

Is History the Same as Evolution? No. Is it Independent of Evolution? Certainly Not

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Abstract

History is full of violence and oppression within and between groups, and although group conflicts enhance within-group cooperation (mediated by oxytocin, which promotes parochial altruism) the hierarchy within groups ensures that spoils accrue very unevenly. Darwin suggested, and we now know, that sexual selection is as powerful as selection by mortality, and the main purpose of survival is reproduction. Male reproductive skew is greater than that among females in all societies, but the difference became much greater after the hunting-gathering era, and the rise of so-called "civilization" was everywhere a process of predatory expansion, producing kingdoms and empires where top males achieved astounding heights of reproductive success. This was shown by historical and ethnographic data now strongly confirmed by genomic science. Psychological research confirms that group identity, out-group stigmatization, leadership characterized by charisma, the will to power, narcissism, sociopathy, and cruelty, and followership characterized by hypnotic obedience, loss of individuality, and cruelty are integral parts of human nature. We can thank at least ten or twelve millennia of microevolutionary processes such as those described above, all more prominent in males than females. Followers in wars have faced a difficult risk-benefit analysis, but if they survived and won they too could increase their reproductive success through the rape and other sexual exploitation that have accompanied almost all wars. For modern leaders, social monogamy and contraception have separated autocracy from reproductive success, but only partly, and current worldwide autocratic trends still depend on the evolved will to power, obedience, and cruelty.

Keywords

history, violence, group conflict, cooperation, sexual selection, reproductive skew, war, autocracy, obedience, the will to power

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Introduction

"History is a nightmare from which I am trying to awake."

So James Joyce has his character Stephen Daedalus—an obvious stand-in for the author—say early in *Ulysses* (Joyce, 1934). The context is a conversation at an elite Dublin boys' school between Stephen and the old headmaster, Mr. Deasy, a pompous dogmatist who disdains his young colleague's freedom of thought. What immediately precedes the quote is an antisemitic tirade by the old man, complete with the usual tropes—the Jews run and ruin England, their usury undermines the world, and the ever popular, "They have sinned against the light ... And you can see darkness in their eyes. And that is why they are wanderers on the earth to this day."

Stephen boldly replies, "Who has not?" Mr. Deasy asks what he means, which after a pause elicits the "history is a night-mare" remark. It is morning recess, and so, "From the playfield the boys raised a shout." Mr. Deasy says,

- "—The ways of the Creator are not our ways ... All human history moves toward one great goal: The manifestation of God."
- "Stephen jerked his thumb toward the window, saying,
- "-That is God.
- "-What? Mr. Deasy asked.
- "Hooray! Ay! Whrrwee!
- "—A shout in the street" (Joyce, 1934, pp. 34–35).

Perhaps Stephen and Joyce behind him were thinking about a *mot* of the Duke of Wellington's, often paraphrased

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as, "The Battle of Waterloo was won on the playing fields of Eton." That is, the games at elite English schools prepared their boys to beat Napoleon. Ironically, Mr. Deasy loves England, and Stephen warily supports Irish independence; both are listening to parallel contesting cries in Dublin, which Stephen, shrugging his shoulders, calls God. It has been well said that all wars are boyish. In the same chat, the tedious old man berates women: a woman brought sin into the world, another caused the Trojan War, others tore down Ireland's great leaders.

Nowhere does the lust of men contending to control women figure in the old man's model—for instance, the Greeks' willingness to sacrifice thousands of lives and burn a great city as payback for a willing woman's adultery. The Iliad's opening line, smashing into the epic with "the wrath of Achilles," refers to his rage over having a favorite young slave woman, Briseis, taken from him by King Agamemon; the two men's obstinacy halts the seige and nearly allows a Trojan victory—despite the fact that Achilles' true love is his male companion Patroclus, on whose funeral pyre he slits the throats of twelve Trojan boys. The great men's lust for war predates the seige, as King Agamemnon sacrifices his own daughter, on her wedding day, to the goddess Artemis, for a breeze to carry the Greek fleet to Troy (Euripides, 1978). It seems that one altar was as serviceable as another. Not for nothing did Simone Weil, the French-Jewish philosopher and anti-fascist activist, call *The Iliad* "the Poem of Force" (Weil, 2006).

The conversation with Mr. Deasy takes half an hour of the day in June, 1904, in which Joyce depicts the wanderings around Dublin of one Jew, Leopold Bloom, who has Stephen's fond if ironic admiration; he is married to Molly, a fading but still colorful Irish flower who has her "Poddy" firmly in hand. Through these and other characters and encounters, Joyce depicts his beloved, detested Dublin, its absurd humanity, society, and culture, a microcosm of the world.

And the conversation is a microcosm of the microcosm, containing three of the main themes of the neodarwinian paradigm in behavior: the boyishness of raucous games that becomes the boyishness of war; the definition of a feared "other," contempt for whom can unify the side; and male derision of "evil" women as the men deny their own lust, the power it gives women over them, and the nightmarish destruction that their attempts to control women wreak upon the the world.

Though *Ulysses* (evoking the Greek wanderer-hero) takes place in 1904, near the dawn of a new century, Joyce actually began publishing it serially in March 1918, the last year of what was to its contemporaries an unimaginably destructive World War (Ellman, 1982). He published the book version the year the Irish Free State was formed, 1922. Possibly, the boys whose shouts Stephen equated with God had grown up to win Irish independence, just as the boys of Eton once grew up to defeat Napoleon.

Joyce had begun work on the book in 1914, but soon moved his family to Zürich, out of harm's way, writing as the war gorged itself on the young men of Europe. So, a setting in 1904, yes, but a writing process—comic as the novel often is—steeped in the full

knowledge of what the new century would bring (Ellman, 1982). Yet the Great War would be eclipsed in scope and ferocity by the Second World War that Joyce did not live to see.

I will offer my evolutionary perspective on all this, but first I should disclose that I was born in 1946; that my parents, although themselves American-born, told me that my conception had been postponed until the closing of the gas chambers; that I was named for a favorite nephew of my mother's who had been killed as the co-pilot of a B-25 bomber in 1943; that I grew up in an Orthodox Brooklyn synagogue where some congregants had tatooed numbers on their forearms; and that I studied world history for two years in high school with a brilliant teacher who inspired me to think about human beings as the units of history in much the way atoms and molecules are the units of chemistry and biology.

I was always biologically inclined, and by high school graduation I had formed the goal of knowing everything there was to know about the science of human nature. I did not realize that this at the time was not a very ambitious goal. But as readers of this journal know, it is now a goal that no one person can aspire to. Having at this writing just passed my 75th birthday, I am arrogant enough to suppose that in writing and teaching I have made a small contribution to this change. Certainly, from my first book (Konner, 2002) to my most recent paper (Konner, 2021), I have pursued that high school goal. However, as of today, history is still a nightmare, and I am still trying to awake from it.

Darwin's Two Minds

Lucretius and other ancient writers believed that species changed over time, but the process came later: "Animals engage in a struggle for existence; for resources, to avoid being eaten, and to breed. Environmental factors influence organisms to develop new characteristics to ensure survival ... thus transforming into new species. Animals that survive to breed can pass on their characteristics to offspring"—thus the 9th-century Baghdad philosopher Al-Jahiz (Masood, 2009). Charles Darwin and Alfred Russell Wallace jointly presented their version, *natural selection*, to the Royal Society of London in 1858, but it was identified with Darwin after his book the following year (Darwin, 1859/1872/1958).

He had postponed the publication for decades, partly due to its potential negative religious impact, but he tried to rise to the challenges in closing: "Psychology will be securely based on ... the acquirement of each mental power and capacity by gradation. Much light will be thrown on the origin of man and his history." And he ended with, "from the war of nature, from famine and death, the most exalted object of which we are capable of conceiving, namely, the production of the higher animals, directly follows. There is grandeur in this view of life, with its several powers, having been breathed by the Creator into a few forms or into one; and that, whilst this planet has gone cycling on according to the fixed law of gravity, endless forms most beautiful and most wonderful have been, and are being, evolved" (pp. 415–416).

But his tone was more triumphalist in an 1838 notebook entry: "Origin of man now proved. He who understands baboon would do more towards metaphysics than Locke" (Darwin, 1987). And he had been thinking of something other than grandeur when he wrote to botanist J.D. Hooker, "What a book a Devil's chaplain might write on the clumsy, wasteful, blundering low and horribly cruel works of nature!" (Darwin, 1856). The phrases "Struggle for existence," "Nature red in tooth and claw," and "Survival of the fittest" were actually not popularized by Darwin but by biologist Thomas Huxley, poet Alfred Lord Tennyson, and sociologist Herbert Spencer, respectively.

However, they were consistent with what Darwin privately thought. He had been an avid hunter and butterfly collector while in college at Cambridge and was no stranger to nature's deadly spectacles. His years gathering specimens and observing wild creatures worldwide as *The Beagle's* official naturalist did not show him only grandeur, despite the grand logic that arose from his observations. For decades after, he went out into the garden of his lovely Kent country home and in its sunlit lab pursued his glorious obsessions, one of which focused on how carnivorous plants eat insects. There was something nasty as well as beautiful about evolution.

Yet he rejected the "Social Darwinism" proposed in his name and routinely used to justify empire ("the White Man's Burden"), poverty, and the eugenics programs spreading throughout the world. He separated scientific logic and moral choice, writing in *The Descent of Man, and Selection in Relation to Sex* (Darwin, 1981),

With savages, the weak in body or mind are soon eliminated; and those that survive commonly exhibit a vigorous state of health. We civilised men, on the other hand, do our utmost to check the process of elimination; we build asylums for the imbecile, the maimed, and the sick; we institute poor-laws; and our medical men exert their utmost skill to save the life of every one to the last moment. There is reason to believe that vaccination has preserved thousands, who from a weak constitution would formerly have succumbed to small-pox. Thus the weak members of civilised societies propagate their kind ... but excepting in the case of man himself, hardly any one is so ignorant as to allow his worst animals to breed. The aid we feel impelled to give to the helpless is mainly an incidental result of the instinct of sympathy, which was originally acquired as part of the social instincts, but subsequently rendered ... more tender and more widely diffused (p. 168).

But he goes on,

Nor could we check our sympathy, even at the urging of hard reason, without deterioration in the noblest part of our nature. The surgeon may harden himself whilst performing an operation, for he knows that he is acting for the good of his patient; but if we were intentionally to neglect the weak and helpless, it could only be for a contingent benefit, with an overwhelming present evil. We must therefore bear the undoubtedly bad effects of the weak surviving and propagating their kind (pp. 168–169).

He speculates that lower marriage rates among the poor might have a mitigating effect, but is still set against eugenic policies.

Contrast this with what his scientist-cousin Francis Galton wrote two decades later: "It has now become a serious necessity to better the breed of the human race. The average citizen is too base for the every day work of modern civilization" (Pearson, 1930). This sentiment and the eugenics movement it epitomized spread to the United States, as in the Supreme Court opinion penned by Justice Oliver Wendell Holmes in Buck v. Bell (1927), upholding a Virginia law ordering the sterilization of Carrie Buck, one of about 70,000 forced sterilizations in the U.S.

In Germany, a 1920 book by a leading jurist and a leading psychiatrist, *Allowing the Destruction of Life Unworthy of Life*, advocated euthanasia for the disabled (Binding & Hoche, 1975), and in 1923, a health director in Zwickau wrote to the German Minister of the Interior urging eugenic sterilization (Chorover, 1979): "What we racial hygienists promote is not at all new or unheard of. In a cultured nation of the first order, the United States of America, that which we strive toward was introduced and tested long ago" (p. 98). The skeptical interior minister became convinced. Through the legal and judicial example set by the United States, eugenics became government policy in Weimar Germany a decade before the Nazis came to power.

Thus we can draw a fairly straight historical line from late 19th century British eugenics—a "Darwinian" model that Darwin rejected on moral grounds—to the mass murders of World War II, which were in essence a eugenic public health program (Kevles, 1985; Proctor, 1988). Although Darwin and Abraham Lincoln were born on the same day, there is no evidence that either mentioned the other, but Darwin was a staunch abolitionist. Yet through no fault of his own, he benefited all his life, as did his career—from the voyage of *The Beagle* to his late writings quoting far-flung observers—by living it in the seat of an empire on which the sun never set, an empire justified with Darwin's writings.

War and Violence in the Dream of History

War and violence have been inherent in human experience not just in recorded history but deep into the archeological past (Keeley, 1996; LeBlanc & Register, 2003). Keeley used the term "interpretive pacifications" (p. 20) to characterize archeological excavations that ignored fortifications of settlements and other clear evidence of warfare, including violent deaths. More recently, introducing the four-volume *Cambridge World History of Violence* (Dwyer & Damousi, 2020b), the editors state, "Violence played a prominent role in the lives of all peoples across time and space from inter-state, organized warfare to everyday violence between individuals" (Dwyer & Damousi, 2020a, p. 2/loc. 453).

These authors avoid other broad generalizations, but Steven Pinker's *The Better Angels of Our Nature* summarized the evidence that violent deaths have declined throughout history, on time scales from decades to millennia, with data including homicide, rape, other assaults, battle deaths, and more (Pinker, 2011). Pinker's book was a data-driven extension of

decades of work by German sociologist Norbert Elias, culminating in *The Civilizing Process* (Elias, 1994). It seemed perverse for them to cap the horrifically violent twentieth century with this documentation of progress, but consider the denominator. Even the World Wars left violent deaths at historically low rates against the background of an exploding population; in absolute numbers, yes, unprecedented violence, but in relative numbers, relative peace.

Pinker explains this decline by: the replacement of bands and tribes by empires and nation-states with their Hobbesian demand for order; The Enlightenment, with its values of cosmopolitanism and reason not tied to a religion but universal in intent; commerce, making states more dependent on each other; and what he calls feminization—I would say womanization: greater influence of women on male pyramids of power. I would add, lengthening lifespan. A twenty-something man had a lot less life ahead to lose in the pre-modern world than the same-age man today, so his risk-benefit ratio was different. Also, in recent centuries, democratization has mattered, since democracies (particularly mature, consolidated ones) are less likely go to war with each other (Altman et al., 2020; Hegre, 2014; Hegre et al., 2019).

Behind History

Where Pinker goes beyond the evidence is in extrapolating backward beyond the transition to agriculture—or at least beyond the densely settled hunter-gatherer life that preceded agriculture by two millennia—to a long phase of evolution in our environments of evolutionary adaptedness (EEAs), which he sees as the most violent of all. Although there is ample evidence of violence in the preagricultural human fossil record (Bae et al., 2015; Beier et al., 2020; Bruner et al., 2017; Kranioti et al., 2019), with at least one gruesome group massacre at Nataruk, Kenya (Lahr et al., 2016), and although one estimate based on a large sample suggested that cranial trauma was as common in Upper Paleolithic peoples as in Mesolithic or Neolithic ones (Beier et al., 2020), most of the violence is interpreted as intragroup rather than intergroup fighting.

But archeological evidence shows an increase in group violence with the emergence of agriculture both in the Old and New Worlds (Ferguson, 2013; Lambert, 2002). The huntinggathering era culminated in many places with around two thousand years (ky) of sedentary settlements, which may have increased the need to defend resources. Humans are considered the most cooperative of species, and some theorists have attributed this to continual intergroup violence during the huntinggathering era (Bowles, 2009, 2012; Bowles & Gintis, 2011). Sarah Hrdy attributes exceptional human cooperation to our being the only cooperative breeders among the Old World higher primates (Hrdy, 2009; Hrdy & Burkart, 2020). Hrdy's explanation would seem to raise more favorable prospects for the human future than that of Bowles and Gintis, which suggests that to be truly cooperative, we need collective enemies, but these are not mutually exclusive explanations.

The fossil record, despite its deep history of human violence, is too sparse to effectively compare rates of violence in the preagricultural versus the agricultural era. Studies of recent huntergatherers (RHGs) have methodological problems of their own, but they support the widespread occurrence of interindividual violence while at the same time suggesting a lower (though cross-culturally variable) level of intergroup violence (Fry, 2013; Fry & Soderberg, 2013; Lee, 2018).

Turning to comparative primatology, chimpanzees (*Pan troglodytes*) commonly display violence, including killing of conspecifics (Wilson et al., 2014). The perpetrators are overwhelmingly males who cooperate (remarkably well for a relatively non-cooperative species) in killing victims in orderly ambushes. The killings are adaptive (most victims are male, leaving females for the killers to mate with), are not explained by human impact, and result in territorial expansion (Mitani et al., 2010). Less commonly, females may kill the infants of other females (Arcadi & Wrangham, 1999), but competitive infanticide by males is well known in many primates and other species (Hausfater & Hrdy, 1984; Hrdy, 1974, 1976), as is male use of force to coerce females into sex (Muller & Wrangham, 2009; Smuts & Smuts, 1993).

These patterns paint a dire picture of the origins of human violence (Wrangham & Peterson, 1996), and have led to Richard Wrangham's theory that human cooperation (much greater than that of chimps, while our level of violence is lower) resulted from "self-taming," in which proto-human males ganged up on the most violent among them and killed them (Wrangham, 2019). This process of deliberate negative selection (which has been seen in RHGs) is thought to have been systematic enough to have made us tamer than chimpanzees, who are posited to resemble our last common ancestor (LCA).

Unfortunately for simplicity, another ape species is exactly as related to us as chimps are: bonobos (Pan paniscus). Despite similar cognitive abilities and social complexity, they are nothing like chimps in their level of aggression, have different patterns of sexual behavior (including female same-sex relationships), and are far more cooperative than chimps (Gruber & Clay, 2016; Hare & Yamamoto, 2017). This seems largely due to female dominance over males, who are no match for bonobo females' cooperative alliances, partly based on oxytocin- (OT-) mediated sex (Moscovice et al., 2019). Yet even the less OT-mediated malefemale sex is more social and even tender (including face-to-face copulation) than the chimp pattern of male physical dominance. Remarkably, bonobo females support their parturient comrades during labor and delivery (Demuru et al., 2018). This has long been considered a near-universal human trait, seen in RHGs (Konner & Shostak, 1987) and central to some theories of human evolution (Rosenberg & Trevathan, 2002, 2018), including Hrdy's model of the evolution of cooperation (Hrdy, 2009; Hrdy & Burkart, 2020).

When I mentioned many years ago to my mentor, primatologist Irven DeVore, that we needed more genetic and neurobiological information to help decide which of our two closest relatives we most resemble, he replied that we just have to look at human behavior to see that we are more like chimps.

This is certainly true for violence and male dominance over females for most of history. However, we resemble bonobos in our general cooperativeness, in our less coercive dominance of males over females (certainly among RHGs), and in the more social nature of our sexual encounters.

When the bonobo genome was sequenced and the three could be compared (Pruefer et al., 2012), hopes were raised for a behavior-genetic answer. Despite our equal quantitative relatedness to each species, more than 3% of the human genome was found to be more closely related to either the chimpanzee or the bonobo genome than these are to each other. Human ancestors split from the line leading to both around 6 million years ago (mya), while they separated from each other only around 1–2 mya. Controversy continues about what features of the three species' behavior were present in the LCA. At stake is whether the old "killer ape" version of human evolution has validity—a more chimp-like LCA, with bonobos diverging behaviorally.

Studies of regional gene expression in the three species' brains (Khrameeva et al., 2020) as well as gene-based neuroanatomical differences (Staes et al., 2019) are making progress. James Rilling's group, in the first-ever comparison of chimp and bonobo brains using diffusion tensor imaging (Rilling et al., 2012), found "that bonobos have more gray matter in brain regions involved in perceiving distress in both oneself and others, including the right dorsal amygdala and right anterior insula" as well as "a larger pathway linking the amygdala with the ventral anterior cingulate cortex ... implicated in both top-down control of aggressive impulses as well as bottom-up biases against harming others. We suggest that this neural system not only supports increased empathic sensitivity in bonobos, but also behaviors like sex and play that serve to dissipate tension, thereby limiting distress and anxiety to levels conducive with prosocial behavior" (p. 369).

Specific neurogenomic data—for example, three-way comparisons of the structure of receptors for OT, vasopressin, serotonin, and dopamine (Staes et al., 2021)—as well as detailed neural microanatomical comparisons in socioemotional circuits (Issa et al., 2019) are emerging. Studies comparing wild foxes with foxes bred for 50 generations to be tame reveal regionally specific brain gene expression differences that may point to new investigations of chimpanzees, bonobos, and humans (Rosenfeld et al., 2019).

Despite the violence in our deep evolutionary prehistory (Orschiedt, 2020), there may have been a new form of violence late in the process: "Sites like Nataruk, at Lake Turkana, Kenya, and Jebel Sahaba in Sudan seem to indicate a new dimension in intra-human violence. These sites present the first conflicts of a larger scale at the end of the Palaeolithic" (Orschiedt, p. 75/loc. 2598). As noted, RHGs show variable but often low levels of intergroup violence (Fry & Soderberg, 2013; Lee, 2018), and the archeological record shows an increase in various parts of the world associated with agriculture (Ferguson, 2013; Lambert, 2002), although there are problems with all these data.

Some horticultural and pastoral societies engaged in continual raiding, ambush, headhunting, and battles or preparation for those activities (Chagnon, 1968; Knauft, 1985; Koch, 1974; Rosaldo, 1980); some were organizations for predatory expansion (Kelly, 1985; Sahlins, 1961). Massive battles on an unprecedented scale, drawing soldiers from a wide geographic range, became possible in the Neolithic (Jantzen et al., 2011; Meyer et al., 2015). We might say that if hunter-gatherers had lower levels of organized violence it was more because they were less organized than because they were less violent.

As for the claim of decreasing violence with the rise of what we call "civilization," these instances of Pax Romana-equivalents worldwide all followed periods of predatory expansion through conquest, and required quotidian structural violence ranging from slavery to human sacrifice. The myth that the Indus Valley process was an exception to this generalization is false (Cork, 2005; Green). Karl Marx wrote that capital comes into the world "soiled with mire from head to toe and oozing blood from every pore" (Marx, 1883). Whether or not this is true of capital, "civilization" literally arose from the mire of flooded fertile soil streaked with the blood of conquered people. Men killed weaker men and seized women for sexual abuse, or enslaved both. Hereditary aristocracies with standing armies allied with merchant and priestly classes. All were coalitions—conspiracies—of men. Whatever the rates of violent deaths under "civilizations" corrected for the size of the whole species, all were empires that had perfected organized violence on a new scale. But their ultimate logic was neither political, economic, nor religious. It was a product of evolution by natural selection.

On the Nature of Cooperation, Conflict, Authority, and Cruelty

Human beings become exceptionally cooperative when at war (Collins, 1993; Coser, 1956) or in childhood group conflicts (Majolo & Marechal, 2017); even OT, a hormone and neurotransmitter for cooperation, functions to intensify in-group cooperation while *increasing* hostility to the out-group, a phenomenon known as parochial altruism (De Dreu et al., 2012). (Recall that dominant bonobo female coalitions are partly based on OT-mediated same-sex encounters; perhaps their outgroup is males?) But long before OT's role was discovered, there was much relevant research.

The classic "Robbers Cave" experiment randomized 11-year-old boys in a summer camp to two competing teams. Within days, sportsmanship gave way to name-calling and demeaning of the out-group; in a week or two, abusive stereotypes crystallized (Sherif et al., 1961), consistent with the boyishness of war. Many experiments with adults showed that bias is easily fostered against arbitrarily created groups. Frustrating people or lowering their self-esteem worsens such prejudices (Robinson & Tajfel, 1997). Women are susceptible, but less so than men.

Melissa McDonald's group reviewed research supporting their "Male Warrior Hypothesis." Men are more ethnocentric and xenophobic, more likely to dehumanize members of outgroups (calling them animals), and more willing to make sacrifices to punish them. Across many cultures, men show more social dominance, preference for hierarchy, embrace of the flag

or colors, and group-based identity. In war games, intergroup conflict is more easily triggered in men, who more often make unprovoked preemptive strikes. Men but not women support war more strongly when primed with an attractive person of the other sex. Male hostilities are also primed by out-group males, the "out-group male target" effect (McDonald et al., 2012; Muñoz-Reyes et al., 2020). All this was consistent with what Lionel Tiger had shown decades earlier about the dynamics of all-male groups (Tiger, 1969). And, since violence is inherently unpredictable (Konner, 2015a), in-groups must be ready.

But the nightmare of history also demanded studies of authority. Stanley Milgram showed that the great majority of people of either sex will obey an authority figure in a white coat who orders them to punish unknown others with what they believe are dangerous electric shocks (Milgram, 1963; Milgram, 1974). Philip Zimbardo and his colleagues showed that when college-age men were randomly assigned to be inmates or guards in a mock-prison experiment, about half of those assigned to either group—with encouragement from the experimenters—took on the roles in disturbingly realistic ways, including brutality by the guards.

Subsequent replications showed, not surprisingly, that the type of authority exerted and the subjects' identification with that authority contributes to the behavioral outcomes in Milgram—(Burger, 2009, 2014; Doliński et al., 2017; Haslam et al., 2014) and Zimbardo-type studies (Reicher & Haslam, 2006; Zimbardo, 2006). These refinements make neither study less relevant to real-world human cruelty.

As reported, "my partial replication of Milgram's procedure suggests that average Americans react to this laboratory situation today much the way they did 45 years ago" (Burger, 2009, p. 9); "in spite of the many years which have passed since the original Milgram experiments, the proportion of people submitting themselves to the authority of the experimenter remains very high" (Doliński, p. 931); and "the way that a mere simulated prison environment generated degrading and abusive behavior and strong emotional reactions, so rapidly and dramatically, among normal, healthy college students who were randomly assigned to their roles, continues to serve as an important lesson about exactly how powerful and destructive these dynamics can become" (Zimbardo & Haney, 2020, p. 402).

Critics of Milgram and Zimbardo say "that individuals' willingness to follow authorities is conditional on identification with the authority in question and an associated belief that the authority is right" (Haslam & Reicher, 2012, p. 1), which does not in the least weaken the relevance of these studies to the human nature and history of tyranny and cruelty.

But how did these all-too-human characteristics evolve?

"A Few Words about What I Have Called Sexual Selection"

Thus, in *The Origin of Species*, Darwin introduced a new idea that would equal or eclipse survival in his and others' descriptions of evolution (Darwin, 1859/1872/1958): "This depends,

not on a struggle for existence, but on a struggle between the males for possession of the females; the result is not death to the unsuccessful competitor, but few or no offspring. Sexual selection is, therefore, less rigorous than natural selection. Generally, the most vigorous males ... will leave most progeny... A hornless stag or spurless cock would have a poor chance of leaving offspring" (pp. 74–75).

He might have said "no chance," since in fact it is *not* less rigorous; leaving no offspring is the functional equivalent of dying before breeding age—worse, perhaps, since the pre-reproductive individual might before its death have consumed considerable parental investment, now wasted. Darwin again:

Sexual selection by always allowing the victor to breed might surely give indomitable courage, length to the spur, and strength to the wing to strike in the spurred leg, as well as the brutal cockfighter, who knows well that he can improve his breed by careful selection of the best cocks. How low in the scale of nature this law of battle descends, I know not; male alligators have been described as fighting, bellowing, and whirling round ... for the possession of the females; male salmons have been seen fighting all day long; male stag-beetles often bear wounds from the huge mandibles of other males. The war is, perhaps, severest between the males of polygamous animals, and these seem oftenest provided with special weapons. The males of carnivorous animals are already well armed; though to them and to others, special means of defense may be given through means of sexual selection, as the mane to the lion, the shoulder-pad to the boar, and the hooked jaw to the male salmon; for the shield may be as important for victory, as the sword or spear (p. 75).

Much of this language would be unacceptable now, but the essence endures: Males often differ from females in their weap-onry, a product of countless generations of male conflict over females, making the sexes diverge. He calls the lion's mane a shield, when it is also a display of beauty. But he gives beauty its due: "Amongst birds, the contest is often of a more peaceful character. ...

There is the severest rivalry between the males of many species to attract, by singing, the females. ... Birds of paradise, and some others, congregate; and successive males display their gorgeous plumage and perform strange antics before the females, which standing by as spectators, at last choose the most attractive partner. ... If man can in a short time give elegant carriage and beauty to his bantams ... I can see no good reason to doubt that female birds, by selecting, during thousands of generations, the most melodious or beautiful males ... might produce a marked effect (p. 75).

This is an antidote to the sexist language about conflict and weaponry, balancing it with a theory of female aesthetic choices, well established today (Prum, 2017). Here the (usually) male breeders on farms Darwin observed were replaced by females among wild animals (especially birds), who became the breeders shaping endless generations of males.

Darwin's book expanding his original "few words" (Darwin, 1981) documented the process throughout the animal world. But it would take another century before more neutral language was used: "Where one sex invests considerably more than the other, members of the latter will compete ... to mate with members of the former" (Trivers, 1972, p. 173). Thus sexual selection applies equally to birds like the cassowary, phalarope, and jacana, where females are larger, more colorful, and more aggressive than males, mating with multiple males who do the parental care (Emlen & Wrege, 2004a, 2004b; Judson, 2013; Moore, 2007; Safari & Goymann, 2020). Such reversals (Janicke et al., 2016) are the exceptions that prove the rule: the sex that invests less in the care of offspring will fight for and/or be chosen by the other.

In humans, beauty plays a role in both sexes' mating choices, but human biology dictates a low ceiling on women's reproduction, while some of their male counterparts—actors like Warren Beatty and Charlie Sheen, musicians like Mick Jagger and Gene Simmons, sports stars like Wilt Chamberlain and Dennis Rodman—credibly claim to have had sex with thousands of women. Peacock-like beauty in displays has also been sought by chiefs, dukes, kings, and emperors, not to mention the dazzling uniforms of military leaders. But in human history weapons and force are the essence of sexual selection. Women described as beautiful are fought over by men in *The Iliad, The Bible, The Mahabharata*, and other texts of many cultures; all involve powerful men's use of force to accumulate women and subdue or destroy lesser men.

Since men, like viruses, lack their own reproductive machinery, they must succeed by controlling the reproductive capacity of others, which is why so much of history is about men's control of uteruses—those of their sisters, daughters, wives, concubines, and slaves. This was true of men exchanging women in small-scale societies (Lévi-Strauss, 1969), of the Taliban who at this writing have just retaken control of Afghanistan, and of Texas state legislators controlling wombs with ever-more-coercive laws.

Sexual Selection and the Descent of Men

Laura Betzig's landmark book, *Despotism and Human Reproduction*, changed permanently how I and many others think about the nightmare of history (Betzig, 1986). Taking seriously the Bible's King Solomon, who reportedly had 700 wives and 300 concubines, Betzig showed that kings, emperors, and other despots around the world throughout history had up to hundreds of wives and concubines and hundreds of children. Lesser versions of these privileges accrued to the rulers' close male allies in hereditary political and military hierarchies. These are just the official unions producing children with formal status, and do not count the large numbers resulting from matings between such men and unrecognized, often coerced women.

Since there was no reason to believe that sex ratios were naturally skewed in these kingdoms, every additional sexual partner used or abused by these men left a lower-ranking man without a mate. These much more numerous men became sword-and-spear fodder and sensibly took the risk of joining the king's army rather than that of punishment for avoiding it; in addition, if they were lucky enough to survive and win, they could mate on the losing side. This was sexual selection with a vengeance.

Betzig's idea, fielded in the 1980s, has received decisive support, much of it from unexpected directions. DNA analysis by Tatiana Zerjal's group showed that about sixteen million men alive today—including one of every twelve central Asian males—have a Y-chromosome haplotype suggesting that they are descendants of one man who lived around the time of polygynist-conqueror Genghis Khan, whose sons and grandsons had similar habits and power (Wen et al., 2019; Zerjal et al., 2003). That man *could* have been Genghis Khan himself, although other, earlier males have been proposed. At least ten other men left very large genetic legacies among Asian pastoral peoples (Balaresque et al., 2015), known as "star clusters". Two thirds of the men in Western Kazakhstan are descended from one man who corresponds in historical time to the founder of their clan (Zhabagin et al., 2021).

This phenomenon was not restricted to one part of the world. As shown by Laoise Moore and her colleagues in 2006, roughly the same proportion—about 8 percent—of Irish men today share a haplotype traceable to one man who lived more than a thousand years ago, probably a chieftain in an era of relentlessly warring tribes and fiefdoms in Ireland and Britain (Moore et al., 2006). Similar findings pertain to Bronze Age Europe (Batini & Jobling, 2017). And the oldest population in Ecuador is descended from male Incan invaders who lived centuries ago (Di Corcia et al., 2021).

As Walter Scheidel shows in his review of genetic studies (this issue), populations throughout the world have much more male than female foreign ancestry (Scheidel, 2022). The "Genghis Khan" model applies generally, although often not one but many conquering males were involved. Populations spreading out of Asian steppes carried out male-biased population replacement affecting descendant gene pools from Britain through Europe and South Asia to Siberia. In each of these locales, Y-chromosomes of today are much more dominated by the genetic signatures of ancient invaders than is the case for autosomal or mitochondrial DNA, reflecting respectively a gender-balanced or female-biased ancestry, both of which continued to respresent the local invaded peoples.

In Britain, Y-chromosomes of invaders replaced up to 90% of the genetic legacy of local males (Olalde et al., 2018), and similar findings apply in Iberia (Olalde et al., 2019), the Indus Valley (Goldberg et al., 2017; Silva et al., 2017), and elsewhere in Europe and Central Asia (Narasimhan et al., 2019). Mestizo populations in Mexico heavily lean toward male Spanish and female Native American ancestry (Martínez-Cortés et al., 2012, 2013). Due to the brutal biases of slavery, the 19% of European ancestry in African-Americans is 90% male, but only 5% female (Bryc et al., 2015). Yet the skewing toward male European ancestry is much greater in Latin Americans of African descent (Micheletti et al., 2020).²

Thousands of years earlier, reproductive skew favored some males over others on a major scale with the rise of agriculture.

In addition to the Out-of-Africa genetic bottleneck, there was "a second strong bottleneck in Y-chromosome lineages dating to the last 10 ky ... caused by cultural changes affecting variance of reproductive success among males" (Karmin et al., 2015, p. 1). The timing of the bottleneck—a smaller number of males fathering more and more children—is consistent with Neolithic population expansions, increased inequality, and war as predatory expansion. But even in a small-scale horticultural society like the Yanomamo of highland Venezuela, men who committed homicide had more children and grandchildren than men who did not (Chagnon, 1988).

Betzig has continued her research (Betzig, 2012), showing that "in every one of the six pristine civilizations—in Mesopotamia, Egypt, India, China, Mexico, and Peru—emperors collected hundreds of women and had hundreds of children" (p. 312). Although having nothing like the reproductive opportunities of males in imperial elites, men in herding and gardening societies have substantially greater variance in reproductive success (RS) than women. There is an impact of male status on RS even in hunter-gatherers (von Rueden & Jaeggi, 2016), but the variance in status and the absolute value of the variance in RS are modest compared to other kinds of societies (Betzig, 2012; Smith et al., 2010). The second Y-chromosome bottleneck, associated with the Neolithic, confirms in genomic history Betzig's anthropological generalizations (Karmin et al., 2015; Zeng et al., 2018).

For millennia those Y chromosomes passed through the uteruses of millions of women, many of whom did not freely consent; nor did millions of deprived, bereft, and slaughtered fathers, brothers, husbands, and suitors of those women, whose fruitless genes died with them. Not just in Asia, Ireland, and Ecuador but worldwide, men bear the genes and to some extent the inclinations of those who in a millennial past killed men and seized women more or less at will. We still deal with the genetic legacy of the males who gained most. Many millions of powerless men alive today are probably contaminated with the narcissism, bullying, misogyny, and violence in that legacy.

War as Sexual Selection

As ecologist Bobbi Low said, war is a kind of runaway sexual selection (Low, 2000, p. 217), and not just for the men high in the military hierarchy. We often rightly lament the fate of women consigned to be 2nd or nth wives or concubines of powerful men, but those women have a chance to reproduce. For each of them there is a man who is denied that chance entirely, living in frustration or dying in war.

Wars have always been partly about women, in at least four different ways. (1) Men have to shield their wives and daughters from being seized or raped by a raiding party or conquering force and retaliate to preserve their honor. (2) Those same men want to seize and rape women of fallen enemies. (3) Rival groups exchange women, but if a marriage sealing a peace between two groups fails, war resumes. (Anthropologist Mervyn Meggitt quoted the Mae Enga, tribal warriors of highland New Guinea, as saying, "We marry the people we fight"

(Meggitt, 1977, p. 194). (4) For surviving conquerers, war brings reputation and spoils that enable a man to marry and mate better back at home.

Almost all known wars have involved rape, although historians have been strangely reticent on the subject, treating it as an incidental by-product of mass violence aimed at other purposes (Heineman, 2011; Nordås & Cohen, 2021). Recent studies of neglected documents have presented rape in a different light. For the ancient world, Kathleen Gaca writes, "The violent subjugation of women and girls through sexual assault and torment has been an integral and important part of Western warfare over the two millennia from the Bronze Age to late antiquity." This extends from the time of the Trojan War and the biblical Book of Judges well into the Christian era. Even when the stated goal was to seize lands and mines, "the objective of taking captive girls and women as subaltern wives, concubines, prostitutes, and slaves remains central" (Gaca, 2011, p. 87).

In Britain and Ireland between 800 and 1,200 C.E. (a time of Scandinavian invaders as well as local tribes and chiefdoms warring amongst themselves), David Wyatt found that the abduction and subjugation of women, including violent rape, was a nobleman's badge of honor, and even common farmers could have female slaves and concubines (Wyatt, 2009). To earn and keep a place in the hierarchy, a man had to control "the procreative capabilities of a daughter, a sister, a female kinswoman or servant. ... Men of all social levels would aspire to female accumulation" (Wyatt, p. 132), abbots and bishops included. So central was this process that the Irish word for "female slave," cumal, was a unit of value, equal to three ounces of silver, eight or ten cows, or defined acreage; no standard of value was similarly equated to male slaves. In a twelfth-century chronicle a Danish king instructs his soldiers to plunder England and "cut the throat (regardless of pity) all of the male sex who might fall into their hands, preserve the females for gratification of their lust" (Wyatt, p. 143).

Wyatt sees a parallel to the Mursi, herder-warriors of southwest Ethiopia. The pattern also resembles that of the Nuer, Sudanese pastoralists, who had an efficient organization for predatory expansion at the expense of their weaker Dinka neighbors (Kelly, 1985; Sahlins, 1961). Yet the Nuer were not organized in chiefdoms, as in medieval Britain and Ireland, where leaders controlled the sex lives of their underlings in peacetime but preferred to direct young men's lust outward, through war; the numerous illegitimate children of captured women grew up to be warriors and wives or concubines. Church leaders sometimes preached against these patterns but sometimes condoned or joined in them (Wyatt, p. 263).

In the Crusades, capture and rape of women was common on both sides (Wyatt, p. 124), despite official prohibitions and the religious aims of both armies (Curry, 2011). European Crusaders took women along as wives, servants, and prostitutes; when the Islamic defenders captured them, they were raped, ransomed, or both. Noblemen on both sides tried to rehabilitate higher-status women, but this was difficult; the women violently raped abroad would, if ransomed, lose status at home

(Friedman, 2002). Sex workers and other female servants belonged to whichever men prevailed.

This sickening history was not a pure quest for male use of wombs to reproduce. Men also at times raped men to humiliate them and might mutilate or kill women while or after raping them; neither of these war crimes boosted the victors' RS, at least not directly. In many empires young women were buried with powerful men even in peacetime—a waste of wombs seemingly inconsistent with sexual selection theory, yet still sequestering uteruses: If I can't have you, no man will. Nothing in biology is 100%. But thanks to the Y-chromosome reconstructions of history, we can no longer doubt that all this war and conquest enhanced many men's RS.

For the colonial era, the model has evident validity. Although chattel slavery—the formal ownership of a person—was banned throughout the British empire in the 1830s, sex trafficking and sexual slavery continued and is numerically more prevalent worldwide today than ever before in history (UNODC, 2021). All wars up to the present day have led to widespread rape, often including sexual slavery on a large scale. Jewish girls and women were forced sex slaves for Nazi soldiers during World War II (Hedgepeth & Saidel, 2010) and Korean and Chinese girls and women were forced to serve as "comfort women" for the Japanese military (Totani, 2011).

Soviet soldiers raped German women in large numbers, with estimates ranging from tens of thousands to over a million, including extreme gang rapes that killed the victims (Beevor, 2007). Stalin declared rapes understandable and forgivable after the Red Army's long march to Germany. Estimates for American soldiers suggest that they raped "only" 11,000, but their army was a fraction of the size of the Soviets'. Of the US servicemen, only a few were punished, mainly African-Americans. "Fraternization" was forbidden, but a U.S. field commander supposedly said, "Copulation without conversation does not constitute fraternization" (White, 2003, p. 98).

Through rape and "fraternization," every occupying army left fatherless children behind (Grossman, 2011). At least hundreds of thousands of babies were sired by German troops in occupied Europe. Allied troops fathered an estimated 66,000 children in Germany in the decade after the war, and many others during it (Hohn, 2002). In the Pacific wars and occupations, including Japan, Korea, and Vietnam, American men left an estimated 100,000 Amerasian children behind, most of whom would be ostracized along with their raped or seduced and abandoned mothers (Levi, 1993). For each of these mothers, a man of her own country, culture, and ethnicity would be killed or barren. The twentieth century was, proportionately, the least violent century, but rape and other sexual spoils accrued to the soldiers of all modern armies.

Recent wars show variation in rape frequency as a function of whether the official stance is one of authorization, tolerance, or prohibition (Nordås & Cohen, 2021; Wood, 2018). These data will help lead to changes in international law that punish countries and military organizations that take no measures against sexual assault. But it is not reassuring that this literature ignores evolution by sexual selection. A wide-ranging review of

civil wars between 1980 and 2009 showed that rape occurred in most of them, and that levels of rape were not affected by the presence of women combatants, some of whom participated (Loken, 2016). As one historian concluded, "There have been few conflicts where rape and sexualized violence have been absent or effectively sanctioned" (Copelon, 2011, p. 232). Rape is a feature of warfare, not a bug.

Recent History Challenges the Paradigm

Men ruling modern nation-states and empires do not amass scores or hundreds of wives and concubines nor father hundreds of children. Princes or chieftains in some places still do, but leaders in developed nations do not. For one thing, the great invention of the 19th century, the vulcanization of rubber, allowed sex to be separated from reproduction, so even men like John F. Kennedy, Bill Clinton and Donald Trump, who spread their seed as best they could, did not leave large numbers of offspring. This is not a problem for the theory, since all it could have predicted was male sexual exploits in high places; evolution could not anticipate a future in which men's much-sought-after sex did not father offspring.

That said, at least 16 US presidents from George Washington onward are known or credibly suspected of having sexual relations outside of marriage with women who were typically their subordinates, and a number fathered children with women they owned (Smith, 2018). Men at the top in France have been similarly inclined to exercise sexual freedom with women (Garrigues, 2019). Despite attempts to crack down by Xi Jinping, high officials in China in the past few years have had numerous mistresses (Beach, 2015). Years after the #metoo movement, which brought down many powerful men for sexual harrassment or assault, Governor Andrew Cuomo of New York was forced to resign after numerous credible accusations of harrassment, yet he resigned in a state of denial.

Despite this, and despite the great power men seek and have over women, we have many modern cases of men who did not take advantage of women. Richard Nixon, Jimmy Carter, and Barack Obama, just as powerful as JFK, Bill Clinton, and Donald Trump, apparently stayed socially and sexually monogamous both leading up to and during their presidencies. But this and other similar cases do not obviate the role of sexual selection.

First, as my mentor DeVore often said, sexual selection is a theory of motivation. This took me some time to understand, since it explains so much of what we observe in both nonhuman and human *behavior*. Although it doesn't in all cases explain what men do in the sexual sphere when they attain power, it still helps explain the strong motivation to seek power, which throughout the human past has been associated, for men, with expanded sexual opportunities. Such a motive, deeply engrained in men's nature, does not in every social, cultural, or historical situation result in sexual exploitation, especially after a long history of social monogamy.

Second, there are multiple levels of explanation of behavior, and these do not contradict each other (Konner, in press; Tinbergen, 1963). A critic of sexual selection theory wrote

that when teaching undergraduates, she shared some students with E. O. Wilson (Ruti, 2015). The students would reportedly say that sex is about reproduction, which she believed they learned from Wilson. Her answers: "So, when you're having your 3 AM hookup at Winthrop House, are you trying to produce a baby?' 'Why do you think so many American women spend much of their lives on the pill, despite the unpleasant side effects?' 'You don't seriously think that two gay men getting it on are hoping that a child will follow, do you?" This socratic reasoning is followed by a one-sentence paragraph: "I rest my case" (Ruti, 2015, p. 90).

She has no case, but merely conflates levels of explanation, revealing ignorance of how evolutionary explanations work. The emotional or neurohormonal causes of the 3 AM hookup no more preclude an evolutionary explanation than a hormonal explanation of peacock courtship displays would. Natural selection could not prepare us for contraception, but women take "the pill" because they want sex, and that motive results from eons of reproductive advantage for those whose hormones (and brains, and learning) made them want it. Gay men share many evolved biobehavioral mechanisms with their heterosexual ancestors; natural selection did not impede their inclinations, either because it can't erase all human variation or because gay men in the past achieved fitness in other ways (Jain & Rana, 2021).

Similarly, a man like Richard Nixon or Jimmy Carter can have all necessary biobehavioral equipment to seek and achieve power even though in their cases the process seems autonomous from the sexual exploitation of women through which those traits evolved. Let us look briefly into the historical basis of this (partial) disentanglement in sociocultural rather than genetic evolution.

Social monogamy strengthened in the ancient Greco-Roman world; we might actually say returned, since (despite some elective polygyny) the vast majority of hunter-gatherer marriages were monogamous (Marlowe & Berbesque, 2012; Walker et al.,). The Neolithic Y-chromosome bottleneck demonstrates a marked increase in male reproductive skew (Betzig, 2012; Karmin et al., 2015), but there was a baseline of socially monogamous experience during human evolution.

Greek monogamy, like Athenian democracy, was based on slavery and a double standard of sexual freedom: "monogamous" men kept concubines (Scheidel, 2009). "They were supposed to draw the line at cohabitation. ... At the same time, married men's sexual congress with their own slave women or with prostitutes was free of social and legal sanction" (Scheidel, p. 283). Rome had similar arrangements, with public acknowledgement of extramaritally conceived children being optional. Furthermore, easy divorce facilitated "effective polygyny"—men couldn't have two wives at once but "could marry several in a row, thereby raising reproductive inequality overall" (Scheidel, p. 283). In ancient Greece and Rome, as in all countries today, men had options.

Judeo-Christian tradition followed Greco-Roman into social monogamy. The Kingdom of Israel allowed polygyny; hence Solomon's 700 wives and 300 concubines. But in the diaspora Jews followed local laws. In the Roman Empire, where most Jews lived, they followed Roman practice, but it was only

around a thousand years ago that Jewish religious law officially prohibited polygyny, and that restriction was not adopted by all Jewish subcultures (Goldberg, 2003).

Jesus speaks against polygyny, but Paul is silent on it, and Augustine, in the fifth century, explicitly permitted it. Wealthy Christian men often had multiple wives, and some church leaders too had routine access to women. *Formal* polygyny was forbidden—social monogamy—and the prohibition strengthened in modern times. Serial monogamy—divorce—also opposed early Christian teaching and still defies Catholic doctrine. Despite its origins in Greco-Roman practice (Scheidel, 2009), Christians spread antipolygyny through Europe, and then through all the lands Europe conquered; social monogamy is now the norm in most of the world.

Many reasons have been offered for this, but social monogamy, however flawed, was the main mating pattern in huntergatherers, and that makes us largely a pair-bonding species, although with great adaptive flexibility (Quinlan, 2008). However, it has been possible throughout history for influential "monogamous" men to find extramarital paths to extra RS, and it is still possible today.

The Will to Power and the World of the Future

A trend toward autocracy is emerging throughout the world. Men are typically the heads of autocratic states or of democratic ones with autocratic tendencies. Among the most prominent of these (according to their Wikipedia entries), several have had serial wives and extramarital affairs (Donald Trump, Jair Bolsonaro, Boris Johnson, Vladimir Putin, Roderigo Duterte), while others (Xi Jinping, Viktor Orban, Kim Jung Un, Narendra Modi, Recep Tayyip Erdoğan) apparently have not.

When Henry Kissinger was National Security Advisor to the austere Richard Nixon, *The New York Times* noted that "as a 47-year-old divorcé, he makes society news by squiring such glamor girls [sic] as Gloria Steinem in New York, Joanna Barnes and Jill St. John in Hollywood, and Barbara Howar in Washington. Power, he has observed, is the great aphrodisiac" (Smith, 1971). The article depicts him as insecure despite his power; he was a short, chubby, plain-looking man, but this did not impede his associations with much younger, very gifted, sought-after, beautiful women, then known without irony as "glamor girls." As in Xi's China, a country can be run by a powerful man whose associates exploit women even when he does not.

Still, there is an automous will to power that drives certain people, typically men, to dominate others. For Friedrich Nietzsche, who popularized the term, it was the key trait of the "superman" (*Übermensch*), and was bound up with cruelty, which Nietzsche approved (Parmer, 2017). A phrase applied to some recent events, "the cruelty is the point," seems apt (Serwer, 2021). Alfred Adler, who founded the school of Individual Psychology, also gave a central role to the will to power, including the cruelty, but viewed it as a pathology of certain men, whose hypermasculinity stemmed

from feeling inferior and a fear of seeming feminine (Anspacher & Anspacher, 1964). Be that as it may, alongside Adler's formulation, systematic studies by Theodor Adorno and others of The Authoritarian Personality became a research priority in the wake of World War II (Adorno, 1950).

Today we use different terms to describe autocrats. A 2020 study applied standard personality measurements to 157 world leaders, including 14 deemed to have autocratic tendencies, all in countries with electoral politics (Nai & Toros, 2020). "Strongmen," the authors ask; "Who are they?" (p. 1) Over 1800 "expert" raters were recruited, with expertize defined as professional academic knowledge of the relevant country's politics. Not surprisingly, the autocratic-leaning leaders scored significantly lower on the "Big Five" personality traits of agreeableness and emotional stability—the latter even in comparison to right-wing non-autocrats, while scoring marginally higher on extraversion.

More importantly, on another domain of personality known as "The Dark Triad" (narcissism, subclinical psychopathy, and Machiavellianism), the autocrats scored higher than the comparison groups. Narcissism is defined as grandiosity, ego-reinforcement behaviors, and tendency to seek attention and admiration; psychopathy as lack of remorse, insensitivity, and impulsivity; and Machiavellianism as a tendency to use manipulation and strategic behaviors. For the scales in question, all three are considered subclinical, within the normal range. The Dark Triad seems similar to the will to power that Nietzsche embraced and Adler warned against, and this study is in the research tradition of Adorno on the authoritarian personality. Sexual behavior of these "strongmen" was not mentioned, but in males who are not leaders, the Dark Triad is consistently linked to short-term and coercive mating strategies, across cultures (Jonason et al., 2020; Prusik et al., 2021; Valentova et al., 2020).

Since academics are overwhelmingly left-leaning, they tend to focus on right-wing authoritarianism (RWA). After Lenin, Stalin, Trotsky, Mao, Pol Pot, Fidel Castro, Kim Jong Un (and his father and grandfather), Hugo Chavez, and Nicholas Maduro, the bias seems far-fetched, but it exists. New Emory University research led by Thomas Costello and the late Scott Lilienfeld measured left-wing authoritarianism (LWA) in 7,258 individuals across six samples (Costello et al., 2021). Despite dubbing LWA "'the Loch Ness Monster' of political psychology," they show that it is real and robust, overlapping RWA in "a shared constellation of personality traits, cognitive features, beliefs, and motivational values that might be considered the 'heart' of authoritarianism," and that "LWA powerfully predicts behavioral aggression and is strongly correlated with participation in political violence" (Costello et al., p. 1). Again, not all authoritarians are sexual exploiters, but the extreme promiscuity of Mao Zedong (Chang & Halliday, 2005; Li, 1994) and Fidel Castro (Bardach, 2007; Sánchez, 2015) is well documented.

Autocrats must have followers, but despite extensive research on leader psychology, until recently "followers and followership theory have been given short shrift" (Uhl-Bien et al., 2014, p. 83). There is a long history of observations of "the madness of crowds" (Canetti, 1981; Mackay, 1932), and research on "emotional contagion" (Hatfield et al., 1994), but not in relation to leaders. Sigmund Freud, in his 1922 monograph, *Group Psychology and the Analysis of the Ego* ("group psychology" being a questionable translation of *Massenpsychologie* in the German), described the submergence of individual character and will in the mass (Freud 1949 (orig., 1922)) as,

The lack of independence and initiative in their members, the similarities in the reactions of all of them ... the weakness of intellectual ability, the lack of emotional restraint, the inclination to exceed every limit in the expression of emotion, and to work it off completely in the form of action (pp. 81–82).

Further, "Hypnosis is not a good object for comparison with a group formation, because it is truer to say that it is identical with it. Out of the complicated fabric of the group it isolates one element for us—the relation of the individual to the leader" (p. 78).

Current followership studies use the Milgram-type obedience research as a touchstone, but mass dynamics are more complex. Theories include a socially contagious "romance of leadership" with charismatic men (Uhl-Bien et al., 2014, p. 86), an "avoidant attachment style" rather than secure attachment, ideas drawn from child studies (p. 87), and a "toxic triangle" of *a destructive leader*, *colluders*, and *conformers* (p. 88). Explicitly evolutionary analyses propose followership as a fulfillment of adaptive needs: the triad of guidance in a shared direction, protection from threats, and dispute settlement (de Waal-Andrews & van Vugt, 2020); or, followers lacking the will or skill to lead (Bastardoz & Van Vugt, 2019). But these analyses do not refer to the ultimate cause—enhancing reproductive success—nor are they data-based.

The will to power, tied to sexual and reproductive success or not, will play a strong role in the near future. After a steady increase in the number of democratic countries in the late 20th century, accelerating in the 1990s, we see a marked shift back toward autocracies of the right and left (Maerz et al., 2020). Fortunately, this reversal has not erased prior democratization numbers, even when population-weighted, although if present trends continue it could do so soon. Social protest appears to be growing in the new autocracies, which could slow the trend. Needless to say, replacing men with women in high positions would not eliminate the will to power, but it would reduce the role of the Dark Triad traits and sexual exploitation (Konner, 2015b).

Timothy Snyder, in *On Tyranny: Twenty Lessons from the Twentieth Century*, treats right—and LWA with salutary focus (Snyder, 2017). Europe saw "three major democratic movements: after the First World War in 1918, after the Second World War in 1945, and after the end of communism in 1989. Many of the democracies founded at these junctures failed, in circumstances that in some important respects resemble our own" (Snyder, p. 10/loc. 67). Also, "The European

history of the twentieth century shows us that societies can break, democracies can fall, ethics can collapse, and ordinary men can find themselves standing over death pits with guns in their hands" (Snyder, p. 11/loc. 74). The things done by ordinary people—deafening echoes of the massacre at Nataruk 10,000 years ago—should make us really afraid (Browning, 1992; Gross, 2001).

Snyder in 2017 issued a prescient warning of a day that would bring the U.S. into the European mode of democracy sliding toward autocracy: January 6, 2021. In that insurrection and attempted coup hundreds took over the Capitol, harmed defending police, and gravely threatened lawmakers. But one incident, late in the day on the Capitol steps outside, lasting 90 s, is particularly instructive (Barry et al., 2021). "Amid the hand-to-hand combat, seven men from seven different states stood out. Although strangers to one another, they worked as if in concert while grappling with the phalanx of police officers" (Barry et al., 2021, p. A1). Their ages ranged from 27 to 57 (three in their 50s, two in their 40s), and by all accounts were up to that moment not just ordinary but mostly good men.

Scrutiny of multiple videos of their event "provides a close-up view of how seemingly average citizens—duped by a political lie, goaded by their leaders and swept up in a frenzied throng—can unite in breathtaking acts of brutality" (p. A1) They seriously injured three police officers and ignored a woman dying of an overdose at their feet, her dead body soon trampled by the mob. The scenes inside the Capitol were "startling" and "tend to eclipse the medieval civil war that was waged just beyond its doors ... Americans fought other Americans with fists and cudgels, with bear spray and hunks of broken wood, roaring in combat frenzy and spilling blood on the white steps of their country's democratic center" (p. A23). One of the weapons used by the seven men was a large flagpole bearing the Stars and Stripes.

Few doubt that we will see more of this and some predict civil war, but even without such violence systematic lies and draconian state laws are preempting the future normal exercise of democracy. It may be hard to believe that the brutality, the lies, and the will to power leading toward autocracy trace back to a twelve-millennial history of charismatic, cruel men and their willing followers waging relentless war in which one of the main spoils was women that these men coercively bred upon, but it is true. This is the point of origin of the fierce motivation to wage war, conquer, rape, and kill. Lands, crops, mines, trade routes, and more were spoils of war needed to support the growing enterprise, including the offspring of women seized, but the ultimate cause, the ultimate motivation, was sexual selection.

The relative egalitarianism of hunter-gatherer societies suggests a baseline of human adaptation that was more democratic than what emerged in the Neolithic, especially as the rise of "civilization," dispersed Y chromosomes with new hidden dangers and ever-greater efficiency. The struggle to establish democratic forms of government in the past few centuries—in societies far more complex, denser, and hierarchical than hunter-gatherers—has not been easy or linear, and its success

is by no means guaranteed. Perhaps it bodes well that present democratization efforts may draw on fundamental though imperfect egalitarian tendencies in small-scale societies of the deepest human past. But given the genetic impact of sexual selection on male dominance over the past ten or twelve millennia, vigilance is warranted.

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Notes

- The quote is on p. 787: "... das Kapital von Kopf bis Zeh, aus allen Poren, Blut- und schmutz-triefend." http://books.google.com/ books?id=xdYDAAAAMAAJ&dq=Kapital+von+Kopf+bis+Zeh, +aus+allen+Poren,+Blut-+und+schmutz-triefend&source=gbs_navlinks_s
- I am grateful to Dr. Scheidel for leading me to the articles cited in this paragraph. His own treatment of them and others is much more thorough (Scheidel, 2022).
- For an overview, statistics, and further references, see the Wikipedia entry "War children," accessed October 10, 2021, at http://en. wikipedia.org/wiki/War children#War children of World War II.

References

Adorno, T. W. (1950). The authoritarian personality (1st ed.). Harper. Altman, D., Rojas-de-Galarreta, F., & Urdinez, F. (2020). An interactive model of democratic peace. Journal of Peace Research, 58(3), 384–398. https://doi.org/10.1177/0022343319883672

Anspacher, H. L., & Anspacher, R. R. (Eds.). (1964). *The individual psychology of Alfred Adler*. Harper & Row.

Arcadi, A. C., & Wrangham, R. W. (1999). Infanticide in chimpanzees: Review of cases and a new within-group observation from the Kanyawara study group in Kibale National park. *Primates*, 40(2), 337–357. https://doi.org/10.1007/BF02557557

Bae, C., Sala, N., Arsuaga, J. L., Pantoja-Pérez, A., Pablos, A., Martínez, I., Quam, R. M., Gómez-Olivencia, A., Bermúdez de Castro, J. M., & Carbonell, E. (2015). Lethal interpersonal violence in the middle pleistocene. *PLoS One*, 10(5), e0126589. https://doi. org/10.1371/journal.pone.0126589

Balaresque, P., Poulet, N., Cussat-Blanc, S., Gerard, P., Quintana-Murci, L., Heyer, E., & Jobling, M. A. (2015). Y-chromosome descent clusters and male differential reproductive success:

- Young lineage expansions dominate Asian pastoral nomadic populations. *European Journal of Human Genetics*, 23(10), 1413–1422. https://doi.org/10.1038/ejhg.2014.285
- Bardach, A. L. (2007). Cuba confidential: Love and vengeance in Miami and Havana. Vintage Books.
- Barry, D., Feuer, A., & Rosenberg, M. (2021). 90 s of rage on the Capitol steps: Inside, violence ebbed; outside, 7 men united in a moment of stunning brutality, News analysis. *The New York Times* (pp. A1 & A22–A25). https://www.nytimes.com/interactive/2021/10/16/us/capitol-riot.html
- Bastardoz, N., & Van Vugt, M. (2019). The nature of followership: Evolutionary analysis and review. *The Leadership Quarterly*, 30(1), 81–95. https://doi.org/10.1016/j.leaqua. 2018.09.004
- Batini, C., & Jobling, M. A. (2017). Detecting past male-mediated expansions using the Y chromosome. *Human Genetics*, 136(5), 547–557. https://doi.org/10.1007/s00439-017-1781-z
- Beach, H. (2015). China's other women, Online. *Time*. https://time.com/4083260/chinas-other-women/
- Beevor, A. (2007). Berlin: The downfall 1945. Cambridge University Press.
- Beier, J., Anthes, N., Wahl, J., & Harvati, K. (2020). Prevalence of cranial trauma in Eurasian upper paleolithic humans. *American Journal of Physical Anthropology*, 174(2), 268–284. https://doi. org/10.1002/ajpa.24163
- Betzig, L. (1986). Despotism and differential reproduction: A Darwinian view of history. Aldine.
- Betzig, L. (2012). Means, variances, and ranges in reproductive success: Comparative evidence. *Evolution and Human Behavior*, 33(4), 309–317. https://doi.org/10.1016/j.evolhumbehav.2011.10.008
- Binding, K., & Hoche, A. (1975). Allowing the destruction of life unworthy of life: Its measure and form. Originally published by Felix Meiner Leipzig, 1920. Translated by Cristina Modak. Suzeteo Enterprises.
- Bowles, S. (2009). Did warfare among ancestral hunter-gatherers affect the evolution of human social behaviors?[see comment]. *Science* (*New York, N.Y.*), 324(5932), 1293–1298. https://doi.org/10.1126/science.1168112
- Bowles, S. (2012). Warriors, levelers, and the role of conflict in human social evolution. *Science (New York, N.Y.)*, *336*(6083), 876–879. https://doi.org/10.1126/science.1217336
- Bowles, S., & Gintis, H. (2011). *The cooperative species: Human reciprocity and its evolution*. Princeton University Press.
- Browning, C. R. (1992). *Ordinary men: Reserve police Battalion 101 and the final solution in Poland*. HarperCollins.
- Bruner, E., Píšová, H., Martín-Francés, L., Martinón-Torres, M., Arsuaga, J. L., Carbonell, E., & Bermúdez de Castro, J. M. (2017). A human parietal fragment from the late early pleistocene gran dolina-TD6 cave site, Sierra de Atapuerca, Spain. *Comptes Rendus Palevol*, 16(1), 71–81. https://doi.org/10.1016/j.crpv. 2016.02.002
- Bryc, K., Durand, E. Y., Macpherson, J. M., Reich, D., & Mountain, J. L.(2015). The genetic ancestry of African Americans, Latinos, andEuropean Americans across the United States. *The American*

- Journal of Human Genetics, 96(1), 37–53. https://doi.org/10.1016/j.ajhg.2014.11.010
- Burger, J. M. (2009). Replicating Milgram: Would people still obey today? American Psychologist, 64(1), 1–11. https://doi.org/10. 1037/a0010932
- Burger, J. M. (2014). Situational features in Milgram's experiment that kept his participants shocking. *Journal of Social Issues*, 70(3), 489–500. https://doi.org/10.1111/josi.12073
- Canetti, E. (1981). Crowds and power. Continuum.
- Chagnon, N. A. (1968). Yanomamo: The fierce people. Holt, Rinehart and Winston.
- Chagnon, N. A. (1988). Life histories, blood revenge, and warfare in a tribal population. *Science (New York, N.Y.)*, 239(4843), 985–992. https://doi.org/10.1126/science.239.4843.985
- Chang, J., & Halliday, J. (2005). Mao: The unknown story. Anchor Books/Random House.
- Chorover, S. L. (1979). From genesis to genocide: The meaning of human nature and the power of behavior control. MIT Press.
- Collins, R. (1993). What does conflict theory predict about America's future? *Sociological Perspectives*, 36(4), 289–313. https://doi.org/ 10.2307/1389390
- Copelon, R. (2011). Toward accountability for violence against women in war: Progress and challenges. In Heineman, E. D. (Ed.), Sexual violence in conflict zones (pp. 232–256). University of Pennsylvania Press.
- Cork, E. (2005). Peaceful Harappans? Reviewing the evidence for the absence of warfare in the Indus Civilisation of North-West India and Pakistan (c.2500–1900 BC). *Antiquity*, 79(304), 411–423. https://doi.org/10.1017/S0003598X0011419X
- Coser, L. (1956). The functions of social conflict. The Free Press.
- Costello, T. H., Bowes, S. M., Stevens, S. T., Waldman, I. D., Tasimi, A., & Lilienfeld, S. O. (2021). Clarifying the structure and nature of left-wing authoritarianism. *Journal of Personality and Social Psychology*, 122(1), 135–170. https://doi.org/10.1037/pspp0000341
- Curry, A. (2011). The theory and practice of female immunity in the medieval West. In Heineman, E. D. (Ed.), Sexual violence in conflict zones (pp. 173–188). University of Pennsylvania Press.
- Darwin, C. (1856). Letter to J.D. Hooker. Darwin Correspondence Project. https://www.darwinproject.ac.uk/letter/DCP-LETT-1924.xml
- Darwin, C. (1859/1872/1958). The origin of species by means of natural selection, or the preservation of favoured races in the struggle for life; introduction by Sir Julian Huxley. The New American Library.
- Darwin, C. (1981). The descent of man, and selection in relation to sex (orig. 1871), introduction by John Tyler Bonner and Robert M. May. Princeton University Press.
- Darwin, C. (1987). *Notebook M #84, August 16, 1838, #84e*. British Museum/Cambridge University Press. Retrieved February 12, 2022 from http://darwin-online.org.uk/content/frameset?keywords=more%20metaphysics%20locke%20than%20towards&pageseq=77&itemID=CUL-DAR125.-&viewtype=text
- De Dreu, C. K. W., Shalvi, S., Greer, L. L., Van Kleef, G. A., & Handgraaf, M. J. J. (2012). Oxytocin motivates non-cooperation in intergroup conflict to protect vulnerable in-group members. PLoS One, 7(11). https://doi.org/10.1371/journal.pone.0046751

- Demuru, E., Ferrari, P. F., & Palagi, E. (2018). Is birth attendance a uniquely human feature? New evidence suggests that Bonobo females protect and support the parturient. *Evolution and Human Behavior*, 39(5), 502–510. https://doi.org/10.1016/j.evolhumbehav. 2018.05.003
- de Waal-Andrews, W., & van Vugt, M. (2020). The triad model of follower needs: Theory and review. *Current Opinion in Psychology*, 33, 142–147. https://doi.org/10.1016/j.copsyc.2019.07.006
- Di Corcia, T., Scano, G., Martínez-Labarga, C., Sarno, S., De Fanti, S., Luiselli, D., & Rickards, O. (2021). Uniparental lineages from the oldest indigenous population of Ecuador: The Tsachilas. *Genes*, 12(8), 1273. https://doi.org/10.3390/genes12081273
- Doliński, D., Grzyb, T., Folwarczny, M., Grzybała, P., Krzyszycha, K., Martynowska, K., & Trojanowski, J. (2017). Would you deliver an electric shock in 2015? Obedience in the experimental paradigm developed by Stanley Milgram in the 50 years following the original studies. *Social Psychological and Personality Science*, 8(8), 927–933. https://doi.org/10.1177/1948550617693060
- Dwyer, P., & Damousi, J. (2020a). General introduction: Violence in world history. In Fagan, G. G., Fibiger, L., Hudson, M., & Trundle, M. (Eds.), *The Cambridge world history of violence, volume 1: The prehistoric and ancient worlds, Kindle edition* (Vol. 1, pp. 1–36). Cambridge University Press.
- Dwyer, P., & Damousi, J. (Eds.). (2020b). The Cambridge world history of violence (4 volumes) (Vol. 1–4). Cambridge University Press.
- Elias, N. (1994). The civilizing process. Blackwell.
- Ellman, R. (1982). *James Joyce: Revised edition*. Oxford University Press.
- Emlen, S. T., & Wrege, P. H. (2004a). Division of labour in parental care behaviour of a sex-role-reversed shorebird, the wattled jacana. *Animal Behaviour*, 68(4), 847–855. https://doi.org/10.1016/j.anbehav.2003.08.034
- Emlen, S. T., & Wrege, P. H. (2004b). Size dimorphism, intrasexual competition, and sexual selection in Wattled Jacana (*Jacana jacana*), a sex-role-reversed shorebird in Panama. *The Auk*, 121(2), 391. https://doi.org/10.1642/0004-8038(2004)121[0391: sdicas]2.0.co;2
- Euripides (1978). *Iphigeneia at Aulis* (W. S. Merwin & G. E. Dimock, Jr., Trans.). Oxford University Press.
- Ferguson, R. B. (2013). The prehistory of war and peace in Europe and the Near East. In Fry, D. P. (Ed.), *War, peace and human nature: The convergence of evolutionary and cultural views* (pp. 191–240). Oxford University Press.
- Freud, S. (1949 (orig. 1922)). *Group psychology and the analysis of the ego* (J. Strachey, Trans.). The Hogarth Press.
- Friedman, Y. (2002). Captivity and ransom: The experience of women. In Edgington, S. B., & Lambert, S. (Eds.), *Gendering the crusades* (pp. 121–139). Columbia University Press.
- Fry, D. P. (Ed.). (2013). War, peace, and human nature: The convergence of evolutionary and cultural views. Oxford University Press.
- Fry, D. P., & Soderberg, P. (2013). Lethal aggression in mobile forager bands and implications for the origins of war. *Science (New York, N.Y.)*, 341(6143), 270–273. https://doi.org/10.1126/science. 1235675

Gaca, K. L. (2011). Girls, women, and the significance of sexual violence in ancient warfare. In Heineman, E. D. (Ed.), *Sexual violence in conflict zones* (pp. 73–88). University of Pennsylvania Press.

- Garrigues, J. (2019). Une histoire érotique de l'elysée: De la Pompadour aux paparazzi (French ed.). PAYOT.
- Goldberg, A., Günther, T., Rosenberg, N. A., & Jakobsson, M. (2017).
 Ancient X chromosomes reveal contrasting sex bias in Neolithic and Bronze age Eurasian migrations. *Proceedings of the National Academy of Sciences*, 114(10), 2657–2662. https://doi.org/10.1073/pnas.1616392114
- Goldberg, H. E. (2003). Jewish passages: Cycles of Jewish life. University of California.
- Green, A. S. Killing the priest-king: Addressing egalitarianism in the indus civilization. *Journal of Archaeological Research*, 29(2), 153–202. https://doi.org/10.1007/s10814-020-09147-9
- Gross, J. T. (2001). Neighbors: The destruction of the Jewish community in Jedwabne, Poland. Princeton University Press.
- Grossman, A. (2011). The "big rape": Sex and sexual violence, war, and occupation in post-World War II memory and imagination. In Heineman, E. D. (Ed.), Sexual violence in conflict zones (pp. 137–151). University of Pennsylvania Press.
- Gruber, T., & Clay, Z. (2016). A comparison between bonobos and chimpanzees: A review and update. *Evolutionary Anthropology: Issues, News, and Reviews*, 25(5), 239–252. https://doi.org/10. 1002/evan.21501
- Hare, B., & Yamamoto, S. (Eds.). (2017). *Bonobos: Unique in mind, brain, and behavior*. Oxford University Press.
- Haslam, N., Loughnan, S., & Perry, G. (2014). Meta-Milgram—An empirical synthesis of the obedience experiments. *PLoS One*, 9(4), e93927. https://doi.org/10.1371/10.1371/journal.pone.0093927.t001
- Haslam, S. A., & Reicher, S. D. (2012). Contesting the "nature" of conformity: What Milgram and Zimbardo's studies really show. *Plos Biology*, 10(11), e1001426. https://doi.org/10.1371/journal.pbio. 1001426
- Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1994). *Emotional contagion*. Cambridge University Press.
- Hausfater, G., & Hrdy, S. B. (Eds.). (1984). *Infanticide: Comparative and evolutionary perspectives*. Aldine-de Gruyter.
- Hedgepeth, S. M., & Saidel, R. G. (Eds.). (2010). Sexual violence against Jewish women during the holocaust. University Press of New England (UPNE).
- Hegre, H. (2014). Democracy and armed conflict. *Journal of Peace Research*, 51(2), 159–172. https://doi.org/10.1177/0022343313512852
- Hegre, H., Bernhard, M., & Teorell, J. (2019). Civil society and the democratic peace. *Journal of Conflict Resolution*, 64(1), 32–62. https://doi.org/10.1177/0022002719850620
- Heineman, E. D. (Ed.). (2011). *Sexual violence in conflict zones*. University of Pennsylvania Press.
- Hohn, M. (2002). GIs and Fräuleins: The German-American encounter in 1950s West Germany. University of North Carolina Press.
- Hrdy, S. B. (1974). Male-male competition and infanticide among the langurs (Presbytis entellus) of Abu, Rajasthan, India. *Folia Primatologica*, 22(1), 19–58. https://doi.org/10.1159/000155616
- Hrdy, S. B. (1976). The care and exploitation of non-human primate infants by conspecifics other than the mother. In Rosenblatt, J.,

Hinde, R., & Beer, C. (Eds.), *Advances in the study of behavior* (Vol. 6, pp. 101–158). Academic Press.

- Hrdy, S. B. (2009). *Mothers and others: The evolutionary origins of mutual understanding*. Harvard University Press.
- Hrdy, S. B., & Burkart, J. M. (2020). The emergence of emotionally modern humans: Implications for language and learning. *Philosophical Transactions of the Royal Society B-Biological Sciences*, 375(1803), 1–11. https://doi.org/10.1098/rstb.2019.0499
- Issa, H. A., Staes, N., Diggs-Galligan, S., Stimpson, C. D., Gendron-Fitzpatrick, A., Taglialatela, J. P., Taglialatela, J. P., Hof, P. R., Hopkins, W. D., & Sherwood, C. C. (2019). Comparison of bonobo and chimpanzee brain microstructure reveals differences in socio-emotional circuits. *Brain Structure & Function*, 224(1), 239–251. https://doi.org/10.1007/s00429-018-1751-9
- Jain, S., & Rana, M. (2021). Alternative sexual orientation in humans: What is known and what needs to be known further. *Journal of Homosexuality*, 1–26. https://doi.org/10.1080/00918369.2021. 1898805
- Janicke, T., Haderer, I. K., Lajeunesse, M. J., & Anthes, N. (2016).
 Darwinian sex roles confirmed across the animal kingdom.
 Science Advances, 2(2), 1–10. https://doi.org/10.1126/sciadv.
 1500983
- Jantzen, D., Brinker, U., Orschiedt, J., Heinemeier, J., Piek, J., Hauenstein, K., Hauenstein, K., Kruger, J., Lidke, G., Lubke, H., Lampe, R., Lorenz, S., Schult, M., & Terberger, T. (2011). A bronze age battlefield? Weapons and trauma in the Tollense Valley, north-eastern Germany. *Antiquity*, 85(328), 417–433. https://doi.org/10.1017/s0003598x00067843
- Jonason, P. K., Li, N. P., Webster, G. D., & Schmitt, D. P. (2020). The dark triad: Facilitating a short-term mating strategy in men. *European Journal of Personality*, 23(1), 5–18. https://doi.org/10. 1002/per.698
- Joyce, J. (1934). Ulysses. Modern Library/Random House.
- Judson, O. (2013). Big bird. National Geographic, 224(3), 60-77.
- Karmin, M., Saag, L., Vicente, M., Sayres, M. A. W., Jarve, M., Talas, U. G., Talas, U. G., Rootsi, S., Ilumae, A.-M., Magi, R., Mitt, M., Pagani, L., Puurand, T., Faltyskova, Z., Clemente, F., Cardona, A., Metspalu, E., Sahakyan, H., Yunusbayev, B., & Hudjashov, G. (2015). A recent bottleneck of Y chromosome diversity coincides with a global change in culture. *Genome Research*, 25, 1–8. https://doi.org/10.1101/gr.186684.114
- Keeley, L. H. (1996). War before civilization: The myth of the peaceful savage. Oxford University Press.
- Kelly, R. C. (1985). The Nuer conquest: The structure and development of an expansionist system. University of Michigan Press.
- Kevles, D. J. (1985). In the name of eugenics: Genetics and the uses of human heredity. Alfred Knopf.
- Khrameeva, E., Kurochkin, I., Han, D. D., Guijarro, P., Kanton, S., Santel, M., Santel, M., Qian, Z. Z., Rong, S., Mazin, P., Sabirov, M., Bulat, M., Efimova, O., Tkachev, A., Guo, S., Sherwood, C. C., Camp, J. G., Paabo, S., Treutlein, B., & Khaitovich, P. (2020). Single-cell-resolution transcriptome map of human, chimpanzee, bonobo, and macaque brains. *Genome Research*, 30(5), 776–789. https://doi.org/10.1101/gr.256958.119
- Knauft, B. M. (1985). Good company and violence: Sorcery and social action in a lowland New Guinea society. University of California Press.

- Koch, K.-F. (1974). War and peace in Jalémó: The management of conflict in highland New Guinea. Harvard University Press.
- Konner, M. (2002). The tangled wing: Biological constraints on the human spirit, Revised edition. (originally published 1982) (2nd ed.). Holt/Times Books.
- Konner, M. (2015a). The weather of violence: Metaphors and models, predictions and surprises. *Counter-Terrorism Exchange (CTX)*, 5(3), 53–63.
- Konner, M. (2015b). Women after all: Sex, evolution, and the end of male supremacy. W. W. Norton, Co.
- Konner, M. (2021). Nine Levels of Explanation: A Proposed Expansion of Tinbergen's Four-Level Framework for Understanding the Causes of Behavior. *Human Nature*, 32, 748–793. https://doi. org/10.1007/s12110-021-09414-8
- Konner, M., & Shostak, M. (1987). Timing and management of birth among the !Kung: Biocultural interaction in reproductive adaptation. *Cultural Anthropology*, 2(1), 11–28. https://doi.org/10.1525/ can.1987.2.1.02a00030
- Kranioti, E. F., Grigorescu, D., & Harvati, K. (2019). State of the art forensic techniques reveal evidence of interpersonal violence ca. 30,000 years ago. *PLoS One*, 14(7), e0216718. https://doi.org/10. 1371/journal.pone.0216718
- Lahr, M. M., Rivera, F., Power, R. K., Mounier, A., Copsey, B., Crivellaro, F., Crivellaro, F., Edung, J. E., Fernandez, J. M. M., Kiarie, C., Lawrence, J., Leakey, A., Mbua, E., Miller, H., Muigai, A., Mukhongo, D. M., Van Baelen, A., Wood, R., Schwenninger, J. L., & Grun, R. (2016). Inter-group violence among early holocene hunter-gatherers of West Turkana, Kenya. *Nature*, 529(7586), 394—+. https://doi.org/10.1038/nature16477
- Lambert, P. M. (2002). The archaeology of war—A North American perspective. *Journal of Archaeological Research*, 10(3), 207– 241. https://doi.org/10.1023/A:1016063710831
- LeBlanc, S., & Register, K. E. (2003). Constant battles: The myth of the peaceful, noble savage. St. Martin's Press.
- Lee, R. B. (2018). Hunter-gatherers and human evolution: New light on old debates. *Annual Review of Anthropology*, 47, 513–531. https://doi.org/10.1146/annurev-anthro-102116-041448
- Levi, R. S. (1993). NOTE: Legacies of war: The United States' obligation toward Amerasians. *Stanford Journal of International Law*, 29(2), 459–502. https://advance-lexis-com.proxy.library.emory.edu/api/document?collection=analytical-materials&id=urn:contentItem:3S3T-VSJ0-00CV-X00F04-00000-00000&context=1516831.
- Lévi-Strauss, C. (1969). The elementary structures of kinship (Les structures élémentaires de la parenté) (Revised ed.). Eyre & Spottiswoode.
- Li, Z. (1994). The private life of Chairman Mao: The memoirs of Mao's personal physician Dr. Li Zhisui (T. Hung-chao, Trans.). Random House.
- Loken, M. (2016). Rethinking rape: The role of women in wartime violence. *Security Studies*, 26(1), 60–92. https://doi.org/10.1080/09636412.2017.1243915
- Low, B. S. (2000). Why sex matters: A Darwinian look at human behavior. Princeton University Press.
- Mackay, C. (1932). Extraordinary popular delusions and the madness of crowds. Noonday Press.

Maerz, S. F., Lührmann, A., Hellmeier, S., Grahn, S., & Lindberg, S. I. (2020). State of the world 2019: Autocratization surges—resistance grows. *Democratization*, 27(6), 909–927. https://doi.org/10.1080/ 13510347.2020.1758670

- Majolo, B., & Marechal, L. (2017). Between-group competition elicits within-group cooperation in children. *Scientific Reports*, 7, 1–9, https://doi.org/10.1038/srep43277
- Marlowe, F. W., & Berbesque, J. C. (2012). The human operational sex ratio: Effects of marriage, concealed ovulation, and menopause on mate competition. *Journal of Human Evolution*, 63(6), 834–842. https://doi.org/10.1016/j.jhevol.2012.09.004
- Martínez-Cortés, G., Salazar-Flores, J., Gabriela Fernández-Rodríguez, L., Rubi-Castellanos, R., Rodríguez-Loya, C., Velarde-Félix, J. S., Velarde-Félix, J. S., Franciso Muñoz-Valle, J., Parra-Rojas, I., & Rangel-Villalobos, H. (2012). Admixture and population structure in Mexican-Mestizos based on paternal lineages. *Journal of Human Genetics*, 57(9), 568–574. https://doi.org/10.1038/jhg.2012.67
- Martínez-Cortés, G., Salazar-Flores, J., Haro-Guerrero, J., Rubi-Castellanos, R., Velarde-Félix, J. S., Muñoz-Valle, J. F., López-Casamichana, M., Carrillo-Tapia, E., Canseco-Avila, L. M., Bravi, C. M., López-Armenta, M., & Rangel-Villalobos, H. (2013).
 Maternal admixture and population structure in Mexican-Mestizos based on mtDNA haplogroups. American Journal of Physical Anthropology, 151(4), 526–537. https://doi.org/10.1002/ajpa.22293
- Marx, K. (1883). Das Kapital: Kritik der politischen Oekonomie. O. Meissner.
- Masood, E. (2009). Islam's evolutionary legacy. *The Guardian*. https://www.theguardian.com/commentisfree/belief/2009/feb/27/islam-religion-evolution-science
- McDonald, M. M., Navarrete, C. D., & Van Vugt, M. (2012). Evolution and the psychology of intergroup conflict: The male warrior hypothesis. *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences*, 367(1589), 670–679. https://doi.org/10.1098/rstb.2011.0301
- Meyer, C., Lohr, C., Gronenborn, D., & Alt, K. W. (2015). The massacre mass grave of Schöneck-Kilianstädten reveals new insights into collective violence in early Neolithic Central Europe. Proceedings of the National Academy of Sciences, 112(36), 11217–11222. https://doi.org/10.1073/pnas.1504365112
- Micheletti, S. J., Bryc, K., Ancona Esselmann, S. G., Freyman, W. A., Moreno, M. E., Poznik, G. D., Shastri, A. J., Beleza, S., Mountain, J. L., Agee, M., Aslibekyan, S., Auton, A., Bell, R., Clark, S., Das, S., Elson, S., Fletez-Brant, K., Fontanillas, P., Gandhi, P., & Zare, A. (2020). Genetic consequences of the transatlantic slave trade in the Americas. *The American Journal of Human Genetics*, 107(2), 265–277. https://doi.org/10.1016/j.ajhg.2020.06.012
- Milgram, S. (1963). Behavioral study of obedience. *Journal of Abnormal and Social Psychology*, 67(4), 371–378. https://doi.org/10.1037/h0040525
- Milgram, S. (1974). Obedience to authority: An experimental view. Tavistock.
- Mitani, J. C., Watts, D. P., & Amsler, S. J. (2010). Lethal intergroup aggression leads to territorial expansion in wild chimpanzees. *Current Biology: CB*, 20(12), R507–R508. https://doi.org/10. 1016/j.cub.2010.04.021

- Moore, L. A. (2007). Population ecology of the southern cassowary *Casuarius casuarius johnsonii*, Mission Beach north Queensland. *Journal of Ornithology*, *148*(3), 357–366. https://doi.org/10.1007/s10336-007-0137-1
- Moore, L. T., McEvoy, B., Cape, E., Simms, K., & Bradley, D. G. (2006). A Y-chromosome signature of hegemony in Gaelic Ireland. *American Journal of Human Genetics*, 78(2), 334–338. https://doi.org/10.1086/500055
- Moscovice, L. R., Surbeck, M., Fruth, B., Hohmann, G., Jaeggi, A. V., & Deschner, T. (2019). The cooperative sex: Sexual interactions among female bonobos are linked to increases in oxytocin, proximity and coalitions. *Hormones and Behavior*, 116, 104581. https:// doi.org/10.1016/j.yhbeh.2019.104581
- Muller, M. N., & Wrangham, R. W. (Eds.). (2009). Sexual coercion in primates and humans: An evolutionary perspective on male aggression against females. Harvard University Press.
- Muñoz-Reyes, J. A., Polo, P., Valenzuela, N., Pavez, P., Ramírez-Herrera,
 O., Figueroa, O., Figueroa, O., Rodriguez-Sickert, C., Díaz, D., & Pita,
 M. (2020). The male warrior hypothesis: Testosterone-related cooperation and aggression in the context of intergroup conflict. *Scientific Reports*, 10(375), 1–12. https://doi.org/10.1038/s41598-019-57259-0
- Nai, A., & Toros, E. (2020). The peculiar personality of strongmen: Comparing the big five and Dark Triad traits of autocrats and non-autocrats. *Political Research Exchange*, 2(1), 1707697. https://doi.org/10.1080/2474736x.2019.1707697
- Narasimhan, V. M., Patterson, N., Moorjani, P., Rohland, N., Bernardos, R., Mallick, S., Lazaridis, I., Nakatsuka, N., Olalde, I., Lipson, M.M., Kim, A. M., Olivieri, L. M., Coppa, A., Vidale, M., Mallory, J., Moiseyev, V., Kitov, E., Monge, J., Adamski, N., & Reich, D. (2019). The formation of human populations in South and Central Asia. Science (New York, N.Y.), 365(999), 1–15. https://doi.org/10.1126/science.aat7487
- Nordås, R., & Cohen, D. K. (2021). Confict-related sexual violence 2021.pdf>. Annual Review of Political Science, 24, 193–211. https://doi.org/10.1146/annurev-polisci-041719-102620
- Olalde, I., Brace, S., Allentoft, M. E., Armit, I., Kristiansen, K., Booth, T., Rohland, N., Mallick, S., Szécsényi-Nagy, A., Mittnik, A., Altena, E., Lipson, M., Lazaridis, I., Harper, T. K., Patterson, N., Broomandkhoshbacht, N., Diekmann, Y., Faltyskova, Z., Fernandes, D., & Reich, D. (2018). The beaker phenomenon and the genomic transformation of northwest Europe. *Nature*, 555(7695), 190–196. https://doi.org/10.1038/nature25738
- Olalde, I., Mallick, S., Patterson, N., Rohland, N., Villalba-Mouco, V., Silva, M., Dulias, K., Edwards, C. J., Gandini, F., Pala, M., Soares, P., Ferrando-Bernal, M., Adamski, N., Broomandkhoshbacht, N., Cheronet, O., Culleton, B. J., Fernandes, D., Lawson, A. M., Mah, M., & Reich, D. (2019). The genomic history of the Iberian Peninsula over the past 8000 years. Science (New York, N.Y.), 363, 1230–1234.
- Orschiedt, J. (2020). Violence in paleolithic and mesollithic hunter-gatherer communities. In Fagan, G. G., Fibiger, L., Hudson, M., & Trundle, M. (Eds.), The Cambridge world history of violence, volume 1: The prehistoric and ancient worlds, Kindle edition (Vol. 1, pp. 58–78). Cambridge University Press.
- Parmer, W. J. (2017). Nietzsche and the art of cruelty. *Journal of Nietzsche Studies*, 48(3), 402–429.

- Pearson, K. (1930). The Life, Letters, and Labours of Francis Galton, Vol. 3a Vol. 3a. https://galton.org/cgi-bin/searchImages/galton/ search/pearson/vol3a/pages/vol3a_0110.htm
- Pinker, S. (2011). The better angels of our nature: Why violence has declined. Viking.
- Proctor, R. N. (1988). *Racial hygiene: Medicine under the Nazis*. Cambridge University Press.
- Pruefer, K., Munch, K., Hellmann, I., Akagi, K., Miller, J. R., Walenz, B., Koren, S., Sutton, G., Kodira, C., Winer, R., Knight, J. R., Mullikin, J. C., Meader, S. J., Ponting, C. P., Lunter, G., Higashino, S., Hobolth, A., Dutheil, J., Karakoc, E., ... Pääbo, S. (2012). The bonobo genoe compared with the chimpanzee and human genomes. *Nature*, 486(7404), 527–531. https://doi.org/10.1038/nature11128
- Prum, R. O. (2017). The evolution of beauty: How Darwin's forgotten theory of mate choice shapes the animal world—and Us. Doubleday.
- Prusik, M., Konopka, K., & Kocur, D. (2021). Too many shades of gray: The Dark Triad and its linkage to coercive and coaxing tactics to obtain sex and the quality of romantic relationships. *Personality and Individual Differences*, 170, 110413. https://doi. org/10.1016/j.paid.2020.110413
- Quinlan, R. J. (2008). Human pair-bonds: Evolutionary functions, ecological variation, and adaptive development. *Evolutionary Anthropology: Issues, News, and Reviews*, 17(5), 227–238. https://doi.org/10.1002/evan.20191
- Reicher, S., & Haslam, S. A. (2006). Rethinking the psychology of tyranny: The BBC prison study. *British Journal of Social Psychology*, 45(1), 1–40. https://doi.org/10.1348/014466605x48998
- Rilling, J. K., Scholz, J., Preuss, T. M., Glasser, M. F., Errangi, B. K., & Behrens, T. E. (2012). Differences between chimpanzees and bonobos in neural systems supporting social cognition. *Social Cognitive and Affective Neuroscience*, 7(4), 369–379. https://doi. org/10.1093/scan/nsr017
- Robinson, P., & Tajfel, H. (Eds.). (1997). Social groups and identities: Developing the legacy of Henri Tajfel. Butterworth-Heinemann.
- Rosaldo, R. (1980). *Ilongot headhunting 1883–1974: A study in society and history*. Stanford University Press.
- Rosenberg, K. R., & Trevathan, W. R. (2002). Birth, obstetrics and human evolution. *British Journal of Obstetrics & Gynaecology*, *109*(1), 1199–1206. https://doi.org/10.1046/j.1471-0528.2002.00010.x
- Rosenberg, K. R., & Trevathan, W. R. (2018). Evolutionary perspectives on cesarean section. *Evolution Medicine and Public Health*, (1), 67–81. https://doi.org/10.1093/emph/eoy006
- Rosenfeld, C. S., Hekman, J. P., Johnson, J. L., Lyu, Z., Ortega, M. T., Joshi, T., Mao, J., Vladimirova, A. V., Gulevich, R. G., Kharlamova, A. V., Acland, G. M., Hecht, E. E., Wang, X., Clark, A. G., Trut, L. N., Behura, S. K., & Kukekova, A. V. (2019). Hypothalamic transcriptome of tame and aggressive silver foxes (Vulpes vulpes) identifies gene expression differences shared across brain regions. *Genes, Brain and Behavior*, 19(1), 1–22. https://doi.org/10.1111/gbb.12614
- Ruti, M. (2015). The age of scientific sexism: How evolutionary psychology promotes gender profiling and fans the battle of the sexes. London: Bloomsbury.

- Safari, I., & Goymann, W. (2020). The evolution of reversed sex roles and classical polyandry: Insights from coucals and other animals. *Ethology*, *127*(1), 1–13. https://doi.org/10.1111/eth.13095
- Sahlins, M. D. (1961). The segmentary lineage: An organization of predatory expansion. *American Anthropologist*, 63(2), 322–345. https://doi.org/10.1525/aa.1961.63.2.02a00050
- Sánchez, J. R. (2015). The double life of Fidel Castro: My 17 years as personal bodyguard to El Líder Máximo (A. Gyldén Ed.). St. Martin's Griffin.
- Scheidel, W. (2009). A peculiar institution? Greco–Roman monogamy in global context. *The History of the Family*, *14*(3), 280–291. https://doi.org/10.1016/j.hisfam.2009.06.001
- Scheidel, W. (2022). Fitness and power: The contribution of genetics to the history of differential reproduction. *Evolutinary Psychology*.
- Serwer, A. (2021). The cruelty is the point: The past, present, and future of Trump's America. Penguin Random House.
- Sherif, M., Harvey, O. J., White, B. J., Hood, W. R., & Sherif, C. W. (1961). *Intergroup conflict and cooperation: The robbers cave experiment*. Institute of Group Relations.
- Silva, M., Oliveira, M., Vieira, D., Brandão, A., Rito, T., Pereira, J. B., Fraser, R. M., Hudson, B., Gandini, F., Edwards, C., Pala, M., Koch, J., Wilson, J. F., Pereira, L., Richards, M. B., & Soares, P. (2017). A genetic chronology for the Indian Subcontinent points to heavily sex-biased dispersals. *BMC Evolutionary Biology*, 17(88), 1–18. https://doi.org/10.1186/s12862-017-0936-9
- Smith, A. (2018). 15 other presidents who were caught up in salacious sex scandals before Trump's Stormy Daniels saga, Online. *Business Insider*. https://www.businessinsider.com/president-sex-scandal-history-2018-3
- Smith, E. A., Hill, K., Marlowe, F. W., Nolin, D., Wiessner, P., Gurven, M., Bowles, S., Mulder, M. B., Hertz, T., & Bell, A. (2010). Wealth transmission and inequality among hunter-gatherers. *Current Anthropology*, 51(1), 19–34. https://doi.org/10.1086/648530
- Smith, H. (1971). Foreign Policy: Kissinger at the Hub, January 19, 1971, p. 12. *The New York Times* (p. 12). https://www.nytimes.com/1971/01/19/archives/foreign-policy-kissinger-at-hub-foreign-policy-at-center-kissinger.html?searchResultPosition=2
- Smuts, B. B., & Smuts, R. W. (1993). Male-aggression and sexual coercion of females in nonhuman-primates and other mammals: Evidence and theoretical implications. Advances in the Study of Behavior, 22, 1–63.
- Snyder, T. (2017). On tyranny: Twenty lessons from the twentieth century. Crown Publishing/Tim Duggan Books.
- Staes, N., Guevara, E. E., Helsen, P., Eens, M., & Stevens, J. M. G. (2021). The Pan social brain: An evolutionary history of neuro-chemical receptor genes and their potential impact on sociocognitive differences. *Journal of Human Evolution*, 152, 102949. https://doi.org/10.1016/j.jhevol.2021.102949
- Staes, N., Smaers, J. B., Kunkle, A. E., Hopkins, W. D., Bradley, B. J., & Sherwood, C. C. (2019). Evolutionary divergence of neuroanatomical organization and related genes in chimpanzees and bonobos. *Cortex*, 118, 154–164. https://doi.org/10.1016/j.cortex.2018.09.016
- Tiger, L. (1969). Men in groups. Random House.
- Tinbergen, N. (1963). On aims and methods of ethology. *Zeitschrift fur Tierpsychologie*, 20, 410–433.

Totani, Y. (2011). Legal responses to World War II sexual violence: The Japanese experience. In Heineman, E. D. (Ed.), Sexual violence in conflict zones (pp. 217–231). University of Pennsylvania Press.

- Trivers, R. L. (1972). Parental investment and sexual selection. In Campbell, B. (Ed.), Sexual selection and the descent of man, 1871–1971 (pp. 136–179). Aldine.
- Uhl-Bien, M., Riggio, R. E., Lowe, K. B., & Carsten, M. K. (2014).
 Followership theory: A review and research agenda. *The Leadership Quarterly*, 25(1), 83–104. https://doi.org/10.1016/j.leaqua.2013.11.007
- UNODC (2021). Global Report on Trafficking in Persons 2020 (United Nations publication). Retrieved from Vienna, Austria
- Valentova, J. V., Moraes Junior, F. P., Štěrbová, Z., Varella, M. A. C., & Fisher, M. L. (2020). The association between Dark Triad traits and sociosexuality with mating and parenting efforts: A cross-cultural study. *Personality and Individual Differences*, 154, 109613. https://doi.org/10.1016/j.paid.2019.109613
- von Rueden, C., & Jaeggi, A. V. (2016). Men's status and reproductive success in 33 nonindustrial societies: Effects of subsistence, marriage system, and reproductive strategy. *PNAS*, *113*(39), 10824–10829. https://doi.org/doi/10.1073/pnas.1606800113
- Walker, R. S., Hill, K. R., Flinn, M. V., & Ellsworth, R. M. (2011).
 Evolutionary history of hunter-gatherer marriage practices. *PLoS One*, 6(4), e9066. https://doi.org/10.1371/
- Weil, S. (2006). *The Iliad, or, the poem of force: A critical edition*. Peter Lang Publishing.
- Wen, S.-Q., Yao, H.-B., Du, P.-X., Wei, L.-H., Tong, X.-Z., Wang, L.-X., Wang, C.-C., Zhou, B.-Y., Shi, M.-S., Zhabagin, M., Wang, J., Xu, D., Jin, L., & Li, H. (2019). Molecular genealogy of Tusi Lu's family reveals their paternal relationship with Jochi, Genghis Khan's eldest son. *Journal of Human Genetics*, 64(8), 815–820. https://doi.org/10.1038/s10038-019-0618-0
- White, O. (2003). Conquerors' road: An eyewitness report of Germany 1945. Cambridge University Press.
- Wilson, M. L., Boesch, C., Fruth, B., Furuichi, T., Gilby, I. C., Hashimoto, C., Hobaiter, C. L., Hohmann, G., Itoh, N., Koops, K., Lloyd, J. N., Matsuzawa, T., Mitani, J. C., Mjungu, D. C.,

- Morgan, D., Muller, M. N., Mundry, R., Nakamura, M., Pruetz, J., ... Wrangham, R. W. (2014). Lethal aggression in Pan is better explained by adaptive strategies than human impacts. *Nature*, *513*(7518), 414–417. https://doi.org/10.1038/nature13727
- Wood, E. J. (2018). Rape as a practice of war—toward a typology of political violence. *Politics & Society*, 46(4), 513–537. https://doi. org/10.1177/0032329218773710
- Wrangham, R. (2019). The goodness paradox: The strange relationship between virtue and violence in human evolution. Pantheon.
- Wrangham, R. W., & Peterson, D. (1996). Demonic males: Apes and the origins of human violence. Houghton Mifflin.
- Wyatt, D. (2009). Slaves and warriors in medieval Britain and Ireland, 800–1200. Brill.
- Zeng, T. C., Aw, A. J., & Feldman, M. W. (2018). Cultural hitchhiking and competition between patrilineal kin groups explain the post-Neolithic Y-chromosome bottleneck. *Nature Communications*, 9(2077), 1–12. https://doi.org/10.1038/s41467-018-04375-6
- Zerjal, T., Xue, Y., Bertorelle, G., Wells, R. S., Bao, W., Zhu, S., Qamar, R., Ayub, Q., Mohyuddin, A., Fu, S., Li, P., Yuldasheva, N., Ruzibakiev, R., Xu, J., Shu, Q., Du, R., Yang, H., Hurles, M. E., Robinson, E., & Tyler-Smith, C. (2003). The genetic legacy of the Mongols. *American Journal of Human Genetics*, 72(3), 717–721. https://doi.org/10.1086/367774
- Zhabagin, M., Sabitov, Z., Tazhigulova, I., Alborova, I., Agdzhoyan, A., Wei, L.-H., Urasin, V., Koshel, S., Mustafin, K., Akilzhanova, A., Li, H., Balanovsky, O., & Balanovska, E. (2021). Medieval super-grandfather founder of Western Kazakh Clans from Haplogroup C2a1a2-M48. *Journal of Human Genetics*, 66(7), 707–716. https://doi.org/10.1038/s10038-021-00901-5
- Zimbardo, P. G. (2006). On rethinking the psychology of tyranny: The BBC prison study. *British Journal of Social Psychology*, 45(1), 47–53. https://doi.org/10.1348/014466605x81720
- Zimbardo, P. G., & Haney, C. (2020). Continuing to acknowledge the power of dehumanizing environments: Comment on Haslam et al. (2019) and Le Texier (2019). American Psychologist, 75(3), 400– 402. https://doi.org/10.1037/amp0000593