pp. 253–282. New York: Routledge.

Dentan, Robert Knox. 1968. The Semai: a nonviolent people of Malaya. New York: Holt, Rinehart & Winston.

DePauw, Linda Grant. 2000. Battle cries and lullabies: women in war from prehistory to the present. Norman: University of Oklahoma Press.

Duncanson, Claire. 2009. Narratives of military masculinity in peacekeeping operations. International Feminist Journal of Politics 11:63–80.

Duriesmith, David. 2013. Is manhood a causal factor in the shifting nature of war: the case of Sierra Leone's Revolutionary United Front. International Feminist Journal of Politics 16:236–254.

- 2017. Masculinity and new war: the gendered dynamics of contemporary armed conflict. New York: Routledge.
- Eagly, Alice, and Wendy Wood. 2003. The origins of sex differences in human behavior: evolved dispositions versus social roles. In Evolution, gender, and rape. Cheryl Brown Travis, ed. Pp. 265–304. Cambridge, MA: MIT Press.
- Edgerton, Robert. 2000. Warrior women: the Amazons of Dahomey and the nature of war. Boulder, CO: Westview.
- Eichler, Maya. 2014. Militarized masculinities in international relations. Brown Journal of World Affairs 21:81–93.
- Eisenhart, R. Wayne. 1975. You can't hack it little girl: a discussion of the covert psychological agenda of modern combat training. *Journal of Social Issues* 31:13–23.
- Elshtain, Jean Bethke. 1995. Women and war. Chicago: University of Chicago Press.
- Ember, Carol, and Melvin Ember. 1994. War, socialization, and interpersonal violence: a cross-cultural study. *Journal of Conflict Resolution* 38:620– 646.
- Enloe, Cynthia. 1983. Does khaki become you? the militarization of women's lives. London: Pluto.
- Ewers, John. 1994. Women's roles in Plains Indian warfare. In Skeletal biology in the Great Plains: migration, warfare, health, and subsistence. Douglas Owsley and Richard Jantz, eds. Pp. 325–332. Washington, DC: Smithsonian Institution.
- Fadiman, Jeffrey. 1982. An oral history of tribal warfare: the Meru of Mt. Kenya. Athens: Ohio University Press.
- Ferguson, R. Brian. 1988. War and the sexes in Amazonia. In *Dialectics and gender: anthropological approaches*. Richard Randolph, David Schneider, and May Diaz, eds. Pp. 136–154. Boulder, CO: Westview.
- . 1992. A savage encounter: Western contact and the Yanomami war complex. In War in the tribal zone: expanding states and Indigenous warfare. R. Brian Ferguson and Neil Whitehead, eds. Pp. 199–227. Santa Fe, NM: School of American Research.
- . 1994. The general consequences of war: an Amazonian perspective. In Studying war: anthropological perspectives. S. P. Reyna and R. E. Downs, eds. Pp. 85–111. Langhorne, PA: Gordon & Breach.
- ——. 1995a. Infrastructural determinism. In Science, materialism, and the study of culture. Gainesville: University Press of Florida.
- 1995b. Yanomami warfare: a political history. Santa Fe, NM: School of American Research.
- . 1999. A paradigm for the study of war and society. In War and society in the ancient and medieval worlds: Asia, the Mediterranean, Europe, and Mesoamerica. Kurt Raafaub and Nathan Rosenstein, eds. Pp. 389–437. Cambridge, MA: Center for Hellenic Studies/Harvard University Press.
- ———. 2001. Materialist, cultural and biological theories on why Yanomami make war. Anthropological Theory 1:99–116.
- 2003. Violent conflict and control of the state. In The state, identity and violence: political disintegration in the post-Cold War world. R. Brian Ferguson, ed. Pp. 1–58. New York: Routledge.
- 2006. Archaeology, cultural anthropology, and the origins and intensification of war. In The archaeology of warfare: prehistories of raiding and conquest. Elizabeth Arkush and Mark Allen, eds. Pp. 469–523. Gainesville: University Press of Florida.
- ——. 2008. War before history. In The ancient world at war: a global history. Philip de Souza, ed. Pp. 14–27. London: Thames & Hudson.
- 2011. Born to live: challenging killer myths. In Origins of cooperation and altruism. Robert W. Sussman and C. Robert Cloninger, eds. Pp. 249– 270. New York: Springer.
- 2013a. Pinker's list: exaggerating prehistoric war mortality. In War, peace, and human nature: the convergence of evolutionary and cultural views. Douglas Fry, ed. Pp. 112–131. New York: Oxford University Press.
- 2013b. The prehistory of war and peace in Europe and the Near East. In War, peace, and human nature: the convergence of evolutionary and cultural views. Douglas Fry, ed. Pp. 191–240. New York: Oxford University Press.
- 2015. History, explanation, and war among the Yanomami: a response to Chagnon's Noble Savages. Anthropological Theory 15:377-406.
- ——. 2018. War may not be in our nature after all: why we fight. Scientific American 319(3):76–81.
- ——. Forthcoming. Chimpanzees, "war," and history: are men born to kill? Oxford: Oxford University Press.
- Ferguson, R. Brian, and Neil L. Whitehead, eds. 2000. War in the tribal zone: expanding states and indigenous warfare. 2nd edition. Santa Fe, NM: School for Advanced Research.

- Fisher, Ian. 1999. Like mother, like daughter: Eritrean women wage war. New York Times, August 26, A1, A8.
- Fry, Douglas P. 2007. Beyond war: the human potential for peace. New York: Oxford University Press.
- Fry, Douglas P., and Patrik Söderberg. 2013. Lethal aggression in mobile forager bands and implications for the origins of war. Science 341:270– 275.
- Fuentes, Agustin. 2012. Race, monogamy, and other lies they told you: busting myths about human nature. Berkeley: University of California Press.
- Fulton, Robert, and Steven W. Anderson. 1992. The American "man-woman": gender, liminality, and cultural continuity. Current Anthropology 5:603–610.
- Gardela, Leszek. 2013. "Warrior women" in Viking Age Scandinavia? a preliminary archaeological study. Acta Archaeologica Ressoviensia 8:273–314.
- Gat, Azar. 2006. War in human civilization. Oxford: Oxford University Press.
  ———. 2015. Proving communal warfare among hunter-gatherers: the quasi-Rousseauan error. Evolutionary Anthropology 24:111–126.
- Ghiglieri, Michael. 1999. The dark side of man: tracing the origins of male violence. Reading, MA: Perseus.
- Gibson, Thomas. 1990. Raiding, trading, and tribal autonomy in insular Southeast Asia. In *The anthropology of war*. Jonathan Haas, ed. Pp. 171– 189. New York: Cambridge University Press.
- Goldstein, Jonathan. 2001. War and gender: how gender shapes the war system and vice versa. New York: Cambridge University Press.
- Grinnell, George. 1972a. The Cheyenne Indians: their history and ways of life, vol. 1. Lincoln: University of Nebraska Press.
- ———. 1972b. The Cheyenne Indians: their history and ways of life, vol. 2. Lincoln: University of Nebraska Press.
- Grossman, David. 1995. On killing: the psychological cost of learning to kill in
- war and society. New York: Little, Brown.
  Guliaev, Valeri I. 2003. Amazons in the Scythia: new finds at the Middle Don, southern Russia. World Archaeology 35:112–125.
- Gutmann, Matthew. 1997. Trafficking in men: the anthropology of masculinity. Annual Review of Anthropology 26:385–409.
- Haas, Jonathan, and Matthew Piscitelli. 2013. The prehistory of war: misled by ethnography. In War, peace, and human nature: the convergence of evolutionary and cultural views. Douglas Fry, ed. Pp. 168–190. New York: Oxford University Press.
- Harris, Marvin. 1979. Cultural materialism: the struggle for a science of culture. New York: Random House.
- Hedenstierna-Johnson, Charlotte, Anna Kjellström, Torun Zachrisson, Maja Krzewińska, Veronica Sobrado, Neil Price, Torsten Günther, et al. 2017. A female Viking warrior confirmed by genomics. American Journal of Physical Anthropology 164(4):853–860.
- Hoebel, E. Adamson. 1978. The Cleyennes: Indians of the Great Plains. 2nd edition. New York: Holt. Rinehart & Winston.
- Hutchings, Kimberly. 2008. Making sense of masculinity and war. Men and Masculinities 10:389–404.
- Keeley, Lawrence. 1996. War before civilization: the myth of the peaceful savage. New York: Oxford University Press.
- Kelly, Robert. 2013. From the peaceful to the warlike: ethnographic and archaeological insights into hunter-gatherer warfare and homicide. In War, peace, and human nature: the convergence of evolutionary and cultural views. Douglas Fry, ed. Pp. 151–167. New York: Oxford University Press.
- Kelty, Ryan, Meredith Kleykamp, and David Segal. 2010. The military and the transition to adulthood. Future of Children 20:181-207.
- Kissel, Marc, and Nam Kim. 2018. The emergence of human warfare: current perspectives. Yearbook of Physical Anthropology 168(S67):141–163.
- LeBlanc, Stephen, with Katherine Register. 2003. Constant battles: the myth of the peaceful, noble savage. New York: St. Martin's.
- Llewellyn, Karl, and E. Adamson Hoebel. 1941. The Cheyenne way. Norman: University of Oklahoma Press.
- Lowie, Robert. 1956. The Crow Indians. New York: Holt, Rinehart & Winston. Lutz, Catherine. 2004. Living room terrorists. Women's Review of Books 21(5):17–18.
- Martin, Debra L., and David W. Frayer, eds. 1997. Troubled times: violence and warfare in the past. Langhorne, PA: Gordon & Breach.
- Martin, Debra L., Ryan P. Harrod, and Ventura R. Pérez, eds. 2012. The bioarchaeology of violence. Gainesville: University Press of Florida.
- Maybury-Lewis, David. 1974. Akwe-Shavante society. New York: Oxford University Press.
- Mayor, Adrienne. 2014. The Amazons: lives and legends of warrior women across the ancient world. Princeton, NJ: Princeton University Press.

- McDonald, Melissa, Carlos Navarrete, and Mark VanVugt. 2012. Evolution and the psychology of intergroup conflict: the male warrior hypothesis. Philosophical Transactions of the Royal Society B 367:670–679.
- Medicine, Beatrice. 1983. "Warrior women"—sex role alternatives for Plains Indian women. In *The hidden half: studies of Plains Indian women*. Patricia Albers and Breatrice Medicine, eds. Pp. 267–277. Lanham, MD: University Press of America.
- Medina, Jose Toribio, ed. 1988. The discovery of the Amazon. New York: Dover.
- Meggitt, Mervyn. 1977. Blood is their argument: warfare among the Mae Enga tribesmen of the New Guinea highlands. Palo Alto, CA: Mayfield.
- Miklikowska, Marta, and Douglas P. Fry. 2012. Natural born nonkillers: a critique of the killers have more kids idea. In Nonkilling psychology. Daniel Christie and Joam Evans Pim, eds. Pp. 43–70. Honolulu: Center for Global Nonkilling.
- Mirazón Lahr, M., F. Rivera, R. K. Power, A. Mounier, B. Copsey, F. Crivellaro, J. E. Edung, et al. 2016. Inter-group violence among early Holocene hunter-gatherers of West Turkana, Kenya. Nature 529:394–398.
- Nunn, Patrick. 2000. Environmental catastrophe in the Pacific Islands around A.D. 1300. Geoarchaeology: An International Journal 15:715–740.
- Ortner, Sherry. 1972. Is female to male as nature is to culture? Feminist Studies 1(2):5-31.
- Otterbein, Keith. 1985. The evolution of war: a cross-cultural study. New Haven, CT: HRAF.
- . 1994. A cross-cultural study of rape. In Feuding and warfare. Keith Otterbein, ed. Pp. 119–132. Langhorne, PA: Gordon & Breach.
- Partis-Jennings, Hannah. 2017. Military masculinity and the act of killing in Hamlet and Afghanistan. Men and Masculinities 20:1–19.
- Peterson, Jane. 2010. Domesticating gender: Neolithic patterns from the southern Levant. Journal of Anthropological Archaeology 29:249–264.
- Pinker, Steven. 2002. The blank slate: the modern denial of human nature. New York: Viking.
- ———. 2011. The better angels of our nature: why violence has declined. New York: Viking.
- Power, Margaret. 1991. The egalitarians—human and chimpanzee: an anthropological view of social organization. New York: Cambridge University Press.
- Raffield, Ben. 2019. Playing Vikings: militarism, hegemonic masculinities, and childhood enculturation in Viking Age Scandinavia. Current Anthropology 60:813–835.
- Ramos, Alcida Rita. 1995. Sanuma memories: Yanomami ethnography in times of crisis. Madison: University of Wisconsin Press.
- Reyna, Stephen. 1994. A mode of domination approach to organized violence. In Studying war: anthropological perspectives. S. P. Reyna and R. E. Downs, eds. Pp. 29–65. Langhorne, PA: Gordon & Breach.
- Robarcheck, Clayton. 1990. Motivations and material causes: on the explanation of conflict and war. In *The anthropology of war*. Jonathan Haas, ed. Pp. 56–76. New York: Cambridge University Press.
- Rosaldo, Michelle. 1983. The shame of headhunters and the autonomy of self. Ethos 11:135–151.

- Sanday, Peggy Reeves. 1981. The socio-cultural context of rape: a crosscultural study. Journal of Social Issues 37(4):5-27.
- Silva, Jennifer. 2008. A new generation of women? how female ROTC cadets negotiate the tension between masculine military culture and traditional femininity. Social Forces 87(2):937–960.
- Simons, Anna. 1997a. The company they keep: life inside the U.S. Army Special Forces. New York: Avon.
- . 1997b. In war, let men be men. New York Times, April 23.
- Sussman, Robert. 2013. Why the legend of the killer ape never dies: the enduring power of cultural beliefs to distort our view of human nature. In War, peace, and human nature: the convergence of evolutionary and cultural views. Douglas Fry, ed. Pp. 97–111. New York: Oxford University Press.
- Swick, Andrew, and Emma Moore. 2018. The (mostly) good news on women in combat: what is the state of female combat integration across the military services? Center for a New American Security. https://www.cnas.org/ /publications/reports/an-update-on-the-status-or-women-in-combat (accessed January 26, 2019).
- Theidon, Kimberly. 2009. Reconstructing masculinities: the disarmament, demobilization, and reintegration of former combatants in Colombia. Human Rights Quarterly 31:1–34.
- Tiffany, Sharon, and Kathleen Adams. 1994. Anthropology's "fierce" Yano-mami: narratives of sexual politics in the Amazon. NWSA Journal 6(2):169–196.
- Tooby, John, and Leda Cosmides. 1988. The evolution of war and its cognitive foundations. Institute for Evolutionary Studies Technical Report 88–1. https:// www.cep.ucsb.edu/papers/Evolofwar.pdf.
- Trenholm, Jill, Pia Olsson, Martha Blomqvist, and Beth Maina Ahlberg. 2012.
  Constructing soldiers from boys in eastern Democratic Republic of Congo.
  Men and Masculinities 16:203–227.
- Van Creveld, Martin. 2000. The great illusion: women in the military. Millennium: Journal of International Studies 29(2):429-442.
- Voget, Fred. 1964. Warfare and the integration of Crow Indian culture. In Explorations in cultural anthropology. Ward Goodenough, ed. Pp. 483– 509. New York: McGraw Hill.
- Webb, James. 1979. Women can't fight. Washingtonian, November 1.
- Wendorf, Fred, ed. 1968. The prehistory of Nubia. Dallas, TX: Southern Methodist University Press.
- Wiessner, Polly. 2019. Collective action for war and for peace: a case study among the Enga of Papua New Guinea. Current Anthropology 60:224–244.
- Wilson, Michael L., Christophe Boesch, Barbara Fruth, Takeshi Furuichi, Ian C. Gilby, Chie Hashimoto, Catherine L. Hobaiter, et al. 2014. Lethal aggression in Pan is better explained by adaptive strategies than human impacts. Nature 513:414–417.
- Wood, Wendy, and Alice Eagly. 2015. Two traditions of research on gender identity. Sex Roles 73:461–473.
- Wrangham, Richard, and Dale Peterson. 1996. Demonic males: apes and the origins of human violence. Boston: Houghton Mifflin.
- Zurbriggen, Eileen. 2010. Rape, war, and the socialization of masculinity: why our refusal to give up war ensures that rape cannot be eradicated. Psychology of Women Quarterly 34:538-549.