

WAR & THE NOBLE SAVAGE

BEING

*A Critical Inquiry into Recent Accounts
of Violence amongst Uncivilized Peoples*

BY

GYRUS



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Dedicated to Julian & Dorian Cope, whose unflagging vitality always inspires.

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Introduction

GROWING UP, I never had a particular interest in war. Or history, for that matter. Why on Earth do I find myself writing about the history of war?

It's both glibly convenient and at least partially true to pin the blame on Terence McKenna's 1992 book, *Food of the Gods*. Reading this provocative tome awoke in me for the first time an excitement and curiosity about *the shape of history*. That is, the contours, the peaks and valleys, that our concepts of "development" and our value judgements about the quality of life bestow upon the past.¹

The theory for which the book is most famous—the so-called "Stoned Ape Hypothesis"—suggests that the dramatic psychological and social effects of psilocybin mushrooms played a crucial role in human evolution; cultural, and perhaps biological (see Appendix II). This hypothesis remains both contested and interesting, but in the end the more important aspect of *Food of the Gods* is the wider perspective within which it is embedded. For anyone not especially versed in ecology, his vision of the almost symbiotic dance of mutuality between humans and various psychoactive plants—from mushrooms, perhaps, in the mists of prehistory, to coffee, sugar and smack in the cold light of modernity—is deeply educational. Looking back, the effect of this new perspective was to shake me out of the blind slumber that my bad history teachers and our culture's tedious, barely post-Victorian models of history had left me drifting in. The book was blast of conceptual fire, energizing me with curiosity about our species' journey, and about the multitude of forms that it's possible to imbue our vision of that journey with.

And war? Well, McKenna believed—following Riane Eisler's *The Chalice and the Blade*—that for large stretches of our prehistory, "partnership" rather than "dominator" social norms held sway. Society was more female-centred, and throughout the early European Neolithic a Great Goddess was revered. For McKenna, these times were the last traces of the influence of Palaeolithic mushroom cults of the African grasslands. These partnership societies were held to be generally peaceful, eventually battered into submission by horse-borne, hierarchical warriors (the Indo-Europeans, my and possibly your cultural ancestors) from the central Asian steppes. With their battle-axes they brought a monomaniacal Sky God; the rest, as they say, is history.

It's a simple narrative in many ways, and in its sense of degeneration from a primeval state of peace it's far from new; the Book of Genesis is (ironically) a notable

predecessor. Still, for a while it functioned well for me as a rather flawed alternative to a very flawed orthodoxy. *Progress* is a concept so deeply embedded in our worldview that it's simply exhilarating and inspiring to break away from it, even by such simple and ostensibly depressing means as inversion. From one perspective, "progress" is the air we breathe. Being "for" it is beyond even common sense; questioning it can seem like wilful perversion. However, this dogma of scientific humanism wrestles in the hearts of most Westerners with the Christian doctrine of the Fall from Eden—to mention gruelling everyday realities that nag us and mock our pretensions to cumulative improvement. We move onward and upward, telling stories of the good old days...

I RETAINED A more than passing interest in the issues of war and peace relating to the archaic world over the years. From Hakim Bey's rich mix of primitivism, radical politics and heretical spirituality I picked up the idea that much hunter-gatherer conflict was ritualistic. Following Bey's tracks led me to anthropologist Pierre Clastres, who believed that primitive war was indeed violent, but was fuelled by the instinct for freedom; small egalitarian bands resisted the pull to merge into larger-scale social structures (and the hierarchies and inequalities they bring) simply by fighting each other a lot (see Appendix I). Palaeopsychologist Howard Bloom painted a dark picture of our aggressive primate inheritance. And I found primitivist blogger Jason Godesky flying the flag for the evolutionary and moral superiority of the forager way of life while never risking a slide into a crude romantic vision of "prehistoric peace."

Such a complex (if scattershot and shallow) education in the field left me rather unprepared for a talk by popular psychologist Steven Pinker called 'A Brief History of Violence'.² Filmed in 2007 before a prestigious invite-only audience, Pinker argued that, contrary to the popular myth that the past was a time of peace, degenerating into our modern nightmare of holocausts and genocides, actually things have been steadily getting better over the years. Deaths from violent conflict in contemporary Western countries (when measured as a proportion of the total population) pale into insignificance next to the comparably horrific death tolls among hunter-gatherers. Human empathy has expanded alongside global population levels, and—with due respect to the millions of victims of recent wars—relatively speaking we're living in a Golden Age.

This rather simplistic thesis tugged at the simplistic levels of my intellect, creating tensions. Didn't I usually *appreciate* revealing attacks on tired conventional views? But hang on, when did the idea of peaceful prehistory become *conventional*? Did I miss a meeting? Surely this was just re-entrenchment of orthodoxy dressed up as a

challenging new perspective. In any case, by now I had Pinker in my sights.

Having been invited to talk at the Metageum conference on archaic consciousness in London in 2009, I decided to, in part, honour Charles Darwin's bicentennial by tackling some ways in which evolutionary theory had affected our views of prehistoric life. In the end, my talk fell into three parts. Pinker stood at the beginning as a neo-Darwinian whose dim view of archaic humanity bolstered, in some sense, the (mis)application of biological theory to society, wherein we find the idea of evolution as an ascending ladder of progress (rather than a radiating bush of mutation) irresistible when looking out and back from the modern Western vantage point. Somehow Terence McKenna popped up next, with his ideas about the role of psilocybin mushrooms in human evolution. Finally, I attacked an aspect of David Lewis-Williams' work,³ that is, the quite bizarre contrast between the effort he expends and sensitivity he musters in reconstructing the cognitive worlds of the shamanic Stone Ages, and the harsh judgements he frames his narratives with. Famed for constructive use of the anthropology of the African Bushmen in interpreting prehistoric rock paintings, he nevertheless holds the worldview of such people to be irredeemable nonsense, best consigned to the past. Again, an "evolutionary" doctrine that, like Pinker's, has more to do with the Darwin's Victorian cultural superiority complex than his theories of natural selection.

A few weeks before I was due to deliver my talk, pangs of integrity struck me. If I was to attack Pinker's views, shouldn't I first acquaint myself with his work more deeply than watching a talk on YouTube? I picked up his book *The Blank Slate*—the basis for his talk on violence—and was unexpectedly engrossed. While riddled with problems, his central thesis on the skewed "nature versus nurture" debate is compelling and timely. Most interesting is his observation that the association of genetics with, particularly, the Nazis, has somehow left theories in that field tainted in a way that the "blank slates" on which Stalin and Mao believed they were writing their twisted visions of history hasn't tainted the "nurture"-dominated theories that have been conventional in academia since World War II.

His section on war and the "Noble Savage," though, only complexified my response to his "history of violence" theory. Even accepting the numbers regarding the decrease in proportional mortality rates from war, is this as good a yardstick as it seems? And had he not heard of the perils of projecting observations of contemporary tribal people back into prehistory?

I noted that Pinker's chief source for this section of his work was Lawrence H. Keeley's 1996 study, *War Before Civilization: The Myth of the Peaceful Savage*. Becoming curious about research in the field since Keeley's book, I searched the web a little, and experienced the vertigo you get when you realize you've bitten off more than

you can chew. My talk was imminent, yet it seemed that to speak with any degree of authority—let alone satisfy my curiosity—I had a veritable pile of research to get through.

Of course, any “pile” of research on an interesting issue is really a black hole in disguise. Even now, writing this essay that aims to dig deep where my *Metageum* talk had merely skimmed the surface, I feel woefully premature. At the same time, I recognize this as only partly a mark of the brevity of my bibliography. It’s also an acknowledgement of the irreducible complexity of the topic. My fascination with remote periods of the past, and their relationship to our present and future, has always embraced the fundamental lack of certainty that’s involved. Further, Michael I. Handel, after exhaustively studying those titans of martial theory, Sun Tzu and Clausewitz, concluded: “To streamline the theories of war by artificially eliminating contradictions is dysfunctional, unrealistic, and counter-productive.”⁴ Throw some mercurial prehistory and ethnography into the mix, and the profundity of this advice can only be extended.

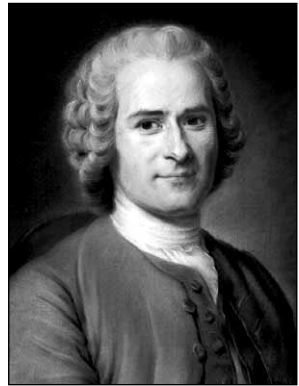
This work is partly a review of (some of) the literature, partly my own meditations on the thorny issues threading through the history of violent conflict. In the former, I hope to be fair in representing others’ views. In the latter, I hope to heed Handel’s warning about “streamlining,” while at the same time being clear that—like everyone—I have my own perspective.

I also hope that I can act as a “way in” to these topics for people. It’s sometimes daunting reading the work of experts who have devoted entire careers to studying a particular subject—and baffling when you go and read another expert on the same subject who reaches entirely different conclusions. How does the layperson reasonably find their position in the debate, given that they have very little time, if any, to do proper research, and see that even intelligent people who spend forever doing the research end up disagreeing wildly? As a layperson who’s fortunate enough to find more time than most to dig beneath the cultural surface of such debates, I hope I can at least act—whether you agree or disagree with particular views—as a mediating influence across that confusing divide.

The Origins of the Noble Savage

AS WITH ALL complex topics that are tangled with sensitive cultural nerves, the study of prehistoric war gains much of its charge from a beguiling polarization. Each pole in the debate is in the care of a philosopher, their historical images happily standing fast where their actual counterparts may have requested a break every now and then. Each is defined by the view they represent regarding the origins of violent conflict.

Cast in a role idealizing the primordial is 18th century French philosopher Jean-Jacques Rousseau; his script is dominated by the concept of the Noble Savage. His proclamation that “man is born free; and everywhere he is in chains”⁵ is rather well-known. In a “state of nature,” humans are taken to be generally peaceable, any violence restricted to the bare necessities of nature. In order to fit the round pegs of human nature into the square holes of civilization, however, our impulses are thwarted and distorted; natural flows of energy and relatedness are dammed, and we are damned to the perversions of oppression, alienation, and their convulsive consequences.



Jean-Jacques Rousseau
(1712–1778)

Rousseau is opposed in this background drama by Thomas Hobbes, an English philosopher who predated Rousseau by about a century. He set forth his views on society in *Leviathan*, in which he argued that the “state of nature” is one of unrestrained competition and selfishness, a “war of all against all,” which necessitates a strong central state to enforce social limitations on our natural brutishness.

Such is the frame of the debate. Of course it’s based on truths about the respective philosopher’s positions, but the rich realities behind this inherited frame are highly instructive.

Rousseau Revisited

ETHNOMUSICOLOGIST TER ELLINGSON has written a fascinating book—ignored by recent works that make use of Rousseau’s role in the debate on war⁶—called *The Myth of the Noble Savage*. Ellingson attempts to show how the history of the Noble Savage trope deviates rather markedly from the beliefs that usually cluster around the phrase for us. A blunt summary of his thesis would be that the real “myth” is that anyone really held to this notion at all.

People who know that Rousseau didn’t originate the term (he never even used it) usually attribute its actual origin to lines in John Dryden’s Restoration drama *The Conquest of Granada* (1670):

I am as free as Nature first made man,
Ere the base laws of servitude began,
When wild in woods the noble savage ran.⁷

In fact, the term’s original appearance lies further back, in the 1609 publication of the French lawyer Marc Lescarbot’s travelogue compendium, *Histoire de la Nouvelle France*:

Now leaving there those *Anthropophages* Brazilians, let us return to our New France, where the Men there are more humane, and live but with that which God hath given to Man, not devouring their like. Also we must say of them that they are truly noble, not having any action but is generous, whether we consider their hunting or their employment in the wars, or that one search out their domestical actions ...⁸

Right away we find the complexity that Lescarbot’s actual experience of “savages” revealed to him, when compared to the polarities that seeped into popular debates via Hobbes’ and Rousseau’s simplistically politicized anthropology. There is no generalization about tribal people; some are more, some are less humane. There is no question of any war-free idyll; they, like us, fight. But still some are remarkably “noble” and “generous”.

The heading that Lescarbot gave this section was “The Savages are Truly Noble”, and the nature of this nobility deserves attention. In Europe at the time, hunting was the preserve of the nobility, “one of the *marques de noblesse*, the emblematic privileges that distinguished nobles from commoners.”⁹ Typically, Europeans approaching the New World would apply their own frameworks to this unknown land rather than revise those frameworks. The sight of a hunting free-for-all, rather than prompting a response along the lines of, “The privileges of our nobility are unfair!”, caused Lescarbot the lawyer to conclude that, because all of the natives hunted, all of them

were, at least legally speaking, “noble.” The wider connotations of the word did of course extend Lescarbot’s terminology past simple observation. And the implied critique of hierarchical society that hunter-gatherer egalitarianism offered was soon taken up in Europe, not least by Rousseau. However, it’s interesting to note that these initial perceptions of “savage nobility” were more a result of an imposition of European values than any criticism of them, and had little, if anything, to do with any idealization of primitive life.

As for Rousseau’s critique, Ellingson points out that, on top of not making use of the Noble Savage trope so often attributed to him, Rousseau’s concept of humans in a “state of nature” had more of the character of a thought experiment than any kind of ethnological judgement. Taking the existence of song as an example, Rousseau states, “while the Savages of America sing because they speak, true Savages have never sung at all.”¹⁰ Singing, he argues, is a product of culture, not nature; therefore the American savages are more than “natural.” His “true Savages” are hypothetical humans in “a state which no longer exists, which perhaps never existed, and which will probably never exist, yet of which it is necessary to have sound ideas if we are to judge our present state satisfactorily.”¹¹ Rather abstract and baffling, to be sure; but it’s clear that Rousseau’s concern is not to romanticize Native Americans, but to use our inevitably hypothetical models of early humanity as a tool with which to break apart ossified contemporary ideas about the whys and wherefores of society. This “state of nature” is neither a past nor a future state. No “return to nature” is possible; again, savage life is a chance to see our present ills from a different perspective, in order to challenge them.

Ellingson succeeds in showing that Rousseau—like most people of his time—had rather more complex views of actual tribal peoples than our idea of a pervasive romantic notion of the Noble Savage among Europeans suggests. But—hypothetical or not—his image of pre-cultural humanity has a lot of problems. His use of song as a mark of unnatural, uniquely human “culture” stands as an obvious one, given birds and whales. And his characterization of man in a state of nature is genuinely deserving of Steven Pinker’s attacks on the absurdity of the philosophy of the Blank Slate. Explicitly linking his judgements to native Caribbeans, Rousseau writes:

His imagination paints no pictures; his heart yearns for nothing; his modest needs are readily supplied at hand; and he is so far from having enough knowledge for him to desire to acquire more knowledge, that he can have neither foresight nor curiosity.¹²

These pronouncements are, in their way, as ridiculous as those of Hobbes (which we’ll come to soon).

Crawfurd's Coup & Darwin's Wretched Savages

AFTER EXHAUSTIVELY SURVEYING ethnographic writings on American Indians, Ellingson finds European attitudes before and after Rousseau to be a mixed bag of ambiguities and oppositions, a “dialectic of vices and virtues”. While certain laudable qualities are admitted to, ambivalence, colonial utilitarianism, and Christian superiority are the dominant attitudes. If there is any change after Rousseau, “it is toward a more negative evaluation.”¹³ Many instances of ascribing “nobility” seem to have merely served to picture the savages as worthy opponents whose defeat would give honour to European conquerors.

And yet by 1865 Ellingson finds John Lubbock, a president of London's Ethnological Society (a forerunner of today's Royal Anthropological Institute), convinced that the myth we falsely attribute to Rousseau, and falsely see as rampant during the Enlightenment, was rife: “There are, indeed, many who doubt whether happiness is increased by civilization, and who talk of the free and noble savage.”¹⁴ What happened?

Ellingson maintains that the myth as we know it can be traced to a paper delivered to the Ethnological Society in 1859 by John Crawfurd, a respected and rather racist ex-colonial administrator who—Ellingson claims—was part of a coup designed to overtake the society. Rooted in the Aborigines Protection Society and with a strong Quaker contingent, the Ethnological Society was rather enlightened for the time, with a marked anti-slavery agenda. The theory at the centre of Ellingson's story is that Crawfurd resurrected this rarely-used term as a straw man, something to make sympathies with aboriginal cultures seem risible. If this is true, it's worked remarkably well.

Crawfurd's racist cod-evolutionary views were contested; but of course, in Victorian England, they were not unusual. Still, he needed to muster potent rhetoric in order to gain momentum for his bid for presidency of the Ethnological Society—through which he, together with white supremacist James Hunt, sought to fend off factions in the nascent science of anthropology who advocated universal human rights. His speech hijacked imagery from two key sources in order to drive home the supposed transparency of inherent racial hierarchy.

One was “a vision, partly fictitious, and partly founded on an actual dream”, drawn from the writings of Sir Humphry Davy (perhaps inspired by Davy's extensive

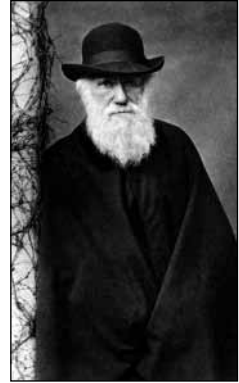


John Crawfurd
(1783–1868)

experiments with nitrous oxide inhalation). Davy's vision, cited by Crawford, describes "naked savages feeding upon wild fruits, or devouring shell-fish, or fighting with clubs for the remains of a whale" They are "wretched human beings" whose "greatest delicacy appeared to be a maggot or worm".¹⁵

The other source was Crawford's friend Charles Darwin's experiences traveling on the famed HMS Beagle's second voyage in the 1830s. Darwin's bourgeois sensibilities were shaken by his encounter with the Yaghan, natives of the southernmost archipelago of South America, Tierra del Fuego, and his description, also cited by Crawford, leaves no doubt as to his conclusions about primitive culture:

I could not have believed how wide was the difference between savage and civilized man. It is greater than that between a wild and domesticated animal, inasmuch as in man there is a greater power of improvement. ... These poor wretches were stunted in their growth, their hideous faces bedaubed with white paint, their skins filthy and greasy, their hair entangled, their voices discordant, their gestures violent and without dignity. Viewing such men, one can hardly make oneself believe they are fellow creatures, and inhabitants of the same world.¹⁶



Charles Darwin
(1809–1882)

Darwin's impressions were to later form the basis for theories about the evolution of civilization in *The Descent of Man*, which contains the unfortunately quite prescient prediction that "at some future period, not very distant as measured by centuries, the civilised races of man will almost certainly exterminate and replace throughout the world the savage races."¹⁷ While Darwin wasn't actively advocating this future, it seems that he felt no great regret for its apparent inevitability.

The status of Darwin's dim views of the Yaghan is made more intriguing by the reports of Charles Wilkes, an American explorer who, after visiting Tierra del Fuego a few years after Darwin, remarked:



Yaghan people as depicted in J.G. Wood's
The Uncivilized Races of Men (1871)

I have seldom seen so happy a group. They were extremely lively and cheerful, and any thing but miserable, if we could have avoided contrasting their condition with our own.¹⁸

A clearer instance of the realities of cultural relativism is hard to imagine. Yes, actual Fuegians existed there and then, doing specific things and behaving in specific ways; yet the Fuegians of Darwin and Wilkes are a world apart, testifying as much to the personal and cultural filters of Darwin and Wilkes as to the Yaghan themselves. Wilkes' final point about avoiding judgements based on comparisons with our own way of life is remarkably perceptive, and while cultural relativism is hard to defend as an unqualified philosophy, Wilkes' sensitivity is worth bearing in mind when we get to Pinker and Keeley's war statistics.

Despite finding it hard to make himself believe that these "wretches" were "fellow creatures," Darwin eventually managed it, and settled on a monogenist theory of human evolution that held us all to be a single species with a common origin. Crawford held to the then more popular polygenist view that different races of humans had evolved separately, which of course neatly dovetailed with his hierarchical theories of human being, and the immutable inferior and superior races it entailed. This crucial disagreement led, following the publication of *On the Origin of Species* in 1859, to a break between Darwin and racists like Crawford who sought in science a justification for their prejudices.

Still, barely seven months prior to the appearance of Darwin's seminal work, Crawford was making ample use of his friend's negative impressions of the Yaghan. Ellingson finds the creation of the Noble Savage myth to be completed by the conclusion of Crawford's paper, where he quotes John Dryden's lines, then uses Darwin's reports to attack a familiar name:

Such savages as I have now been describing, are the men whose condition was envied by a very eloquent but very eccentric philosopher of the last century; but I imagine a week's residence—even a night's lodging with the Fuegians would have brought Jean-Jacques Rousseau to a saner conclusion. Meanwhile, I think I may safely congratulate you that you are not the red men of Terra [*sic*] del Fuego, but civilized white men and accomplished women, the humblest amongst you having the power of enjoying more of the comforts and pleasures, physical and intellectual, of life, than the proud lords of a horde of ten thousand barbarians.¹⁹

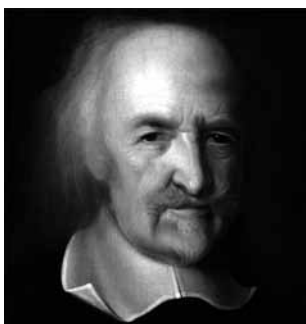
It's a rhetorical trick that's still common currency. A critique of modern society that makes use of a "less developed" way of life is debunked by portraying the person in question as literally wanting to return to that way of life. Perhaps this way of life is

presented in a distorted fashion, perhaps not; either way, the supposed irrationality of the critique is hammered home. I saw it happen just last week. Douglas Rushkoff's careful, clear attack on modern corporatism, *Life Inc.*, involves a re-assessment of the late Middle Ages, when life was apparently better than we have been led to believe. Rushkoff is at pains to stress that of course he's not suggesting a wholesale return to that period, but that we might learn valuable lessons from the positive impact of local currencies at that time, prior to the centralization of currency during the Renaissance, as royals tried to gain some control over the rising business classes. Yet the *Financial Times* review of the book opens with the suggestion that Rushkoff "would rather be living in Europe some time between the years 1100 and 1300!"²⁰

Ellingson finds little space in his study for analyzing how Crawford's fabrication, which managed to cement the idea that the Noble Savage was an actual ideal held by Rousseau and others, has impacted the science of anthropology through the 20th century. Reading Pinker's and Keeley's accounts of modern anthropology, even allowing for their own distortions, makes it clear that this—and not the 18th century—was the heyday of rosy images of primitive life. As Keeley justly observes: "In Western popular culture, Rousseau triumphs over Hobbes only when 'man in a state of nature' is no longer a visible competitor and has faded from direct sight."²¹ (Even so, Keeley's claim that 20th century anthropology, in its "neo-Rousseauianism," has ignored war, is largely false. A 1987 attempt to compile a bibliography of the anthropology of war was given up "around 1,500 citations, because there was no end in sight ... The literature has grown by leaps and bounds since then."²²)

What Ellingson manages to show is that any recent idealizations of primitives have been wrought in an atmosphere skewed by imperialist Victorian propaganda. Crawford manufactured an ideal that was extreme enough to easily dismiss; subsequently, much discussion of the positive aspects of pre-civilized life was caught in the gravity of this sizeable straw man. Distorted further by the back-and-forth of post-colonial guilt and self-justification, the 20th century held little promise for clear comparisons of savage and modern life.

Solitary, Poor, Nasty, Brutish & Short



Thomas Hobbes
(1588–1679)

THERE SEEMS TO BE less of a tale to tell regarding the history of Thomas Hobbes' characterizations of primitive life. His materialism and implicit atheism certainly earned him controversy and opposition in his day, but as these issues became less contentious, his authoritarianism made him understandably less challenging to institutions of power. The ideas set forth in *Leviathan* are strongly monarchist, yet its more general philosophical rationale for the state, a controlling central authority with a monopoly on violence, has meant that Hobbes' ideas have appeared

only moderately challenging to the various ideologies that the West has entertained. Left or Right, the state is for the most part a given; actual anarchism has a vibrant history, but has held little real sway in the mainstream of our culture.

Before looking at his famous “nasty, brutish, and short” passage, it's worth—especially given our overarching theme here—looking at Hobbes' definition of “war” that precedes it.

[A]s long as men live without a common power to keep them all in awe, they are in the condition known as ‘war’; and it is a war of every man against every man. For WAR doesn't consist just in battle or the act of fighting, but in a period of time during which it is well enough known that people are willing to join in battle. So the temporal element in the notion of ‘when there is war’ is like the temporal element in ‘when there is bad weather’. What constitutes bad weather is not a rain-shower or two but an inclination to rain through many days together; similarly, what constitutes war is not actual fighting but a known disposition to fight during a time when there is no assurance to the contrary. All other time is PEACE.²³

This definition of war is interesting in that it may well be reversed to define peace as not necessarily the total absence of violence, but a general tendency towards

non-violence, perhaps punctuated by violent incidents that do not *per se* entail “war.” Both definitions are worth bearing in mind when considering—as we’ll do later—whether a line should be drawn between warfare and homicide in small-scale societies.

In any case, Hobbes proceeds—with his own reasoning rather than evidence as a guide—to draw conclusions about the primeval state of humanity:

Therefore, whatever results from a time of war, when every man is enemy to every man, also results from a time when men live with no other security but what their own strength and ingenuity provides them with. In such conditions there is no place for hard work, because there is no assurance that it will yield results; and consequently no cultivation of the earth, no navigation or use of materials that can be imported by sea, no construction of large buildings, no machines for moving things that require much force, no knowledge of the face of the earth, no account of time, no practical skills, no literature or scholarship, no society; and—worst of all—continual fear and danger of violent death, and the life of man solitary, poor, nasty, brutish, and short.

As with Rousseau, we find an anthropology of primitives that is itself more primitive than its subjects. Conclusive exhibits that may be presented here in defence of pre-civilized culture include Polynesian navigation of vast stretches of the Pacific Ocean (“no navigation!”), intimate bioregional information systems and the colonization of most of the globe *before* the advent of agriculture (“no knowledge of the face of the earth!”), Palaeolithic—even Neanderthal—flint-knapping skills that almost no modern humans can replicate²⁴ (“no practical skills!”)... need I carry on? “No society”!

To be fair to Hobbes, like Rousseau he verged on the domain of the “thought experiment” in his vision of early human life. Indeed, he baldly states, “I believe it was never generally like this all over the world”—making him more cautious, perhaps, than some of his recent successors. Still, his conviction is simpler when it comes to the realities of Native American life. His reading of early ethnographies made him quite positive that “those savages live right now in the brutish manner I have described.”

The perception of *solitude* in the warring “state of nature” is perhaps the root of Hobbes’ vision, and the root of many of his mistakes. Noting that seeing primitives as solitary was also a fault in Rousseau’s thought, it should be made clear that whatever human nature is, it includes sociality—out of the box, so to speak. No man or woman is an island, indeed. Most higher primates share our genetic propensity towards socialization.

Hobbes lists wolves among the supposedly asocial creatures²⁵—and why not?

Isn't the wolf, typically, the "lone wolf"? There's a deep irony here, though, as it seems that early human social organization may actually have more in common with that of wolves than with that of our primate predecessors.

Instead of perpetuating our traditional attitude that our "domesticated animals" are intentional creations of human ingenuity, we propose that initial contacts between wolves and humans were truly mutual, and that various subsequent changes in both wolves and humans must be considered as a process of co-evolution. The impact of wolves' ethics on our own may well equal or even exceed that of our effect on wolves' changes in their becoming dogs in terms of their general appearance or specific behavioral traits. ... Even the term domestication has the wrong ring, since the meeting of wolves and modern humans predates, by far, anything that could be considered a human habitation in the form of a *domus* (Latin for house). Canids' use of dens dates back further. Consequently, instead of domestication, we should talk about "cubilation" (*cubile*, Latin for den) ... and wonder who cubilated whom.²⁶

Neither Hobbes nor Rousseau could really be expected to appreciate the richness of hunter-gatherer culture that has been exposed to us through modern anthropology. Rousseau, at least, didn't let his blunders get in the way of perceiving primitive life as viable. Hobbes seems rather more blinded by his entrenchment in civilized life, and got it—on the issue of solitude at least—plain wrong. Perhaps he'd have changed his mind if he'd learned—as we did over the past century or so—that the supposedly woeful, unworkable state he saw primitive humans as existing in actually accounts for about 94% of our species' 200,000-year existence.

Ironies abound with Hobbes. We'll see that the basis for war is probably located more in our *social* nature, in complex social ties and the conflicts they entail, than it is in some primal individual baseness that must be suppressed by a central authority. And while modern Western lives are certainly not short, it seems probable to me that this, the largest and most sophisticated society ever known, creates the greatest amount of *solitary* existences. Hobbes may have believed, wrongly, that primitive humans lacked society; but when Margaret Thatcher said in the 1980s that there is no such thing as society, here and now, she was at least partially correct. She stood in the wake of centuries of individualistic cultural traditions that have made her perception worryingly accurate.

Fear of Chaos & Ignorance of Order

IN *THE GREAT YEAR*, Nicholas Campion's excellent study of astrology and its relationship to conceptions of the course of history, an interesting parallel between

Hobbes' social philosophy and the work of his contemporary, Galileo, is revealed:

Hobbes set as his personal goal the discovery of the correct form of authority necessary to restrain a nation's citizens. Human beings were, like the planets, in a continual state of motion, and the state's primary function was to restrain them. His view of people as essentially disorderly was directly comparable to the Hebrew prophets' dislike of the planets on the same grounds, and in his opinion Galileo's astronomy, with its demonstration of a new planetary order, pointed the way to an effective authoritarian system: the orderly laws of astronomy could be used to inhibit the disorderly tendencies of human society.²⁷

Anomalous celestial events such as comets were overwhelmingly interpreted in a negative light by most ancient civilizations, due to their unsettling capriciousness. By the same token, the apparent disorder of the "wandering stars," the planets, was usually viewed with suspicion, to the extent that their orbits were not comprehended. However, Campion shows that Hebrew suspicion of the planets demonstrated a degradation in astronomical knowledge which would take a while to be rectified. Mesopotamian priests, around a millennia earlier than the Hebrews, had made observations of the planets precise enough to roughly understand their complex—though not disorderly—patterns. Apparently erratic bodies such as Venus, instead of being shunned as chaotic affronts to God's orderly cosmos, were embraced within Mesopotamian mythology.

To the [Hebrew] prophets, who lacked the fundamental astronomical knowledge available to the Mesopotamian priests, these planetary movements represented the random, threatening quality of the universe that signified a return to formless chaos.²⁸

Could the Hobbesian vision of primeval, asocial chaos be, like the Hebrews' fear of the wandering stars, ascribed to a simple lack of knowledge? Well, as you'll have gathered by now, not much here will be deemed simple. But even a quick analysis of Hobbes' take on primitive life shows, as much or perhaps more than an examination of Rousseau's, that we can't rely on centuries-old guesswork for judging prehistoric life.

The Violent Past & the Political Present

STEVEN PINKER'S ASSESSMENT of Rousseau and Hobbes shows that he's smart enough to see through their simple polarity. In *The Blank Slate*, he consciously hijacks the Noble Savage trope as a way of referring to the general tendency to see what is natural as "better" than the artificial. He sees this as part of a trio of modern dogmas, also comprising the Blank Slate itself (the idea that we start life as a *tabula rasa*, to be inscribed by impressions from the environment) and the Ghost in the Machine (the belief that there is something—spirit or mind—that is qualitatively separate from matter, but which exerts some power over it).

His earliest and gravest stumble in his generally thorough argument occurs when the straw man unwittingly inherited from John Crawford rises up and constellates that seductive polarization again:

[I]t is the doctrine of the Noble Savage that has been most thoroughly debunked by the new evolutionary thinking. A thoroughly noble *anything* is an unlikely product of natural selection ... [I]n the past two decades anthropologists have gathered data on life and death in pre-state societies rather than accepting the warm and fuzzy stereotypes. What did they find? In a nutshell: Hobbes was right, Rousseau was wrong.²⁹

In a 500-page book, you might have thought Pinker would be able to afford a slightly larger nutshell than that. Despite his apparent intent of transcending political divisiveness, his blithe summary, too eager for a clear position, is typical of many highly vocal, politically charged contributions to this debate over the last century.

Hobbes versus Rousseau in Modern Anthropology & Genetics

I HAVE NO ARGUMENT with Pinker's contention that the belief in nurture over nature grew past its bounds in the 20th century—in academia and particular areas of intellectual culture at least (I certainly wouldn't characterize our cultural mainstream as subscribing to all the "dogmas" that Pinker attacks). And yes, tainted by racist theories of evolution and inheritance, genetic theories have always been hard

to separate from the cultural tangle that our reeling from colonialism, slavery and the Holocaust created. What seems less easy to understand is how those who countered strongly genetic theories with culturally determinist theories failed to sense the taint of Mao and Stalin at their heels. Pinker argues that, contrary to the common idea that “nurture over nature” saves us from the dismal prospect of being governed by our biological inheritance, it’s just as much the case that our sociality, bonding skills, and rich forms of communication—all endowments of our genetic evolution—save us from being more easily dominated by political forces. If Mao really had been inscribing his revolution on people who were like “sheets of white paper,” things would have been much worse.³⁰ Pinker’s liberal scientism says: genetic endowments don’t control us; their morally mixed bag is what has *worked* through the ages, and the tensions and balances they enable provide the grounding for our free being in the world.

But during the 20th century, battle lines were drawn, with cultural determinists determined to permanently defeat the basis for racism in genetic science and philosophy. Controversies raged.

Margaret Mead’s anthropological work on Samoan sexual morality and pacifism among the Arapesh in Papua New Guinea has been strongly challenged by Derek Freeman and others. The Wikipedia entry on Mead, for what that’s worth, references recent studies on the issue and remarks, “many anthropologists concluded that the truth would probably never be known, although most published accounts of the debate have also raised serious questions about Freeman’s critique.” Pinker has Mead as “almost perversely wrong.”³¹

There are few quarrels surrounding the autopsy of journalist Patrick Tierney’s shit-stirring 2000 book *Darkness in El Dorado*. In it, he accused anthropologist Napoleon Chagnon (noted for his studies of the famously violent Amazonian natives, the Yanomami) and James Neel (a founder of the modern science of genetics) of a number of unsavoury things. Most shocking was the accusation that they intentionally exacerbated a measles epidemic among the Yanomami in order to test what the anthropologists who touted Tierney’s work called “eugenically slanted genetic theories.”³² The American Anthropological Association investigated, and ultimately cleared Chagnon and Neel of all the most serious allegations. Tierney later remarked, “Experts I spoke to then had very different opinions than the ones they are expressing now.”³³ The perils of relying on experts, eh?

I’ve not found time in preparing this study to dig through such controversies to make my own mind up, though it seems clear that Tierney, supported by the left-leaning political agenda of said anthropologists, stooped to very low levels to have a go at the geneticists. Reservations about Chagnon’s actual work notwithstanding, I wholeheartedly concur with Pinker’s conclusion on this matter:

The decimation of native Americans by European disease and genocide over five hundred years is indeed one of the great crimes of history. But it is bizarre to blame the crime on a handful of contemporary scientists And it is a dangerous tactic. Surely indigenous peoples have a right to survive in their lands whether or not they—like all human societies—are prone to violence and warfare. Self-appointed “advocates” who link the survival of native peoples to the doctrine of the Noble Savage paint themselves into a terrible corner. When the facts show otherwise they either have inadvertently weakened the case for native rights or must engage in any means necessary to suppress the facts.³⁴

Defensive reaction against the profoundly dangerous—and by no means extinct—prospect of racially motivated genetic science certainly might explain excesses such as Tierney’s, but can’t excuse them.

Even so—was Hobbes really “right”? It rather depends on what you’re using Hobbes to represent. The “data on life and death in pre-state societies” that Pinker mentions as Hobbes’ proof is specifically talking about violence. In this context, “Hobbes” is a shorthand for the idea that humans are naturally more competitive than co-operative, more aggressive than peaceable, and hard-wired for collective conflict—war. Peace and progress are the result of artificial impositions.

Among other evidence, Pinker cites anthropologist Donald Brown’s “Human Universals”.³⁵ This is a list of hundreds of traits and behaviours that, in Brown’s survey of ethnographic literature, appear to manifest in every known human society. It includes things as varied as use of consciousness-altering substances or techniques, fear of snakes, the sucking of wounds, and jokes. Pinker draws attention to the inclusion of “conflict, rape, revenge, jealousy, dominance, and male coalitional violence”. Oddly, given his general argument of the balancing mechanisms in our genetic inheritance, he neglects to mention that the list also includes “conflict, consultation to deal with,” “conflict, means of dealing with,” “conflict, mediation of,” and “rape proscribed”. More significant, I think, is the use made of the fact that some things occur in all cultures. While from one perspective, Brown’s universals demonstrate a great richness and variety to human existence, from another it flattens it out. Only a fool would believe in a society without conflict. Setting the argument up in a way that makes its universality some form of demonstration that it is one of the *dominant* aspects of our nature seems deceptive to me. It’s precisely this kind of deformation of debate that Crawford’s Noble Savage was intended to propagate.

Those, if they exist, who buy into the “strong” version of the Noble Savage—that war, aggression, even conflict don’t exist at all in aboriginal human societies—are not only shooting themselves in the foot, but are also firing wildly at the feet of anyone trying to seriously assess the relations between violence, conflict, and quality of life

in different forms of society. At the same time, while not doubting Pinker's good intentions, saying "Hobbes was right" is as misjudged a way to counter naïvety as advocating a blinkered "Rousseau" position is to counter geneticism.

The Real Orthodoxy

BEFORE PROCEEDING, let's be clear. Our world is not dominated by peaceniks who think that the nomadic life of the forager was as good as it got. It is categorically dominated by corporate powers who want more than anything to foster the belief that unrestrained competition between individuals is natural and good, whose valuations of peace and war are governed by the *market* value of those conditions; and by states whose undoubted interest in bolstering their own power is academic, as they're effectively subservient to corporate forces and the wealthy anyway. Power today is a convoluted hybrid that embraces both Hobbesian and Rousseauian elements. The state, under recent neoliberal doctrine, acts as a facilitator of corporate dominance, and a dim Hobbesian view of human nature is required to the extent that it justifies enough state power to defend the economic system against popular opposition. Our centralized authorities enforce the relocation of our "warring nature" (read: "will to freedom") into the economic sphere, where a bastardized and disingenuous Rousseauian ideal is espoused, which holds that the fewer the artificial constraints, the greater the good for all. This is a freedom that, in the immediate wake of violent colonial dominance and the extension of personhood to corporations, translates as the freedom for hierarchical monopolies to continue in ever more complex and intractable forms. (As Naomi Klein's *The Shock Doctrine* shows, this includes the most significant recent manifestation of the Blank Slate: not a belief in aboriginal purity, but the exploitation of the *tabula rasa* that wars and disasters create in order to install the free market vision of progress.) In public at least, industry leaders and politicians hold to the belief that this arrangement is a crowning, cumulative achievement, and that the best way forward is more of the same. I—in case it's not clear already—strongly disagree.

Pinker's attack on those trying to associate genetic science with dodgy right-wing ideology is important. But the stance he takes to mount this attack can unwittingly support those who dominate—and endanger—the globe. Just as we need to separate authentic, morally informed genetic science from eugenics and racism, we also need to separate the realities of primitive life from the pervasive rhetoric and ambient persuasions of corporate economics and modern progressivism.

The Tribal Zone

THE BOOK *War in the Tribal Zone* is a 1992 collection of essays on “the violent edge of Empire” edited by anthropologists R. Brian Ferguson and Neil L. Whitehead. It’s not squeezed its way into my current research, but luckily Ferguson supplies downloads of most of his significant articles on his faculty page at the State University of New Jersey.³⁶ The phrase “the Tribal Zone” is intended to delineate the often turbulent interactions between modern colonial powers and surviving indigenous cultures. Ferguson defines it as “that area continuously affected by the proximity of a state, but not under state administration”.³⁷ Using it is a useful reminder that all our knowledge of these cultures is irrevocably mixed up with some—at least—“contamination” with Western contact.

This isn’t a concept that Lawrence Keeley is a big fan of.

Since these neo-Rousseauian scholars characterize any evidence of Hobbesian social or demographic features, tribal traditions, and mythologies among prestate societies as being consequences of contact, they appear to believe that the resulting transformations, which touched almost every facet of social life and culture, occurred almost instantaneously. Thus the proponents of prehistoric peace not only reject the validity of certain ethnographic observations un congenial to their view of the primitive condition, but also deny the legitimacy of ethnography altogether. That is the substance of arguing that ethnographic descriptions merely mirror civilized behaviour and do not provide a window on the precivilized way of life. ...

This hypothesis attributes an exceptional potency—indeed, a peculiar radioactivity—to civilized people and their products. Were there never epidemic diseases before Western contact? Were there never uncivilized items of trade that excited the practical appetites of primitive consumers and were worth fighting over? Did new weapons never diffuse to modify prehistoric warfare? Were there never population movements or expansions before civilization?³⁸

Ferguson is specifically targeted as the main “neo-Rousseauian,” though he is perhaps most Rousseauian in being persistently misrepresented. Regarding warfare among Indians on the northwest coast of America, he wrote in 1984:

Northwest coast warfare was no game ... war was deadly serious struggle. Sneak attacks, pitched battles, ambushes, prolonged additional campaigns,

treacherous massacres, sporadic raiding—these were facts of life from before contact to “pacification” in the 1860s.

He cites “archaeological evidence to claim that a war complex [on the northwest coast] went back to about 1000 B.C.—although now I would push that back to 2200 B.C., at least.” He has also stated in publications: “*It is an indisputable fact that warfare existed in Amazonia before the arrival of Europeans*” (his emphasis) and, “Even in the absence of any state, archaeology provides unmistakable evidence of war among sedentary village peoples, sometimes going back thousands of years”.³⁹

Such blatant misrepresentation of a fellow scholar does little to establish trust in Keeley’s work. I don’t think this kind of inaccuracy extends to his hard data, but at the level of the important rhetorical frames he places the data within, he—and Pinker in his wake—clearly falls under the spell of the Noble Savage trap, simplifying the “primitive peace” position in order to knock it down. Conversely, in reading Ferguson, I’ve found no rhetorical “mistakes” of a similar order; his representations of his opponents seem fair even amidst fierce disagreement.

While being a professor in an anthropology department, Keeley has an archaeological background, and his emphatic allegiance to the “hard science” aspect of the discipline—which he uses to underpin the main arguments of his book—is for me a clue to the sloppiness of his interpretative blunders. He states:

For archaeologists, the human past is unequivocally real: it has mass, solid form, color, and even occasionally odor and flavor. Millions of pieces of it—bones, seeds, stones, metal and pottery—sit on lab tables and in museum drawers all over the world. The phrase “the weight of evidence” has a literal meaning for archaeologists because their basic evidence is material⁴⁰

In the face of the notoriously tricky nature of archaeological interpretation, this faith in the unequivocal reality of evidence comes across as rather naïve, and speaks of a certain bewitchment by matter’s solidity. His belief that the careful scholarship of people like Ferguson can be swept away by brandishing a few relics and touting their reality over the airiness of theory often serves him badly—especially as Ferguson embraces such evidence in any case.

Keeley caricatures the debate as being between those who believe that Western contact violently disrupted the veritable Eden of aboriginal life, and those (like himself) who believe that contact merely caused variations in the practice of war. Ferguson’s actual position is that “prehistoric warfare got much worse in later prehistory, *before* any outside contact”⁴¹ (due to things like increasing populations, complexifying social structures, and ecological pressures) and that “what has been called

primitive or indigenous warfare was generally transformed, frequently intensified, and sometimes precipitated by Western Contact".⁴² In simplifying Ferguson's position and then opposing it, Keeley leaves himself as the one espousing a crude view: the idea that we can safely project contemporary ethnography back into prehistory; that we can learn most of what we need to know about ancient life from present-day tribal societies.

The Deadly Savage

FIGURE 1 IS A GRAPH, based on Keeley's survey of data,⁴³ showing the annual percentage of male deaths that are due to warfare in various societies. The top eight bars represent averages from various indigenous societies in South America and New Guinea; the tiny bars at the bottom represent war deaths in France during the 19th century and the United States and Europe during the whole of the 20th century.

Keeley's main intention in marshalling this kind of information is to put paid to the idea that primitive warfare was generally "ritualistic," and effectively harmless. Ironically, part of the reason for the propagation of this idea as a catch-all

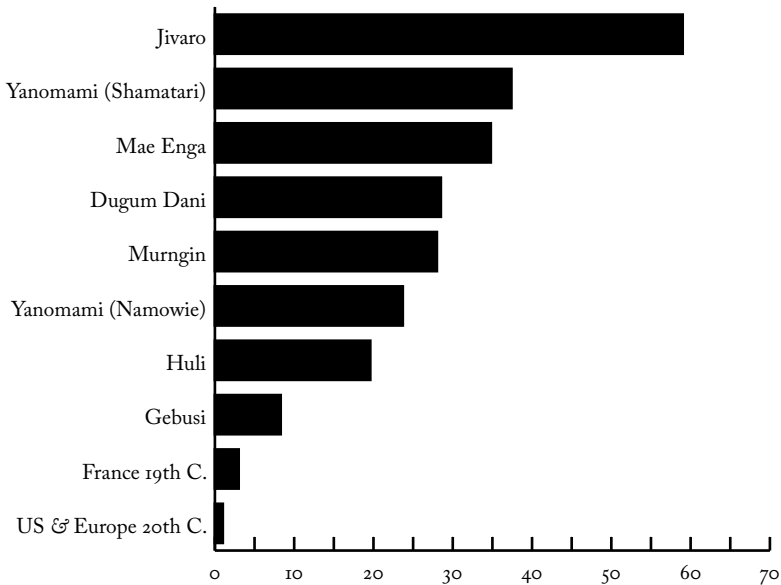


Figure 1. The percentage of male deaths due to warfare in various societies. After Keeley (1996).

characterization of primitive war was the Western superiority complex. The influential early anthropologist of war, Harry Holbert Turney-High (1899–1982), was a colonel in the military police, and thought that savages were too irrational and lazy to strategize properly, and had inferior weapons to boot; basically, he thought they were incompetent.⁴⁴ He sounds like the type of guy who called hippies “losers.”

Keeley himself—with rather backhanded praise—rates indigenous military skills highly. He believes that “it is civilized warfare”—in its bureaucracy and formality—“that is stylized, ritualized, and relatively less dangerous”, stating that when civilized soldiers clash with natives (or their modern equivalents in terms of military strategy, guerrillas), “it is precisely these ‘decorative’ civilized tactics and paraphernalia that must be abandoned by the former if they are to defeat the latter.”⁴⁵ He argues that in most cases it was biological elements (such as imported disease and plant or animal pests) that paved the way for conquests in the New World; in themselves, superior weaponry and discipline may not have been enough to overcome agile warriors who knew the land like the backs of their hands.

Keeley also relates a tale of a New Guinea native who, on first seeing a plane that an ethnographer had arrived in, asked for a ride. He wanted to take some big rocks with him; when asked about them, he said he wanted to drop them on an enemy village. He had grasped the military implications of flight immediately, whereas apparently it took years for the West, after developing the airplane, to use it in wars for anything but observational purposes.⁴⁶

Once *we* started using planes to drop things, those things were deadlier than big rocks. At the same time, the point that indigenous cultures are quite capable of deadly intent has to be conceded by anyone blinkered enough to think otherwise in the first place. Still, the staggering statistics presented in figure 1 jar against our knowledge of the scale of devastation in modern wars. What’s going on here?

Lies, Damned Lies, and Mortality Rates

PINKER, IN *THE BLANK SLATE* and his subsequent talk on violence, relies heavily on Keeley’s above graph. Elsewhere in *The Blank Slate* he makes much of the dissonance between our intuitive perception of the world and the realities revealed by statistics. A simple example, like the prevalence of the fear of flying placed next to aviation’s relatively good safety record, suffices to give you the general idea.

Is our repugnance at modern war just like the fear of flying? Does it blind us to the underlying severity of the less spectacular “car crash” war deaths that accrue in non-state societies? Let’s analyze those statistics a little more. (And yes, I’ll be

using jolly sentences like that along the way to fool you into thinking statistics about mortality rates can be *fun*.)

IT MIGHT BE OBJECTED straight away that the data in figure 1 are for the percentage of male deaths that were caused by warfare. What if the overall mortality rates for the indigenous peoples are rather low, but just happen to have a very high proportion caused by violence? This criticism is apparently held back by another of Keeley's prominent graphs showing the percentage of populations killed per year in warfare, presented in figure 2.

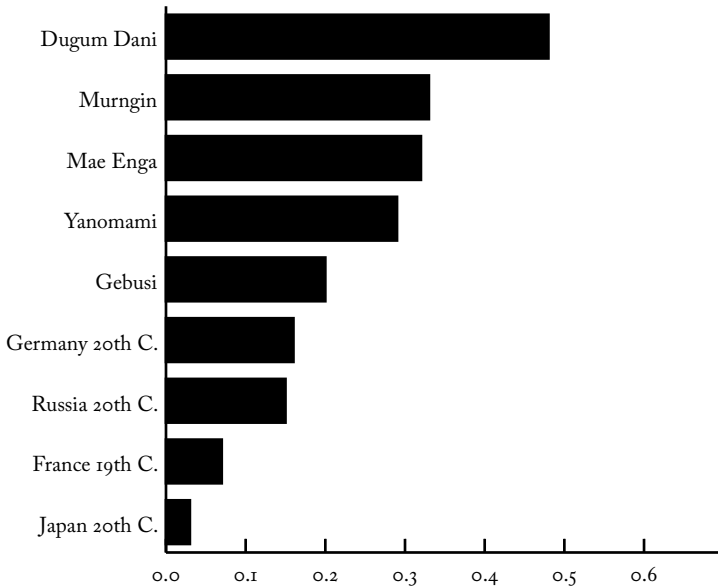


Figure 2. The percentage of various populations killed per year in war. After Keeley (1996).

Firstly, please note the tiny percentage values on the bottom axis compared to figure 1, and be careful to remember that figure 1 isn't simply war-related deaths, it's war deaths as a proportion of all deaths. The above graph shows war deaths as a proportion of the total population, and they range from below 0.1% to 0.5%.

For direct comparison, I've tried to keep only indigenous peoples who are referenced in figure 1 in this graph, but bear in mind that Keeley's data contain several other indigenous peoples ranking higher here than the Dugum Dani, such as the Kato Indians from 1840s California, who racked up a 1.45% per year war mortality

rate. Still, figures for modern states are dwarfed by pre-state peoples.

But hang on. Does this really answer the criticism? We have the percentage of male deaths caused by war, and the percentage of populations killed in war, but we're still lacking *overall* mortality rates. Can we piece them together from the two datasets?

It's hard to extract a true comparison here, because the figures for modern states are mostly from different societies in each dataset. Well, there's one—France in the 19th century—that's common to both, and has a similar low ranking to other modern examples, so let's look at that. I'll use the Yanomami numbers from each dataset to compare with France (taking the higher Shamatari numbers from figure 1), although it seems the ethnographies drawn on for the Yanomami in each graph are different. This is back-of-the-envelope stuff, but let's see what happens.

All we need to get going is population sizes. What's the average size of a Yanomami social group? Good ol' Wikipedia has it (unreferenced) as between 50 and 400 people. A rather more reliable source explains that villages larger than 90 to 100 people "frequently split into 2 groups while on wayumi [an expedition to find food]." ⁴⁷ 150 is classed as a "very large village". Keeley's source for figure 2 states the "contact population" as being 121, which fits the word from our authority—so let's use 120.

As it cites official French census data, the Wikipedia page on France's demographics might be more readily admitted to this little stats party we're having. It seems the French population grew relatively steadily from about 29.5 million in 1800 to around 40.5 million by the end of the century. I'll take the mean of these figures—35 million—for the purposes of these calculations.

One last thing. I'll be taking *all* deaths due to war from Keeley's data behind figure 1—not just the male deaths shown. I think that's the only way to use those percentages in combination with the data for figure 2, which are "genderless."

So... In a Yanomami village of 120, 0.29% killed a year in war (figure 2) translates as 0.348 people a year (please don't try to visualize it). If this represents 20.9% of *all* deaths (figure 1), that gives a total annual death rate of about 1.67 people a year—1.39% of the population.

For France in the 19th century, 0.07% of 35 million killed a year in war means 24,500 war deaths per year. If this is 3% of all deaths, the total annual death rate works out as about 816,667 people a year. That's 2.33% of the population.

Suddenly modern civilization looks a little less rosy. From those numbers it looks like yes, you're more likely to die from violent conflict in the Upper Amazon, but you're less likely—nearly half as likely—to die overall when compared to life in 19th century France.

Not so fast, though... It's hard to say without more data, but the French

population may well have had a longer *life expectancy* than among the Yanomami. This and other factors would lead to a different age structure in the population, with a greater proportion of deaths being those of old people. A higher overall death rate may embrace a greater number of people living to a ripe old age.

But in turn, a larger elderly population means that the simple proportion of all deaths that *war* deaths represent (figure 1) may mask an added complexity. Old people aren't sent into battle as often as young people, so a smaller "war death proportion of all deaths" may not accurately reflect the chances for *young* people dying in war. Conversely, in Yanomami society, most killing is done by older men, further derailing the statistical comparison.⁴⁸ Modern statistics like those in figure 1 should be viewed with this in mind.

For what it's worth, ranking the Yanomami alongside the CIA World Factbook's death rate stats for countries in 2009⁴⁹ places them 24th. The chart is topped by Swaziland's whopping 3.08% of the population dying annually. I presume it's no coincidence that this country also tops the chart for HIV/AIDS prevalence (highlighting the dangers posed by infectious diseases in dense populations, with the health industry dominated by corporatism, and a strong Roman Catholic presence). The United Kingdom scores a 1% death rate, and the United States a respectable 0.83%.

Of course, a *much* more detailed analysis of these figures is required for true comparison, given the global system that allows us to export conflict around the world via byzantine economic structures and "defensive war" (Afghanistan ranks 8th, with a 1.9% mortality rate). At the same time as we ditch romanticized images of the Noble Savage, it should be recognized that structurally, the life of nomadic bands can't help but represent a certain level of transparency that the complexities of civilization preclude. As R. Brian Ferguson puts it:

Yanomami warfare is very different in that its small scale allows it to be studied in its full social context, within which major permutations can be compared. That goal is far beyond the reach of even the most massive research projects directed at modern warfare.⁵⁰

We should also be extremely cautious using data, like the CIA's, that cover one year only. Our Yanomami stats covered two decades. How do we know whether 2009 was above or below average for these countries for the past 20 years? Or the next 20 years? One attempt at compiling aggregated data for the 20th century⁵¹ shows that it was only in the 1960s that, as a global society, we bettered the Yanomami death rate. And our fast-paced, ever-changing story is not over yet.

THE YANOMAMI VERSUS FRANCE is only one rough comparison, of course, with

plenty of nested caveats. But I think it's more than enough to demonstrate that while Keeley's graphs certainly contain useful information, pressing them into the service of simple judgements about tribal life is disingenuous at best. He and Pinker are a little too focused on knocking down that false Noble Savage to admit all the realities involved. Their concern is proving that primitive war can be deadly in terms of intentional killing. This can be seen clearly in Keeley's attempt to show how tipped in favour of indigenous peoples the data in figure 2 are. He emphasizes that death rates given for civilized states include war's "disease casualties" and "accidents",⁵² whereas those for pre-state societies don't. But if you go to war, who cares if gangrene or a machine gun gets you? Many would prefer the latter in any case.

Generally, in these modern apologetics, there's a distracting focus on disproving naïve Rousseauian beliefs, with a seamless, deceptive segue into making general comparisons between societies.

Blinded by Numbers and Ego

I DON'T WANT to press the point implicit in these overall mortality percentages, though I think it's well worth making, to show how the framing of "objective data" often tilts things in particular directions. Aside from the complexities of demographic analysis, why don't I want to press it?

Well, what we're essentially saying by judging things based on relative mortality rates is that we want to be in the situation which gives us the smaller chance of early death. A pretty reasonable position to take, no? It's the position Pinker takes in presenting Keeley's data, and he uses the blinding preferability of a smaller chance of early death to appeal to his audience and convince them that they, too, think we've come a long way since the brutal times before centralized power.

But its preferability blinds people indeed, I believe. Firstly, I don't think most people see just how far the unarguable "hard facts" distance them from lived experiences. And secondly, this position, in this context, is monstrously selfish.

LET ME DEAL with the first point by looking at how the statistics game plays out with another example Pinker takes from Keeley, one that has propagated widely in the wake of Pinker's work: that of the !Kung people in southern Africa. Pinker says:

The !Kung San ... had been described by Elizabeth Marshall Thomas as "the harmless people" in a book of that title. But as soon as anthropologists camped out long enough to accumulate data, they discovered that the !Kung San have a murder rate higher than that of American inner cities.⁵³

Can this be true? Pinker's drawing on a book called *Demonic Males* that I've not got round to, so I'll resort to data from Raymond C. Kelly (watch out for possible surname confusion with Keeley!). Kelly in turn draws on the work of Bruce M. Knauft. Both are well respected in the anthropology of war. Kelly gives the homicide rate for hunter-gatherer societies such as the !Kung, Semai, Mbuti and Siriono as being "33.3 to 44.4 per 100,000 per annum".⁵⁴ This does indeed drastically overshadow New York's 2008 rate of around 6.2 per 100,000 per annum,⁵⁵ and rivals modern murder hotspots like Jamaica and South Africa (the urban areas, that is).⁵⁶

Imagine *that*. The carnage of these chaotic hubs of street violence, only condensed down to a small-scale foraging situation and wrought with basic weapons and bare hands. One pictures endless aggression, ceaseless bloodbaths... In short, Hobbes' "continual fear and danger of violent death".

However, the reality is rather different. This seemingly sky-high murder rate in a population of around 150 (a typical San band) pans out to, on average, *one killing every fifteen to twenty years*. Once a generation. That's why those anthropologists needed to "camp out long enough to accumulate data". Kelly remarks:

Thus [despite the statistically high murder rate] the general tenor of daily social relations observed by the ethnographer can readily be a strongly positive one of friendship, camaraderie, and communal sharing that is very rarely disrupted by argument or physical fighting.⁵⁷

It's like Hobbes is in control of the numbers but on the ground we find Rousseau living it up. How much reality do we bestow upon the abstract viewpoint, and how much reality do we grant to lived experience? This seems to be a crucial question, one we're forced to ask by the emerging fact that in relating demographic statistics to quality of life, *scale matters*. It's grossly misleading to rank band-based society figures next to those of mass civilizations.

Sure, that once-a-generation murder in your forager band will likely be someone you know and love, whereas the civilized (at least, the privileged classes) can be relatively well isolated from such tragedy. But as with the Yanomami versus France example, it's plain that things are far from the overwhelming simplicity of the pictures sketched by Pinker, which increasingly appear cartoonish.

MY SECOND POINT was that preferring the society where the chance of any individual (say, yourself) dying was lowest was, simply, selfish. So what? Can wanting to live reasonably be called selfish?

The game we're playing with Pinker here (and to a lesser extent with Keeley) is one of comparisons. Has civilization improved our general lot, or not? At least in

terms of violence, Pinker categorically thinks it has. But doesn't this focus on percentages and proportions blind us to the fact that a *staggering* number of people—in absolute terms—die violent deaths in the modern world compared to primitive societies? This is exactly the perspective Pinker and Keeley claim to reveal as deceptive. In the written version of his 'History of Violence' piece on Edge.org, Pinker does mention the dilemma of whether a greater *absolute* mortality rate is worse than a greater *relative* mortality rate, but dismisses it as a "moral imponderable". At the same time, he seems to have had few problems with his pondering, having clearly made up his mind that the latter is worse. Being charitable to this duplicity, let's translate "imponderable" as "debatable," and look at the other side of the story.

Nomadic hunter-gatherer societies are by definition very small-scale; over 100 in a social group is big, as we've seen. Civilizations, conversely, have very large populations. That's the deal. For the sake of argument, let's stick to Pinker and Keeley's emphasis on war deaths and accept that civilization allows us a lower per-person chance of dying violently compared to primitive life. Given the inherent scales of these social structures, "preferring" civilization is like saying you're willing for more people in total to die in order to get a better chance at living a long life yourself.

Envision a simplistic fantasy scenario where we're able to step into life with, on the one hand, a band of 100 hunter-gatherers with a 0.5% annual war death rate (as bad as it gets in the most war-torn tribal groups); or, on the other hand, a civilization of 100 million with a 0.05% war death rate—that's among the lower modern figures, and represents 10 times less chance of "dying by the sword". Like a pair of quantum cats, neither society actually exists until you make your choice and step in. If you choose the former, someone dies violently every other year. If you choose the latter, about 140 people die violently every day. Which do you choose?

It's not a choice that anyone is ever literally faced with. And some cynic will surely point out that the least number of actual deaths would occur if you refused the given dilemma by committing suicide. But it seems like a thought experiment that conveys a certain truth. For the most part, the primary concern of attempts to debunk this truth is the supposed pacific or violent nature of the "primitive character." The fact that less *actual* death occurs in foraging social groups is deemed irrelevant because it's not a result of a conscious attitude on these people's part; it's "merely" a function of the social scale. But for anyone who accepts from the start that all humans are quite capable of violence, and thus isn't bothered about proving or denying aggressive intent, small-scale societies may begin to look like a rather more agreeable and humane overall situation. As has been said, by their fruits ye shall know them.

The Impact of Contact

ALL THIS STATISTICAL evaluation has taken place with a complete suspension of the idea that recent ethnographies don't reflect "pristine" indigenous hunter-gatherer situations, but rather describe societies impacted by contact with Western and other states (let alone other societies such as neighbouring pastoralists). If we're to infer anything about the exceptionally long forager-only opening to the human story from those who still live this way, surely this issue needs addressing?

Referring to his much-discussed primitive war casualty figures, Keeley admits that "only in the past few decades have ethnographers attempted to collect such information."⁵⁸ But even in the face of such a dubious range for our data, he compares the idea that ethnography cannot reveal precontact realities to his father's "facetious claim that the flesh of a watermelon is really white until the skin is broken and it turns instantly red."⁵⁹ He "quickly dispose[s] of the argument that these high casualty rates only reflect contact between tribal peoples and Westerners"⁶⁰ using archaeological data from precontact periods. Everyone I'm drawing on here acknowledges that archaeology is indeed the major means of "cross-referencing" our ethnographic data, and we'll deal with that topic in the next part of our study. If you can postpone firm judgements until this supporting evidence is rallied, we can quickly have a look at some arguments about the impacts of more complex cultures on indigenous peoples.

Even if we try to gain more insight into precontact indigenous cultures by going back to the very earliest reports of them, it seems we have much more than the temperamental biases of explorers and missionaries to worry about. Ferguson shows that many impacts of colonization *precede* actual contact. Transmission of disease for which the natives have no immunity, and the spread of imported animals and plants that wreak havoc on ecosystems unaccustomed to their presence, are two vital biological factors that may race ahead of the "edge of Empire." (You'll recall that Keeley himself argued that the devastation wreaked by these biological elements accounted to a large extent for the ease with which the New World was conquered.) On top of this, imported goods valued by natives—especially, of course, weaponry like knives and guns—can disrupt conditions among societies some distance from the newcomers thanks to radiating trade networks. In many cases, those natives who are in contact with invaders are recruited in order to combat or enslave rival groups, extending the colonial influence past the actual colonists in yet another way.

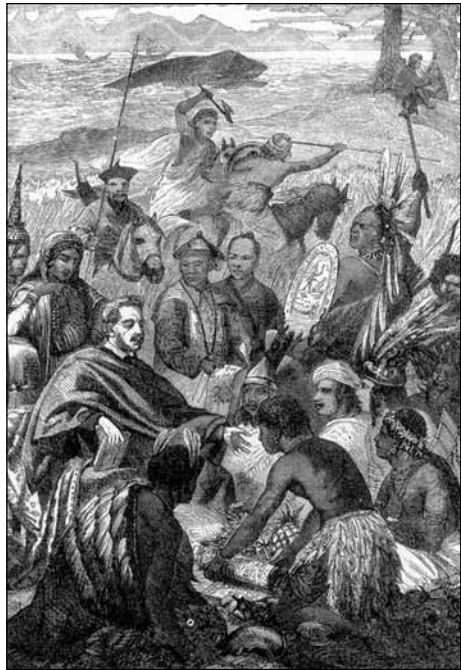
Exactly *how* and *to what extent* these things (let alone direct contact) affect the indigenous situation is, of course, the nub. Ferguson's research has led him to conclude that "what has been assumed to be 'pristine' warfare now seems more likely to be a reflection of the European presence."⁶¹ I can't claim to have done enough

research to strongly agree or disagree with this statement, but it seems hard to argue with his subsequent observations:

This does not mean that nothing can be known about war outside of the influence of Europe or other state systems. Archaeological data and judicious use of early reports from some situations can provide such information. The point, rather, is that we cannot discriminate precontact war patterns without a theoretically informed sensitivity to the influences of contact even in its earliest phases.

Ferguson's image of the "reflection of European presence" categorically does *not* entail the precontact indigenous mirror as some Blank Slate. We saw earlier how Keeley misrepresented him, claiming Ferguson was arguing that all war in native societies was engendered by contact when in fact he argued that indigenous war existed, but was "generally transformed, frequently intensified, and sometimes precipitated" by colonial influence. When handled with more sensitivity than Keeley allows, the debate becomes a dense, sometimes esoteric discourse, with plain English summaries forcing words such as "frequently," "rarely," "typically" and "sometimes" to carry perhaps more of a weight of meaning than their imprecision can bear. Nevertheless, once again, if we dispense with the naïve Rousseauian idea of a primitive state of total peace (and with opposition to such ideas), at least the discussion becomes more useful.

Some argue that yes, European colonists often had an effect on indigenous warfare, but that it was one of *pacification*, not of engendering conflict. This pacification, though, when it occurred, cannot be submitted simply as an argument for the "benefits" of European influence. As Keeley says:



The white man brings civilization and Christianity to the savages. Some still fight in the background. From J.G. Wood's *The Uncivilized Races of Man* (1871)

The price of imperial peace was manifold indignity, dispossession, abject poverty, slavery, famine, and worse; and that price was surely too high. The peace that humans universally desire is not that of the grave or the chain gang, but imperial pacification often meant both.⁶²

However, Harvard archaeologist Steven A. LeBlanc, author of *Constant Battles: Why We Fight*,⁶³ argues that this peaceful aftermath also shows why we can't rely on recent ethnographies to infer anything about the remote past. It's like a reversed application of Ferguson's position. Rather than saying present violence can't be used as evidence for the past because of the influence of contact, he says present *peace* can't be used as evidence, again because of the influence of contact:

In the majority of cases [of contemporary indigenous "peace"], either the group's population has been decimated and the survivors were then living far below their carrying capacity, or they had received such useful technology that the carrying capacity grew markedly.⁶⁴

"Carrying capacity" is a term from ecology which basically means the population size of a certain species that a particular environment can sustain long-term. LeBlanc sees the breach of ecological limits such as carrying capacity (i.e. over-population) as a crucial catalyst for war. So while in some instances the catastrophic effects of colonial genocides and disease impacts function as "post-apocalyptic" generators of violence-ridden tribal societies we encounter,⁶⁵ LeBlanc argues that these exact effects made some natives more peaceful, because there was more to go around—because, in turn, there were fewer people for resources to be shared among. And in contrast to Ferguson's extensive work showing how the introduction of steel tools exacerbated patterns of Yanomami warfare,⁶⁶ LeBlanc argues that new technologies enabled some natives (not specifically the Yanomami) to *increase* their ability to exploit local resources—hence increasing carrying capacity, and ameliorating conflict.

My research isn't extensive enough to say exactly how right or wrong LeBlanc may be on this point; I submit it merely as an interesting factor that underlines the complexities of using ethnography for judging tribal life *per se*.

Other complexities seem even less amenable to study. For instance, if the pre-contact mix of "peaceful" and "warlike" indigenous peoples was more varied than the rather war-centric distribution that some ethnography implies,⁶⁷ perhaps the more peaceful people were simply wiped out. This could have been at the hands of European invaders or amidst inter-tribal conflict precipitated by the colonial influx—or perhaps long before contact, as population and ecological pressures made ferocity a prominent advantage. Equally, peaceful tribes would presumably have vanished at a higher rate thanks to cultural absorption rather than death—that is, thanks to

ethnocide rather than genocide. Fierce tribes would be more likely to stand their ground and resist the transformation of their way of life—and previously peaceable societies would be more likely to become ferocious in order to defend their culture. This may be a good argument against pacifism when it comes to contact with a war-oriented culture, but at the same time it creates further difficulties for the use of ethnography in judging prehistory.

As FERGUSON SAID, though, none of this is to advocate the abandonment of ethnography as valueless. Keeley assumes a brittle stance, seeing any admission that European contact dramatically changed the indigenous situation as implying some sort of wholesale abandonment of ethnography (rather than as calling for a more cautious use of ethnography).

Still, whatever position is taken on ethnography, everyone in the debate acknowledges the immense value of the material evidence supplied by archaeology. It's to this discipline's contribution to the field that we now turn.

The Remains of the Past

I MAGINE THAT by now it's probably redundant to open this section on archaeology with a warning that we shouldn't expect conclusions as hard as the discipline's material evidence. Taking that for granted, I want to start by honing in on the implications of Keeley's title: *War Before Civilization*.

Bands & States, the Nomadic & the Settled

I'VE NOT BEEN that up-front about terminology so far. I've used some terms (like "primitive") that aren't generally acceptable these days due to political sensitivities. I hope it's clear that I'm comfortable with such a term precisely because I hold no truck with the progressivist philosophy it's usually seen to entail. In any case, I've been moderately careful with my labels, but by not discussing them in-depth I've omitted one of the crucial flaws in Keeley's position.

Simply put, the flaw is this: *there are few, if any people today who argue for a significantly low rate or absence of war in any societies other than nomadic, egalitarian hunter-gatherers*. Keeley, in using the origins of *civilization* as his cut-off point for comparison, is largely polemicizing against non-existent adversaries. Most primitivists see the genesis of *agriculture* and/or settled, *sedentary* life as the source of endemic human conflict—not the state, however closely these may grow to be linked. There's a more interesting argument to be made about the differences between foraging and agricultural societies, or between nomadic and sedentary societies, than there is between non-state and state-based societies. In strictly framing his argument using the *state* as the dividing line across which cultures are compared, and lumping together hunter-gatherer and agricultural or sedentary non-state societies, Keeley isn't missing out on a reality of entirely "peaceful savagery"; but he is obscuring the most relevant axis of debate.

WHILE BOTH KEELEY and LeBlanc have good, relevant archaeological fieldwork under their belts, it sometimes appears as if they allow the impact of their direct professional experience to fuel the rash leaps to their rather broad conclusions.

Keeley relies heavily on his specialism in the European Early Neolithic, circa

5000 BCE, which saw early agriculturalists spreading west. Some argue from historical genetics that modern Europeans retain a large proportion of DNA from the Mesolithic hunters who preceded this advance, and see this as evidence that the spread was as much adoption of agriculture by native communities as displacement of natives by invaders.⁶⁸ Others argue that, whatever DNA slipped through, this period was one of severe conflict, “a blitzkrieg by the standards of the day.”⁶⁹ Agriculture’s nearby point of origin, the Middle East, had been farmed for several millennia by this time, and growing populations, soil exhaustion and erosion certainly made the westward expansion more an increasingly desperate necessity than a friendly adventure spreading new technology.

Of course violence existed among the European hunters of the Mesolithic. This period, which saw the social structures of indigenous foragers complexifying far past the primordial band-based nomadic model, has been described as that “when true warfare began in Europe”.⁷⁰ But while Mesolithic Europe proffers excellent evidence for pre-state war, and certainly warns against simplistic ideas of pre-agricultural conditions, it may have little bearing on the less complex Palaeolithic, prior to 10,000 BCE.

I mentioned earlier that Keeley managed to “quickly dispose” of the idea that high war casualty rates among contemporary tribes were an artefact of Western contact using archaeology. The archaeology in question was drawn from “several prehistoric populations”. It’s not a wide sample to try and prove that all primitive societies before 1492 were war-ridden; and on top of its small size, it’s strongly selective, when you drop the state / non-state axis and focus on the nomadic forager / sedentary society axis. The sample includes:

- The only undisputed instance of severe Palaeolithic conflict, from Jebel Sahaba, northeast Africa, circa 11,000 BCE. This was during drastic climate change at the end of the last ice age, the effect of which on Nile valley societies has been described as “an unmitigated disaster”.⁷¹
- The Oneota Indians from Illinois, around 1300 CE—“the first in the ... region to rely on intensive agriculture”⁷² and organized into “large nucleated villages”.⁷³
- The Prince Rupert Harbour Indians from British Columbia on the Northwest Coast, from 1500 BCE to 500 CE. This culture showed “social organizational complexity” and “dense, sedentary village populations”.⁷⁴
- The infamous Crow Creek Indian massacre from the early 14th century, an exceptional event involving subsistence agriculturalists living in fortified villages and probably experiencing famine.⁷⁵
- A late Mesolithic culture from 4100 BCE in Vedbæk, on the coast of Denmark, where rich grave goods are taken as early evidence of social stratification.⁷⁶

- Tévéc, on Brittany's coast around 6000 BCE, also seen by many as showing evidence of "ascribed status." This and other factors place it as an key example of the transition between the late Mesolithic and the early Neolithic in Europe; as at Vedbæk, while these people fished and gathered, they were largely sedentary.⁷⁷

It should also be noted that the cemeteries found at both Vedbæk and Tévéc represent rather small samples—around two dozen bodies in each. This makes statistical representation, as with war deaths among modern indigenous populations, subject to the sometimes misleading effects of what statisticians call "the volatility of small numbers." Even one death among such small numbers represent a relatively large increase in deaths as a proportion of the population.⁷⁸

All in all, as with Keeley's contemporary evidence, there's not much to hold against someone arguing for war-free life among egalitarian hunter-gatherer nomads—our ancestors for the vast majority of our timeline.

Keeley hammers home his evidence, such as it is, with details of his own first excavation, a village from the San Francisco Bay circa 1000 CE, concluding:

It is clear from these archaeological examples that the casualty rates recorded by ethnographers are neither improbable nor exceptional. Tribal people needed no instructions or inducements from Europeans to make real war.⁷⁹

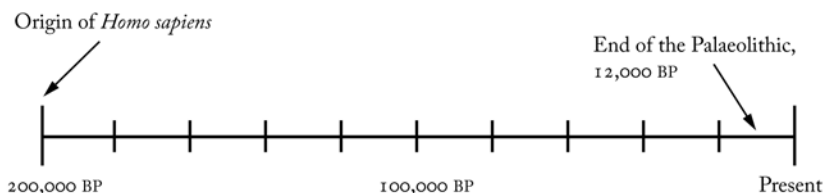
However, the apparent blanket projection of limited evidence across the whole span of human history belies his acknowledgement that while relatively peaceful societies do "occur (if uncommonly) at every level of social and economic complexity ... truly peaceful agriculturalists appear to be somewhat less common than pacifistic hunter-gatherers."⁸⁰

Less nuanced is Steven LeBlanc, whose crudely titled *Constant Battles*, while containing good arguments on the ecological factors in war, reveals another archaeologist so impressed with the findings of his own digs that he seems a little too ready to make sweeping judgements. In the early 1970s he excavated remains from the Classic phase (around 1000 CE) of the Mimbres culture—New Mexico Indians living in large pueblos and undergoing agricultural intensification.⁸¹ Reflecting on his discovery of violent conflict there, LeBlanc "began to think that if the Southwest was not peaceful, then there was little reason to believe any other place on Earth was peaceful for long."⁸² I'm not sure I've encountered bolder archaeological theorizing anywhere else—and coming from me, that's saying something.

The Deep, Dark Past

AFTER MANY CENTURIES of grossly naïve historical belief inspired by The Holy Bible, science began one its most visionary projects during the 18th century Enlightenment: the revelation of *deep time*. Geologists James Hutton and Charles Lyell unravelled the Earth's evidence to place its origins far, far before the paltry handful of millennia proposed by Christian tradition, paving the way for the current estimate of four and half billion years. This vast span of geological time set the stage for Darwin's evolutionary narrative, which in turn uncovered our species' hitherto unsuspected deep past.

That we've only recently awoken to this epic history, and that its overwhelming scope verges on the incomprehensible in any case, might forgive our general tendency to let the depth of our past vanish over our horizon. Perhaps a reminder is in order.



The above timeline shows, in years before the present, our origins as a species, and the end of the Palaeolithic, which saw the rise of significant new levels of social complexity that rapidly swamped our small-scale hunter-gatherer heritage. The overwhelming majority of archaeological evidence for violent conflict lies after that Palaeolithic divide—inconceivably remote, and yet so close behind us.

So what do we know about that other 94% of our existence? A comprehensive survey of Palaeolithic archaeological evidence is way beyond my scope, probably my ability, and certainly my patience. So it's impossible for me to objectively assess what the scattered, hotly disputed evidence for Palaeolithic violence might imply. To get going, let's instead look at the broader scope of this sort of inquiry. What *can* we know about war and violence in this period? Let's see what our experts reckon.

Keeley, embracing the history of the *Homo* genus rather than just that of the *Homo sapiens* species, remarks that “any attempts to survey 2 million years of human prehistory for evidence of violence and armed conflict face several daunting difficulties.”⁸³ These include the fact that few regions are known well archaeologically, the disturbance of remains before burial practices became common, and the perishability of early weaponry. “Thus it is possible to document prehistoric warfare reliably only

within the past 20,000 to 30,000 years and in only a few areas of the world.” But despite this terrible blow to his faith in the “peculiarly robust” nature of archaeology, before the end of his work he’s talking of the “brutal reality” of war predominating through the ages.⁸⁴

LeBlanc, attempting to cast doubt on the early human ecological record, cites the difficulty of rallying positive evidence for harmony with the environment—which may apply equally well to evidence for the absence of war. “As with archaeological information, it is easier to see evidence for non-conservationist behavior and a lack of ecological balance in the historic and ethnographic record than it is to demonstrate that such a balance took place.”⁸⁵ Discussing the relationship between population dynamics and conflict, he does say, “I would expect ... rapid growth among farmers to be accompanied or followed by considerable conflict—and often by subsequent population collapse. In fact, this is precisely what the archaeology and historical accounts show for early farmers.”⁸⁶ Still, he must fulfil the title of his book, so he throws nuance to the wind and declares: “From the earliest foragers found archaeologically to historical accounts of foragers from all corners of the globe, the evidence shows that they fight and kill in deadly earnest. ... early foragers were not able to live peacefully.”⁸⁷

Ferguson readily admits in an interview that if there was war before 20-25,000 years ago, there would probably be no evidence.⁸⁸ However, he points out that arguing for persistent violence previous to this limit of archaeological perception would also have to account for why it *went away* as soon as the archaeological record begins, taking another 10,000 years or so to re-appear. He notes elsewhere that, apart from the unequivocal carnage at Jebel Sahaba from the end of the ice age, “only about a dozen *Homo sapiens* skeletons 10,000 years old or older, out of hundreds of similar antiquity examined to date, show clear indications of interpersonal violence.”⁸⁹ Later, caution about the archaeological record in general (i.e. including the Palaeolithic expanse) evaporates as he describes it as “abundant”, and lacking evidence of warfare. “The signs are not there; here is not the case that ‘the absence of evidence is not evidence of absence’.”⁹⁰

The impartial layperson would be forgiven after all this for thinking that all the experts simply project into the void of Palaeolithic uncertainty the beliefs in which they have so much invested. And perhaps the experts may be forgiven for this, because they wouldn’t come across as very expert if they simply said, “We don’t know.” In part, it’s their job to give it their best guess. But it’s disconcerting to see guesswork translate so readily into the rhetoric of certitude; such, perhaps, are the inflating pressures of academia and commercial publishing.

Ape Cousins & Hard-Wired Violence

IF ETHNOGRAPHY IS MIXED at best, and archaeology turns into not so much a dead-end as a dark, perceptually bottomless pit, where to turn to find solid foundations for human war? Many turn to DNA. More specifically, to the sometimes controversial disciplines that explore the relationship between genetics and behaviour—sociobiology and evolutionary psychology—and to the implications for human behaviour they can draw from the study of our cousins: chimpanzees.⁹¹

The *Homo* line of descent shares with the *Pan* (chimpanzee) genus an as yet unknown common ancestor, dated through genetic studies to about 4 to 6 million years ago. As all other *Homo* species fell by the wayside, chimps stand as our closest evolutionary relatives. Jared Diamond's book *The Third Chimpanzee* made the observation that the 1-2% genetic difference between us and chimps is small enough to warrant placing us all



The common chimpanzee

within the same genus—*Pan sapiens* anyone? Even though recent research has suggested the gene gap might be more along the lines of 6%,⁹² our common evolutionary heritage leads many to ground their speculations (and sometimes their convictions) about human violence in what primatological studies have to tell us.

Goodall's Wild Chimps

HOWARD BLOOM, like many others, cites Jane Goodall's famous research in equatorial Africa. He recounts that by the early 1970s she "had lived fourteen years among the wild chimpanzees of Tanzania's Gombe Reserve."

She loved the chimps for their gentle ways, so different from the violence back home among humans. Yes, there were simian muggings, beatings, and rage, but the ultimate horror—war—was absent.

Goodall published a landmark book on chimpanzee behaviour—*In the Shadow of Man*—a work that to some proved unequivocally that war was a human creation. After all, the creatures shown by genetic and immunological research to be our nearest cousins in the animals kingdom knew nothing of organized, wholesale violence.

Then, three years after Goodall's book was printed, a series of incidents occurred that horrified her. The tribe of chimps Goodall had been watching became quite large. Food was harder to find. Quarrels broke out. To relieve the pressure, the unit finally split into two separate tribes. One band stayed in the old home territory. The other left to carve out a new life in the forest to the south.

At first, the two groups lived in relative peace. Then the males from the larger band began to make trips south to the patch of land occupied by the splinter unit. The marauders' purpose was simple: to harass and ultimately kill the separatists. They beat their former friends mercilessly, breaking bones, opening massive wounds, and leaving the resultant cripples to die a slow and lingering death. When the raids were over, five males and one elderly female had been murdered. The separatist group had been destroyed; and its sexually active females and part of its territory had been annexed by the males of the band from the home turf. Goodall had discovered war among the chimpanzees, a discovery she had hoped she would never make.⁹³

The implicit message of this, and most such use of primate studies (especially studies of violence), is that in looking at chimps, because they're genetically very close to us, we're looking at a low-resolution but otherwise irrefutable reflection of our own "hard-wired" nature. As Bloom's colourful language has it, "our biological legacy weaves evil into the substrate of even the most 'unspoiled' society."

However, in this looking-glass, all is not as it seems. Margaret Power's 1991 study *The Egalitarians—Human and Chimpanzee*⁹⁴ shows how Goodall's studies weren't exactly "observations" of wild chimp populations. To more easily track them, she lured them with boxed bananas, encouraging them to pretty much settle around her camp. This distortion of the logistics of their normal feeding patterns seems to be instrumental in the transition from her early observations of relatively peaceful behaviour to the "war" she later observed. Goodall has since acknowledged that this practice led to a dramatic rise in aggression; and that when she stopped doing it, the aggression—in the short term at least—abated. Yet, Power argues, longer-term damage was done. This period of ecological rupture created a sustained deviation in social habits that led to unnatural levels of violence.

An anthropologist who critically reviewed Power's book noted a number of rather serious errors in her scholarship. But, while he warns against non-specialists taking her work at face value, he concludes that

her thesis cannot be dismissed as readily as her handling of the evidence with which she supports it. Despite its faults, it is founded on a true and troubling statement: "Despite more than 30 years of study ... there is no firm agreement as to the social organization of [chimpanzees]". ... Territorial conflict and closed communities at Gombe and Mahale do not preclude carnivals and open social networks at other sites, and vice versa. We need a better idea of precisely how ecological factors, acting through demographic variables, determine the behavioral options open to chimpanzees at different sites.⁹⁵

All this begs the question of what we're talking about when we try to claim that violence is "natural." The *capacity* for violence is obviously natural for most species that survive for any length of time, for getting food or for self-defence at least. This capacity can also be brought to bear on settling territorial disputes and beating rivals in the mating game. Violence has been periodically used in both scenarios by apes—human and chimp—so there's no doubting the capacity here, either. The real question, again, regards the *propensity* for addressing problems in this way. And the answer from primatology—as from archaeology, as from ethnography—appears to be: it depends on the context.

R. Brian Ferguson, in his argument about Yanomami warfare being impacted by Western contact, doesn't deny war's existence before the European invasion; he suggests that contact's disruptions "lowered the threshold at which conflict turns to war."⁹⁶ It's the shifting of this threshold, which pushes "capacity" towards "propensity," that's important. And these shifts aren't genetic.

Conversely, Power's critical reviewer observes with regard to the Gombe chimp war: "The speed and repeatability with which these events unfold suggest a 'natural' basis." Again, there is a clear capacity present; there's no room for literalist Noble Savage nonsense. But in the end, an accurate gauge of the real issue, propensity, is for the most part a thorny mystery—no matter how seductive the apparent solidity of statistics can be.

There's a final point worth making about how much we need to factor in epigenetic variables when we look at chimps in their "natural" state: they're an endangered species. The International Union for Conservation of Nature tells us that wild chimp populations are "estimated to have experienced a significant population reduction in the past 20 to 30 years."⁹⁷ Major threats include habitat destruction, poaching ("bushmeat"), and infectious disease—all directly or indirectly attributable to encroaching

human populations. As with Western impacts on indigenous peoples, this contact doesn't "cause" chimp violence; but we'd be naïve to think it leaves it in whatever its natural state is.

The Animal Psyche

MOST SIGNIFICANT for me in these inferences from chimp studies are the lingering traces of the Christian-Cartesian split between humans and the rest of the natural world. This split (which seems to haunt modern science to varying degrees, despite emphatic opposition to it) bestows upon the human mind not just unique qualities, but a separate order of *reality*.

To give credit to Richard Dawkins, he follows his theories up with action in supporting the Great Ape Project. Behind the project's campaign to extend basic legal rights to non-human great apes is the acknowledgement that while the advent of *Homo sapiens* certainly saw the arrival of hitherto unseen complexity in animal intelligence, it didn't signal any *absolute* break in the continuum of evolution. We possess mind, psyche, or soul, which gives us our ability to behave in ways that respond in a much more sophisticated way to the environment than mechanical translations of genetic codes allow. But if evolutionary theory says anything, it says that this capacity to be "un-natural" didn't appear out of nowhere, like God breathing into Adam's body. It, like our bodies, is rooted in a continuum extending throughout the living world. We have to open up our falsely exclusive epigenetic "mind club" to a wider and more subtly graded membership.⁹⁸

Admitting this means admitting that in observing chimpanzee behaviour under specific circumstances, we aren't necessarily looking at some image of what our biological nature is "in itself." Alongside genes, we need to be sensitive to the role of *psyche* in the scene—with its inevitable corollary, psychopathology. Obviously Goodall's artificial distortion of chimp behaviour is an extreme instance of this. But even genuine observations in the field may not be concrete revelations of our encoded genetic inheritance; they may contain contingent psychological aberrations, influenced by a complex network of forces in the immediate environment.

Of course, this isn't to argue that our genetic inheritance is "clean," a Blank Slate, wholly bereft of unfortunate traits; or that all violence is pathological. It does mean that we should be careful of casting any complex social animal's behaviour as wholly governed by genes, and of drawing conclusions about our own genes from observing what they do. It also means that as we open our identities up to connect with the animal kingdom, we'll find resonance with instances of pathological cruelty as well

as with instincts to love and nurture. Finding cruelty in nature may not be a cue to understand or justify human perversions as “natural”; it may indicate that our struggles with the tumultuous difficulties of psychic life are not ours alone.

What About the Bonobo?

WHEN MOST OF US say “chimp,” we’re talking about *Pan troglodytes*, the common chimpanzee found in West and Central Africa. But there’s another branch to the *Pan* line: *Pan paniscus*, also known as the dwarf or pygmy chimpanzee (even though only their heads are smaller). It’s gained modest fame as the bonobo, the “hippy chimp.”

Bonobos live in the forests south of the Congo River. It’s thought that the two species originated when the river formed up to 2 million years ago, splitting these bad swimmers into two populations, whose evolution diverged. Bonobos are less aggressive than their more common relatives, socially more female-centred, and more egalitarian. They also express a surprising array of sexual behaviours, believed to be instrumental to their peaceful nature. (This could reveal a



A male bonobo

tricky double edge to the Great Ape Project. If legal rights are extended to them, many will argue that legal responsibilities should be, too; bonobos would then have to be careful what they get up to in some US states.)

Our genetic affinity is with the bonobo as well as the chimp, so it’s no surprise to find the poles of the Hobbes versus Rousseau debate each claiming a species as evidence against the other. Certainly, the bonobo’s generally peaceable habits take the wind out of the kind of one-dimensional use of primatology evidenced by Howard Bloom. And a recent study seems to have dashed the hopes of any who let themselves believe that we’d discovered an ape without the capacity for things that liberated Westerners consider unseemly.⁹⁹ But this evidence—apparently showing that bonobos occasionally hunt other primates—seems to be more of a blow to naïve vegetarians than anything else. Even the bonobo’s public champion, Frans de Waal, finds himself having to placate those who get over-enthusiastic about the bonobo’s

undoubted positive qualities: “Those who learn about bonobos fall too much in love, like in the gay or feminist community. All of a sudden, here we have a politically correct primate, at which point I have to get into the opposite role, and calm them down: bonobos are not *always* nice to each other.”¹⁰⁰

Bonobos are no more saintly than nomadic hunter-gatherers; but both still present serious problems for simplistic Hobbesian philosophies.

Putting Biology in its Place

WE’VE SEEN THAT in *The Blank Slate*, Steven Pinker is happy to rely heavily on Lawrence Keeley’s analysis of primitive war, and to sum up with “Hobbes was right.” As a neo-Darwinian, though, he understandably neglects to mention a section in Keeley’s book headed “The Irrelevance of Biology”.¹⁰¹ Here Keeley argues that the Hobbesian “war of all against all” “might be used to describe some solitary species of nonhuman animals, but it cannot be applied to any known human society” (or great ape society for that matter). Our “inborn aptitude for social cooperation” makes it “far easier to explain peace than war”. While he sees the propensity for war as common, he rejects the idea that it’s ingrained, citing societies that swing quickly from bellicosity to peace (e.g. the Iroquois Indians, or the Norse in Scandinavia). “Military ferocity is not a fixed quality of any race or culture, but a temporary condition that usually bears the seeds of its own destruction.”¹⁰²

Later in his analysis, Pinker is more up-front, in a statement that might surprise some who dismiss him without reading him:

I find myself in agreement with the radical scientists who insist that we will never understand violence by looking only at the genes or brains of violent people. Violence is a social and political problem, not just a biological and psychological one.¹⁰³

He goes on to unpack his “Hobbes was right” declaration to show that, contrary to the shallow association of Hobbes and “innatist” biological theories, social factors are as important, if not more important in analyzing war:

Hobbes’s analysis of the causes of violence, borne out by modern data on crime and war, shows that violence is not a primitive, irrational urge, nor is it a “pathology” except in the metaphorical sense of a condition that everyone would like to eliminate. Instead, it is a near-inevitable outcome of the dynamics of self-interested, rational social organisms.¹⁰⁴

Ah—here’s the “socio” part of sociobiology. But once more, a blanket analysis of

violence across all types of societies masks the real arguments for more peaceful living conditions among foraging nomads:

If an obstacle stands in the way of something an organism needs, it should [according to “selfish gene” theory] neutralize the obstacle by disabling or eliminating it. This includes obstacles that happen to be other human beings—say, ones that are monopolizing desirable land or sources of food.¹⁰⁵

Causes of war—settled living and resource monopolies—are exposed, but societies that generally live without such things are omitted.

Hobbes’s perception of primitive man as “solitary” is, as we’ve seen, risible, and Pinker acknowledges the irony that the cause of most brutishness (as well as most tenderness) is social life: “Human sociality is the original ‘entangling alliance,’ in which two parties with no prior animus can find themselves at war when the ally of one attacks the ally of the other. It is the reason I discuss homicide and war in a single chapter. In a species whose members form bonds of loyalty, the first can easily turn into the second.”¹⁰⁶

Plainly, in looking at the origins of war, we’re dealing with a complex mixture of genetic capacities, ecological contingencies, and social structures. Pinker highlights the role of social entanglements as a central issue in the generation of violence, but, in trying to ground this in “selfish gene” theory, skirts right past any detailed analysis of how these entanglements may have evolved non-genetically. Are the kind of social bonds that breed conflict intrinsic to human being? I’d like to turn now to an anthropological study that directly addresses the importance of social structures and the evolution of alliances that can fan the spark of homicide into the fire of war.

Complexity & Conflict

IT SEEMS ODD, after casting so much doubt on the value of ethnographic accounts of indigenous conflict, to return at this late stage to anthropology. However, Raymond Kelly's *Warless Societies and the Origins of War* is an especially well-crafted study that, in lacking naïvety and analyzing data thoroughly, avoids most of the pitfalls that we've discussed. Even Lawrence Keeley, whose work it implicitly calls into question, was impressed enough to lend its cover some blurb; he found Kelly's thesis "important, interesting, plausible".

Kelly's approach is two-fold. On the one hand, he analyzes data on conflict and violence among indigenous peoples classically trumpeted as "peaceful," e.g. the !Kung in southern Africa, the Semai of the Malay Peninsula, the Mbuti pygmies from the Congo, the northern Canadian Copper Inuit, and the Siriono of eastern Bolivia. His method is to compare various aspects of such societies, such as population density, social structure, sedentarism, and so forth. Out of these permutations he tries to make some general deductions about the occurrence of war.



Two Andamanese Islanders in 1875

On the other hand, he conducts an in-depth case study of the various peoples native to the Andaman Islands, a small archipelago in the Indian Ocean that came to many peoples' attention recently as one of the places devastated by the 2004 tsunami. While unquestionably impacted by colonial occupation, the native situation found in ethnographic reports presents a wide variety in ecological niches, nuances in social structure, and exposure to colonial influence, which Kelly takes as an invitation to use the Andamanese as a microcosm for studying the evolution of violent conflict. Crucially, the Andamanese ethnography is subjected to the checks and balances of comparison with the wider anthropological data described above, and

the archaeological record.

The most important starting point in Kelly's work is the fact that he doesn't buy into the Hobbes versus Rousseau simplifications that have derailed so many studies. He feels—unlike Keeley and Pinker—that it's useful and significant to distinguish between homicide and war, and admit that the absence of the latter can never preclude the existence of the former. Hence, his work is the identification of “warless” societies, not the naïvely utopian search for “peaceful” societies. At the same time, he bears in mind that scale matters when trying to deduce the quality of life from murder statistics.

Homicide, the killing of a killer (capital punishment), and spontaneous, potentially lethal conflict over resources do go well back into human prehistory. However, these were rare events from an actor's point of view, in that lethal violence would be likely to occur within one's own local group only about once every hundred years (or once every twenty years in a regional band of five neighboring local groups). The “nightmare past” that Hobbes envisioned in which individuals lived in continual fear of violent death clearly never existed. On the other hand, an effort to locate ethnographic instances of societies in which conflict is absent and utopia concretely exemplified invites disappointment.¹⁰⁷

What, then is “war”? If someone severely pisses you or your family off repeatedly, and the conflict—in the absence of a central power's mediation—escalates to the point where you kill them, that's murder. However, if a feud or other ongoing conflict (e.g. over resources) develops between two social entities, and it gets to the point where people can be targeted merely because they're one of “them” rather than one of “us”—that's war. Kelly calls it *social substitutability*. An attack can be directed against an individual who's done no wrong to you *per se* because they “stand for” the other social group—and it's this abstraction that's the real target in warfare.

Further, social substitutability only seems to be facilitated by a certain level of social complexity. As we've seen, Keeley's *War Before Civilization* makes his demolition of the idea that social complexity is related to war both easy and worthless by taking the dividing line as that between state and non-state societies. Kelly is more discerning, placing the line between what he calls *unsegmented* and *segmental* societies. He finds little if any direct correlation between war and other factors (e.g. population density and marriage customs), but all “warless” indigenous societies seem to be unsegmented in organization. This means that:

- a typical social group is “limited to the family, kindred, and local community” (i.e. no “clans” or “tribes”—“band” is the usual label for an unsegmented social unit);

- when you marry, the bond only links you to your spouse and their immediate family;
- marriage payments and “kin group member liability to vengeance” are absent;
- “settlement pattern is either fully migratory or seminomadic with an absence of food storage” (and of the potential for economic inequality that food storage engenders);
- “population density is variable, ranging from less than 0.2 to as many as 5 persons per square mile, but is characteristically below 1 person per square mile.”¹⁰⁸

This might seem like an absurdly tight series of constraints that would make the number of qualifying “warless” societies vanishingly small. Indeed, there aren’t many places on the planet where this kind of life is still viable. But some have managed it within living memory; and more importantly, there’s good reason to believe that this pattern was typical for much of that Palaeolithic expanse. Taking Kelly’s thesis seriously tilts our judgement about life before the end of the ice age away from “we can’t be sure” towards “possibly or probably warless.”

Note that Kelly’s conclusion isn’t as simple as saying that living an unsegmented lifestyle completely removes the possibility of war. It’s just that this factor more than any other governs the lowering of the *threshold* for war. In the professional lingo:

... the distinction between unsegmented and segmental organizational types successfully differentiates comparatively warless and warlike foragers, and ... each of these organization designs also modulates the effects of other variables on the frequency of war. This is entirely consistent with the fundamental concept that war and society coevolve.¹⁰⁹

I’m no fan of academic jargon, but the more I’ve looked into this issue, the more I’ve appreciated its extreme complexity, and the value of finely wrought analysis. Authors of popular works may decry such verbosity with the often justified accusation of sophistry, but in this case it seems to me that Kelly has simply taken more care in his thinking.

Even appreciating that “extraordinarily high” homicide rates in small-scale societies can still translate to “day-to-day tranquillity”,¹¹⁰ it’s still difficult for us to not find these claims a little fishy. Without glossing over the instances of brutality that inevitably happened, and happen, in forager societies, a few Andamanese ethnographic snippets are useful for getting a feel for the more general situation. It is, in effect, what many primitivists claim as a kind of ‘original anarchism’. It involves greater personal responsibility than living under a state, of course; but at the same time it certainly isn’t a fearful open-ended “war of all against all.”

M.V. Portman, recruited by an anthropologist to photograph Andaman Islanders in the late 19th century, described Andamanese men as “gentle and pleasant to each other, and kind to children, but having no legal or other restraint on their passions, are easily roused to anger, when they commit murder.”¹¹¹ Kelly adds: “Women also fight each other, sometimes employing sticks, although no female homicides are reported Usually, a homicide engenders no sequel.” That is, there’s no sense of group-level obligation to avenge a murder, and when the family of a murder victim act, they usually target the killer and no one else.

Individual responsibility and animist spirituality merge in the fact that vengeance is usually left for the deceased’s spirit to enact. Kelly quotes Radcliffe-Brown, a social anthropologist who spent two years on the Andaman Islands shortly before World War I, who describes the purification rites that a man must undergo to avoid retaliation from his victim’s spirit:

If a man kills another in a fight between two villages, or in a private quarrel, he leaves the village and goes to live by himself in the jungle, where he must stay for some weeks, or even months. His wife, and one or two of his friends may live with him or visit him and attend to his wants. For some months the homicide must observe a rigorous tabu. He must not handle a bow or arrow. He must not feed himself or touch any food with his hands, but must be fed by his wife or a friend. He must keep his neck and upper lip covered with red paint, and must wear plumes of shredded *Tetranthera* wood (*celmo*) in his belt before and behind, and in his necklace at the back of his neck. If he breaks any of these rules it is supposed that the spirit of the man he has killed will cause him to be ill. At the end of a few weeks the homicide undergoes a purification ceremony. His hands are first rubbed with white clay (*tol-odu*) and then with red paint. After this he may wash his hands and may then feed himself with his hands and may handle bows and arrows. He retains the plumes of shredded wood for a year or so.¹¹²

Such obligations may not be an effective deterrent for a modern atheist gangster, but within the context of Andamanese culture, and along with the elaborate peace-making traditions that Kelly documents, they demonstrate the seriousness with which killing is taken. It’s clear that the lack of state power in such societies in no way precludes social order and collective morality.

At the very least, Kelly’s thesis is a powerful counter-balance to the “war is ingrained” side of the recent debate, which often relies too heavily on attacking crude Rousseauian beliefs. It’s unfortunate, but perhaps predictable, that compelling but involved reasoning like this only registers as a faint signal, if at all, on the radar of popular intellectual discussion.

The Ecologically Noble Savage

STEVEN LEBLANC'S *Constant Battles* is the least successful popular study of primitive war I've covered here. Which is a shame, as it's the one that deals most extensively with the fascinating and undoubtedly important issue of the ecological factors in the generation of warfare.

No one questions the impact of environmental problems on conflict. Keeley admits that "it is becoming increasingly certain that many prehistoric cases of intensive warfare in various regions corresponded with hard times created by ecological and climatic changes." And, even while stressing that "no type of economy or social organization is immune to natural disasters or to the impetus they give to warfare," against the grain of his main argument he concedes that "larger, denser, and more technologically sophisticated societies have a greater capacity to create their own disasters through deforestation, soil salinization, the introduction of new pests, and even foolish economic policies."¹³ Ferguson formulates five "preconditions" that contributed to war in prehistoric times: sedentarism, social hierarchies, long-distance trade, over-population and... climate change. And Kelly compares specific Andamanese examples of war to the late Palaeolithic evidence from Jebel Sahaba, highlighting the similar environmental contexts and the impact of resource shortages. LeBlanc is much bolder: "Ecological imbalance, I believe, is the fundamental cause of warfare."¹⁴

However, instead of discussing the various roles that ecology plays in group conflicts, I'd like to round things off by returning to the more general issue of the Noble Savage that we began with. The recent suggestions that civilization is more benign in terms of violence than primitive culture, rather than vice versa, go hand-in-hand with attacks on the idea that indigenous peoples live in harmony with the environment. Indeed, part of LeBlanc's argument, grounded in the somewhat overstated belief that ecological dysfunction is the root of all war, involves showing how prehistoric people ended up fighting much of the time because they weren't ecological saints.

The past couple of decades has seen a minor wave of revisionist scholarship aiming to expose this "conservation absence."¹⁵ Most critics attack the idea of a spotless environmental record for tribal people with the best interests of indigenous groups in mind, trying to demolish over-idealized images before their inevitable crumbling creates a kind of disillusioned backlash. However, as Ter Ellingson has

argued, framing the argument with loaded phraseology (as in M.S. Alvard's 1993 paper 'Testing the "Ecologically Noble Savage" Hypothesis') "tends to inflate the emotional 'noise' level of virtually any discussion",¹¹⁶ scuppering any good intentions.

Such scholarship, predictably enough, slips comfortably into some wildly reactionary contexts, such as 'The Anti-Biblical Noble Savage Hypothesis Refuted' by John Woodmorappe (also author of *Noah's Ark: A Feasibility Study*).¹¹⁷ Of course sound scholarship can be hijacked by dodgy causes. But some people make it easier than it need be—especially when the underlying assumptions of the scholarship itself are questionable.

In keeping with the rest of this essay, I'll not bother with looking at this issue in relationship to complex and agricultural prehistoric societies. If anyone still thinks that spirituality oriented towards the natural world can somehow automatically trump the destructive dynamics of agriculture, Jared Diamond's bestseller *Collapse* is worth a read.

Killing off the Megafauna

PROBABLY RANKING ALONGSIDE the brawling habits of the Yanomami as a totemic exhibit in the prosecution of primitive culture is the extinction of various species of large animals (megafauna) during our early colonization of the globe. As an example of its use in debate to paint the modern world as no worse than any human world, environmentalist journalist George Monbiot—who is probably seen as some sort of primitivist by many consumers of British media—brings the point up in an exchange with Paul Kingsnorth about the merits of industrial civilization:

You maintain that modern industrial civilisation "is a weapon of planetary mass destruction." Anyone apprised of the Palaeolithic massacre of the African and Eurasian megafauna, or the extermination of the great beasts of the Americas ... must be able to see that the weapon of planetary mass destruction is not the current culture, but humankind.¹¹⁸

As far as I can make out the issue in Africa and Eurasia isn't bandied about much. The length of human habitation in these regions means that any extinctions were less dramatic, and some megafauna were able to evolve defences against our predation.¹¹⁹ The real furore, the "proof" of primitive human rapaciousness, seems to emerge from our expansion into the Americas—much of the controversy being due to cultural sensitivities around the image of Native Americans.

The theory that human hunting was the primary cause of megafauna extinctions in these areas—the "overkill hypothesis"—has been championed since the 1960s by

geologist Paul S. Martin. Depending on who you read, either his theory has faced a long uphill struggle of acceptance and currently has broad consensus, or it gained much support in the decades after its proposal, but has been made debatable by more recent evidence. In his wide-ranging and thorough survey of the late Palaeolithic and early Neolithic, *After the Ice*, Steven Mithen examines the evidence against the Clovis people who first entered the Americas across the Bering Straits, and concludes with a question mark.¹²⁰ A few dozen species seem to have finally become extinct around 10,000 BCE, near the time of human arrival, but from these the only “kill sites” in evidence are for mammoths—and even these seem to be ambiguous.

All told, human hunting probably played a part in some of these extinctions, but it’s worth remembering that it seems to have been playing a quiet second fiddle to the devastation brought about by climate change as the ice caps melted. Quite normal hunting patterns could have tipped the scale for these creatures, beset by massive environmental shifts. So, some may have made it if humans had stayed put in Asia; does this make a case for any kind of Hobbesian primeval human deadliness? Not really. As Jason Godesky writes:

No, there was no noble savage; but there was no murderous savage, either. Humans were not created good or evil—just human. Our entrance into the Americas, Oceania and the rest of the world was as harmless as wolves, lions or sharks. My words there are carefully chosen. We don’t normally consider wolves, lions or sharks particularly “harmless,” and neither were humans. But we recognize the place such predators have in the natural world. We recognize that they’re part of a bigger picture. We know that introducing them into a new situation will have far-reaching effects on that situation, but we also know that’s not a reflection of their own nature, but the nature of ecology itself. Just like humans.¹²¹

Our role in Palaeolithic extinctions certainly topples the idea that hunter-gatherer shamans were in telepathic communication with the group mind of their prey, and could modify their bands’ hunting patterns in order to make sure humans never witnessed anything so heinous as an extinction. But isn’t it strange how shocking “extinction” can seem when placed in a frame with “pristine” hunter-gatherers, even as we ignore our numbness to the mind-boggling acceleration of extinction rates precipitated by our own agriculture and industry?

Once more we’re saddled with exaggerated Noble Savage ideals, floating about in the cultural ether, arguably not actually believed in by anyone. And in bringing these ghostly ideals down to earth, it’s felt that actual hunter-gatherers have been exposed as fraudulent in some way, and that the only change the modern world has wrought on the planet has been improvement. At worst, “it was ever thus.”

MITHEN'S CHAPTER on the megafauna in the New World is titled 'Clovis Hunters on Trial', and the reference to legality is interesting. In modern law, when responsible for someone's death you're generally only charged with murder if you *intended* to kill them or if you acted with wilful *disregard* for their life.

There aren't many cases on record of any humans driving species to extinction with intent—perhaps a virus here and there that's been eradicated from the wild. Still, when you have crops and animals to defend, suddenly some animals become "pests" and "vermin"; combined with expansionism, you have a recipe for potential if not effective "speciecide." Conversely, when it comes to disregard, I find it hard to imagine a hunting culture who don't care about the ongoing success of the animals they hunt. Clearly, any extinctions caused by foragers happened simply because the culture wasn't equipped with a means of knowing what was happening.

Among the blessings of the modern life sciences is the ability to collate enough data from the natural world to assess the overall health of particular species, to an extent never before possible. Unfortunately, this blessing comes as a thin silver lining on a very dark cloud called the Holocene extinction. This is generally considered to be the sixth great "extinction event" the planet has seen, and its origins coincide with the emergence of human culture from the Palaeolithic.

Some classify the ice age megafauna extinctions separately from the ongoing process happening around us now, calling this earlier episode the Quaternary extinction.¹²² Others see them as just the thin end of our big Holocene wedge. Certainly the "thin end" perspective is unarguable when you're just looking at the numbers. But in terms of holding cultures to account, I would argue that the development of agriculture—and certainly the Industrial Revolution—signalled *massive* qualitative shifts. Disregard became much more viable. And while I hold conservation efforts in very high regard, a wider perspective makes it hard to see that silver lining—our ecological knowledge—as unalloyed "point-scoring" for the modern world. Combined with the exponential increase in devastation, our increasing knowledge of the scale of the issue changes the charges against us from plain uncomprehending disregard to *wilful* disregard. We know what we're doing, and, on balance, carry on doing it.

By Their Fruits

YOU MIGHT OBJECT that all this talk of "point-scoring" and legalistic judgements is petty and irrelevant. A species doesn't prefer to be made extinct by uninformed hunters as opposed to obtuse industrialists. What counts is what happens, because the road to hell is indeed paved with good intentions.

It's a very good point. Sadly, it seems to have been entirely lost—if it was ever mooted—in the recent wave of scholarship debunking the Ecologically Noble Savage.

Steven LeBlanc's contributions are typical. In discussing a culture in which a custom that prohibits collecting honey from hives facing north seems to reduce over-exploitation, he dismissively remarks that "this benefit is more likely accidental than by design."¹²³ And looking at hunting habits, he says:

As hunting reduces the numbers of some species, the foragers shift their aim toward other more common animals because the cost, in time, of getting the rare ones is too high.

But this is not conservationist behavior. It is behavior that is focused on the short term. Deciding to stop hunting a species that has become rare differs from consciously hunting that animal so lightly that it does not become rare. The true conservationist will not kill a rare species, even when it is easy to do so.¹²⁴

Indeed, the whole recent debate seems to hinge on this attitude towards "conservationist intent."¹²⁵ Discussing the definition of "conservation", Raymond Hames notes:

For the U.S. government, "Conservation commonly refers to the maintenance of genetic, species, and ecosystem diversity in the natural abundance in which they occur"; for evolutionary ecologists, "... conservation acts are by definition costly and entail the sacrifice of immediate rewards in return for delayed ones"; and for conservation biologists "... *researchers with more applied interests typically consider an intent to conserve, as evidenced by institutional design, to be sufficient.*"¹²⁶ (my emphasis)

If studies of contemporary hunter-gatherers don't show that they *consciously, rationally plan* to minimize their impact on their ecosystem—and not many studies seem to—then even if they have a relatively minor environmental impact, any eco-friendly credentials are denied them. Conversely, by some definitions, the mere intent to conserve, even if you live within a system that violently pulls the rug out from under your good will, gets you brownie points as a "true conservationist."

Some have argued that the concept of "conservation" is entirely modern, and improperly judgemental when applied to indigenous and archaic cultures. I would agree. Judging conservation based on intent is both humanistic and Christian, and is predicated on the double-edged sword that agriculture has given us: (apparent) dominion over the natural world. With the control we've gained, we've accumulated the power to degrade nature to a degree unthinkable to even the least informed forager culture. Alongside this we've accumulated knowledge that, in theory at least, might

let us wield this sword more wisely, exercising control over nature with other species than our own in mind. We might move from the Old Testament's "dominion" to the New Testament's "stewardship."¹²⁷ We might—but we haven't, as yet. In any case, for us, "conservation" is an absolute necessity. We—let alone the species and ecosystems we try to conserve—won't survive without it. On the other hand, while I doubt that callous disregard for the environment was ever a feature of pre-agricultural times, even if it was, the impact of simple hunter-gatherer societies wouldn't have been significantly worse. Low numbers and lack of agriculture would see to that.

This precisely echoes the debate on war. Regarding the absence of war among some hunter-gatherers, Keeley remarks:

The *seeming* peacefulness of such small hunter-gatherer groups may therefore be more a consequence of the tiny size of their social units and the large scale implied by our normal definition of warfare than of any *real* pacifism on their part.¹²⁸ (my emphasis)

We've seen how using proportional statistics to "overcome" this perception can lead to distortions in our impressions of the actual lives these people lived. When it comes to ecological impact, the distortions following in the wake of a triumphant discovery of "non-conservationist behaviour" among foragers are perhaps even greater. The argument that they can't be let off because of their tiny social units doesn't wash. *The tiny social unit is part of the deal, just as constant expansion is part of our deal.* Neither are necessarily intentional, but... by their fruits ye shall know them. Both agriculture (to a large extent) and modern capitalism (inherently) share an imperative to constant growth, which has landed us in a very tight spot. If it's possible to escape, it may only be through the radical application of planning and ingenuity. But we can't judge foragers for lacking these qualities in their interaction with the environment. Contrary to the delusions of Hobbes and Rousseau, they possess the capacity for forward thinking; but with respect to the large-scale interactions of their society with the wider ecology, they simply didn't and don't need it as much as we do.

The high value we're forced to place on conscious intent runs right through the literature analysing war and ecology among indigenous and prehistoric peoples. Jared Diamond subtitled his book *Collapse* with "How Societies Choose to Fail or Succeed"—though the concept of "choosing to fail" here is more of a rhetorical challenge to modern people than any kind of real assessment of the dynamics of past societies that have catastrophically collapsed. The title of his 1987 article 'The Worst Mistake in the History of the Human Race' (meaning agriculture) seems to imply that we (wrongly) *chose* this historical path. I think this is an artefact of the very progressivist ideology he's challenging, wherein we saw that growing food was good, so we took

it up in the name of conscious, linear improvement. All the evidence, meanwhile, seems to show that we “fell” into agriculture in a series of unwitting responses to the combination of growing populations and climate change.

It is of course humbling to admit that we’re not the masters of our fate, and never really have been. Many will confuse this realization with the idea that we’re entirely victims of historical forces; but that’s just a neurotic kind of panic that comes when our too-tight grip on the reins is loosened. It seems that for the majority of our species’ existence, a pretty good life didn’t *require* the kind of mastery that we now believe in and need so much that we can’t imagine properly human life without it. Nomadic foraging, this sociocultural system that evolved alongside our bodies, didn’t hermetically protect us or the life around us from each other; that’s not how nature works. But it allowed a fair level of harmonious integration, which didn’t need whole sub-cultures of activists and pressure groups to sustain it. As tribalism advocate Daniel Quinn has it: “Nothing evolution brings forth is perfect; it’s just damnably hard to improve upon.”¹²⁹

We are still in the very early stages of “evolutionary testing” of the system we live by now. It’s already had a terrible impact on the biosphere, and any success for it that now seems viable probably involves such a radical mutation of the system that it will become unrecognizable. Which is just a long-winded way of saying: it won’t succeed. If we persist, something else will have succeeded. The slick sheen of modern luxury doesn’t go very deep, and masks some huge problems to overcome if we’re to thrive following this evolutionary blink of an eye since the dawn of agriculture.

Conclusions

EARLY ON IN THIS STUDY, I emphasized that the assaults by Steven Pinker and Lawrence Keeley on the “orthodoxy” of Rousseauian ideals regarding prehistory, while perhaps vital within the academic and intellectual spheres, were to a large extent misplaced in the world at large. At best they represent a polemical “over-correction” of intellectual debates. And while there’s no simple reductionist explanation for this surge of debunking the Noble Savage, it’s my feeling that it’s our current cultural turbulence, at the interface between the free market capitalist ideals we’ve thrived on in very recent times and the ecosystems that have always supported us, that is a major factor in this trend.

I don’t know if Pinker or Keeley are consciously or primarily influenced by this turbulence in their pronouncements on primitive war. However, many commentators, such as Howard Bloom (whose solution to the ills of the modern world is summarized as “working harder” at being nice within liberal capitalism¹³⁰), are explicitly motivated by capitalist apologetics, and this tendency is significant and questionable enough to warrant some criticism.

Not many things are left clear to me after studying this topic in-depth, but perhaps one simple observation stands out. It seems that the political and cultural ideals ostensibly treasured above all by the modern West—freedom, democracy, egalitarianism—cannot be claimed as successes that vindicate us. In fact, their most concrete and prevalent manifestation is arguably the institution of nomadic hunter-gatherer culture. It seems to be no coincidence that our view of these people is so rife with distortion and denial—when we remember to include them at all in our debates on prehistory. Caveats apply, of course; women’s rights and the initiatory rites of puberty seem to be worth bearing in mind, though I know of no reason to suggest that the more repellent examples of these in ethnography are universal in small-scale societies. Still, I wonder if the compelling evidence from anthropology that foragers practice a *genuine* democracy, living at the scale at which the collective will can be manifested with minimum compromise, at some level hurts our pride, and skews our collective assessments of them.

Our civil freedoms and democratic cultural institutions are undoubted achievements, but to a large extent they seem to be valiant recoveries from a great lapse. These are recoveries that our vast social scales (another frequent source of pride)

prevent from ever being fully realized, and which are underwritten to an unknown extent by a resource abundance that we seem to have squandered abysmally.

So, WHY DON'T I just go and live in the desert or something? This question is an obvious response to my contrasting primitive culture favourably with modern culture, but it's also obvious nonsense. There's no going back.

Some primitivists do believe that civilization is so fundamentally unsustainable that catastrophic collapse is inevitable, and tribal life is, as well as being our origins, our only way forward. This is at least a coherent position, though I have grave doubts that the ruins of civilization will be any sort of viable foundation for recreating the warless egalitarianism that may once have prevailed in the human world. And anyone who loudly says that collapse is inevitable will have to watch their backs if it happens. Some advocates of positive thinking seem to believe that all such predictions are "apocaphilic," and significantly contribute to the likelihood of disaster. If the worst comes to the worst, no doubt the surviving optimists will roam the world in packs, violently holding the pessimists to account for not looking on the bright side while there was still time.

The problem with this, apart from it being a caricature, is that in our current situation there is also much in "optimism" that colludes, subtly or overtly, with the unsustainable momentum of modern capitalism. Optimism versus pessimism, like Hobbes versus Rousseau, is a duality that has little to offer our complex predicament. Such polar oppositions are of course very useful for triangulating one's position in the extensive landscapes of belief, and for plotting one's course. However, it is one thing for a navigator to use the constancy of a Pole Star to gain vital orientation; it is quite another to shun the complexities of actual terrain by heading straight for an actual Pole, to take up residence at this abstracted *point*, and then try to ignore the barren, frozen wastes that are found at such inhuman extremities.

In the end, I see no great value in the fragile optimism that effectively says, "I can only face a future in which it all works out OK." Without trying to suggest that it's an easy state to achieve or maintain, much more desirable is the conviction that come what may, the future as well as the present will always offer opportunities for improvement and good cheer—things best pursued with graceful aspirations, not fundamentalist compulsions.

FOR ALL MY CRITICISM of Hobbes, it may surprise some if I say now that anarchism in any global form is—for our current situation—not the answer. Hobbes, on balance, does seem to have been wrong. The life we lived for the majority of our

existence was profoundly social, and within those small communities, the inevitable conflicts that expressed themselves violently, while perhaps proportionately rife compared to modern states, almost certainly translated to infrequent irruptions into daily experience. But we don't live that way any more, and for now we can't. States aren't *generally* necessary because humans need them to live decently; they are *currently* necessary because there's too many of us, surrounded by too many domineering private institutions, to live decently otherwise. Just as Freud was wrong on many counts not because he was completely wrong, but because he falsely generalized his analysis of the *fin de siècle* Viennese psyche to humanity as a whole, Hobbes was wrong because he generalized from complex, large-scale societies. Sometimes, quantity affects quality, and judgements don't always scale.

Even though I don't think many billions of people can live even half-decent lives on this planet without states, primitivism, and actual living hunter-gatherers, are probably fundamental elements in our global cultural ecology. Functioning examples of our original cultural style are very close to being extinct, and this as much as anything expresses the peril of the current situation. Those remaining shouldn't be preserved as living museum pieces; they should be simply respected, and engaged with from that basis. I know it's probably just cavalier rhetoric to say so, but if this conflicts with mining, agricultural expansion, or what *we* think is good for them, tough luck. The line should have been drawn a long time ago, and if we don't draw it now, there's as little hope for us as there is for them.

Within modern culture, primitivism will never die away. Heck, even hunter-gatherer cultures have myths of a lost age where communication with the gods, now only attained after gruelling shamanic initiation, was a basic human activity. Far from being a distraction for those too sour to enjoy the blessings of modernity, nostalgia for the archaic is a general—universal?—human tendency that is best related to creatively rather than ignored or dismissed. It will survive as long as two conditions hold true: (1) that present life is unsatisfactory in some way; (2) the nature of our remote past is subject to uncertainty, and is impossible to prove to have been worse than present life. I can't see any end to either of these.

Further, I think very modern phenomena like teen suicides and school shootings point to reasons why, if nostalgia for a Golden Age will be present in any human situation, it is more than understandable today—whatever our proportional war deaths are. Such nihilism expressed by children as they approach the threshold of the adult world is dismissed with Prozac at our peril. Primitivism in this context is merely one of a range of creative reactions to our dire situation that try to imagine their way into a better world rather than just leave the world behind. The fact that in its simplest form it is only coherent if a number of billion people vanish certainly sees it brushing

nihilism, but this is far from implying the tradition has nothing to offer. Given our current situation, in which the population growth of the low-impact poor is often used as a scapegoat by the high-impact rich who produce fewer children,¹³¹ it's the anti-consumerist egalitarianism of primitivism that offers us most inspiration.

What primitivism expresses for us, and thriving foragers exemplify, is the existence of radically different social perspectives. Again, this isn't the only or even the major justification for the rights of indigenous peoples to self-determination; the bottom line there is common decency. But for us, painted into this tight corner, our imagination needs all the perspective it can get. Concrete expressions of primitivism, anarchism, and other heretical social ideals, while abysmal as all-embracing plans for any foreseeable global future, should be embraced on the micro scale as widely as possible within our current context, to act as essential vaccines against futures of totalitarianism and/or profligate consumption. The flame of living, face-to-face democracy should not be smothered beneath the inevitable compromises of coping with an overcrowded globe. As Dale Pendell has argued, even as we make the best of things through reformist measures, it is vital to keep primordial visions of human freedom "on the horizon".¹³²

WRITING ABOUT "PERSPECTIVES," and the "games" of comparison between modern and primitive life, seems rather trivial at times. Like, every time I turn on the news. British soldiers hitting roadside bombs and innocent villagers being massacred in Afghanistan. Embattled American troops on the streets of urban Iraq, the chaos of car bombs, Iraqis killing each other, so many that most incidents never make the news media's radar—just like entire wars in Africa and in other places less obviously bound to Western interests. War in the present—even if some of us are fortunate enough to be statistically better off than at any other time in human history—is awful enough. What of its future?

As the general tenor of his argument is that the modern world is the best world so far, Steven Pinker naturally veers towards optimism. Citing the philosopher of ethics Peter Singer's concept of the "expanding circle" of compassion, he sees the spread of modern media and the democratic state as healthy preconditions for maintaining his hypothesized trajectory towards more peace.

Raymond Kelly, while retaining a realism amidst his claims for "warlessness" among foragers, is also sanguine. He makes much of the peacemaking traditions of the Andamanese, and provides a social echo to Pinker's general emphasis on counter-balancing forces in our evolutionary make-up. He concludes:

We have seen that war and society coevolve. One central aspect of this coevolution is that the elaboration of peacemaking goes hand in hand with the origin and development of war. The hope of future peace therefore does not require a nostalgic longing for a return to the simpler times of the Upper Paleolithic and/or the simpler ways of unsegmented societies. The human propensity to peacemaking, so strikingly evident from the characteristic alternation of war and peace, is central to the nexus of interrelationships between human nature, war, and society—and this bodes well for the future.¹³³

Brian Ferguson is perhaps more cautious: “The foreseeable future of war looks pretty robust.”¹³⁴ But still, his tenacity in insisting on warlessness in the Palaeolithic goes to the root of this position as a politicized view. Even as I express caution about projecting desires into the past, from the perspective of seeking the truth of the matter, I can’t deny the value in holding on to this: “To recognize an ancient beginning is to conceptualize the possibility of a future end to war.”¹³⁵

However, it’s Steven LeBlanc’s views on the future of war that concern me most, because they seem to exemplify a certain optimistic obtuseness that is sadly characteristic of our culture’s attempts to grapple with the magnitude of our problems. His general argument revolves around ecology, but it is precisely on this issue that his analysis of the present and future trips up.

Some people do manage it, but I feel it’s hard to overstate the importance of fossil fuels for understanding the runaway success of the modern world. The major flip-side of this success is of course the twin perils that fossil fuels currently present: the climate change that our profligate use of them has set in motion, and the utter dependence on these finite resources of much of our present carrying capacity. Conservative estimates of usable reserves place us on the edge of a cliff, if not over the edge already, grinning because the breeze is nice and we’ve not hit the ground yet. Accurate or not, liberal estimates of usable reserves, like most commonplace optimisms, seem to be usually taken as an excuse to postpone facing a very serious issue.

In any case, LeBlanc refers to the shadow cast by this huge problem only obliquely, admitting that there’s “no guarantee that the current low growth and resource abundance among the industrialized, or urbanized, states will continue over the long term. Just because the situation seems stabilized does not mean that a long-term balance has been developed.” I can only think that it’s a kind of well-meaning obligation to end on a high note that leads him—after calling his book *Constant Battles*, admitting that our current abundance is possibly short-term, and generally conceding that “modern states have incredibly severe ecological problems”—to then claim:

We are on the right trajectory for world peace. We are moving in the right direction, but this process will not produce instant success any more than the

war on cancer has. . . The opportunity for humans to live in long-term balance with nature is within our grasp if we do it right. It is a chance to break a million-year-old cycle of conflict and crisis.

If warfare has, in fact, been based on rational behavior for much of human history, then deciding that warfare is bad and should be stopped will not solve our problem. If, as I believe, warfare has ultimately been a constant battle over scarce resources throughout the ages, then only solving the problem of adequate resources will enable us to become better at ridding ourselves of conflict. For the first time in history, we have a real ability to provide adequate resources for everyone living on the planet. If we have reached a point at which we can live within Earth's carrying capacity, we can eliminate warfare in the same way we can eliminate infectious disease: nor perfectly, not immediately, but slowly and surely.¹³⁶

Anyone concerned with ecology who looks around the world today and decides that we're currently on the right trajectory for world peace surely throws their credibility immediately into question. The explicit conclusion that chronic conflict and ecological dysfunction are our fundamental inheritance, only now approaching a solution via the modern world, is unforgivable. It ignores the very complex realities of Palaeolithic archaeology and contemporary ethnography—which include viable arguments for war and significant ecological damage being largely products of sedentarism and agriculture—and allies itself with an almost messianic vision of civilization. It is the monomania of this secular messianism, and not primitivist nostalgia, that poses the greatest threat to our future.

IN *AFTER THE ICE*, Steven Mithen discusses the effect of the Younger Dryas on the cultures of the Middle East. The Younger Dryas refers to a period when, as global temperatures warmed at the end of the last ice age, before they stabilized and initiated the current age—the Holocene—things got suddenly colder for a thousand years or so. The effect on the Natufians, generally peaceful hunter-gatherers who had been making the best of the improving climate, kicking back in villages and growing in numbers considerably, was terrible. Mithen talks of “a devastating collapse of food supplies just as population levels had reached an all-time high.”¹³⁷ The Natufians were forced to return to a nomadic life. When things warmed up again, agriculture evolved relatively quickly, apparently a complex reaction to this traumatic climatic oscillation.

With the bulk of our food production reliant on fossilized resources that are running out, and in the knowledge that these resources have to a large extent facilitated our recent exponential population growth, the lessons to be learned from the Natufian experience couldn't be more stark. Of course, there is much of what

Nietzsche called “world-historical irony” in the fact that natural climate change helped initiate agriculture, which in turn created industrial civilization, which unwittingly triggered climate change and other cascades of ecological disruption which may contribute significantly to the downfall of the whole trajectory. Is this why some are so desperate to zoom in on the imperfections of cultures outside this tragic loop? As John H. Bodley writes,

It is no surprise that revisionist assaults on “noble savages” and “wilderness” come at the historical moment when the global culture’s unsustainable cultural imperative of perpetual capital accumulation is reducing the earth’s stocks of water, soil, forests, and fisheries to dangerously low levels and disrupting ecosystems and natural cycles on an unprecedented scale.¹³⁸

For me, this is the most profound issue underpinning current debates on the Noble Savage—whether the image is one of a Ecological Saint or of a Peaceful Saint. While both are unrealistic ideals, many recent attempts to undermine them have overshot their mark by a long stretch. Our civilization is the most ecologically destructive ever, in the way that really counts: its gross effect on other species and on our own sustainability. Any claims about our relative peacefulness, until we’ve resolved our ecological crisis, are premature at best. Our strongest cause for optimism is the fact that while it’s far too early to proclaim our civilization a triumphant improvement on the past, it’s also possible that it’s a little early for outright condemnation. But whatever social modes prove sustainable, making ourselves feel better through the ill-considered debunking of false myths is no way forward. We need to stop kicking around the image of the primitive to justify our singular story of progress, and take it as one image among many that might inspire new stories of human potential.



The North Great Andamanese peace dance (1905)

APPENDIX I

Society Against the State

THE THEORIES OF FRENCH anthropologist Pierre Clastres seem to be neither widely supported nor widely refuted. This indifference (in the English-speaking world, at least) probably stems in part from the fact that he slips right past the Hobbes versus Rousseau polarity that frames and energizes much debate on the nature of primitive society. Clastres says: primitive humans *are* violent, but an overlooked positive social function of their violence is to *guard against the formation of the state*, which is sensed by the aboriginal mind as a looming evil.

Clastres was mentored by the anthropological giant Claude Lévi-Strauss, and his ideas were a key reference point for Gilles Deleuze and Félix Guattari in their *Capitalism and Schizophrenia* volumes.¹³⁹ He shares with these philosophers a Nietzschean concern with the origins of political power, and a fierce independence of mind which no doubt found resonance with the Yanomami and Guayaki tribes he spent time with during fieldwork in the Amazon.

Clastres' apparent "advocacy" of primitive war may seem perverse at first glance. At its heart, though, is the spirit of Winston Churchill's reputed response when someone said to him, "Nothing is worse than war." Churchill snapped back, "Slavery is worse than war! Dishonour is worse than war!"¹⁴⁰ Of all the qualities rightly or wrongly attributed to hunter-gatherers, *egalitarianism* is perhaps of the least disputed. Clastres argues that the very foundation of oppression and alienation is the division of society into the rulers and the ruled, masters and servants, and that this foundation emerges as a function of large-scale society. Past a certain number of people, a society cannot practice *living* democracy, which is really anarchism, the self-determination of a society of equals. Population growth eventually necessitates representatives and leaders, and slides past what Clastres sees as a "point of no return" on the road to the fundamental iniquities of statehood.

Steven Mithen, in *After the Ice*, wonders why the Natufians, hunter-gatherers in the Middle East lasting from about 12,500 to 9,500 BCE, whose sedentary life was a precursor to the earliest farming, gave up "the mobile lifestyle that had served human society since its first appearance 3.5 million years ago on the African savannah."

Why create the social tensions that inevitably arise when one has permanent next-door neighbours within a village? Why expose oneself to human waste and garbage and the health risks that accompany a more sedentary lifestyle? Why risk the depletion of the animals and plants near one's own village? ...

The Natufian people appear to have been quite peaceable as well as healthy. There are no signs of conflict between groups, such as embedded arrow points in human bones ... The Natufian hunter-gatherer groups were good neighbours; there was plenty of land, gardens and animals for all.

It is possible that the Natufian ... people were prepared to suffer the downside of village life ... to enjoy the benefits. François Valla ... believes that the Natufian villages simply emerged from the seasonal gatherings of the Kebaran people. He recalls the work of social anthropologist Marcel Mauss who lived with hunter-gatherers in the Arctic at the turn of the century. Mauss recognised that periodic gatherings were characterised by intense communal life, by feasts and religious ceremonies, by intellectual discussion, and by lots of sex. In comparison, the rest of the year, when people lived in small far-flung groups, was rather dull.¹⁴¹

This theory does beg the question, if foraging life was so boring, why did it take a few million years for hominids to get round to settling down? Whether boredom was a factor or not, for Clastres there is some seductive allure to larger communities, whose diversions mask the necessity of a loss of autonomy and equality, and which "primitive war" defends against. It's not a Hobbesian vision exactly; *large-scale* sociality is a problem to be guarded against, while within the band there is intense conviviality and social intimacy. Rather than the overstated "war of all against all," Clastres' vision is one of war as a persistently irruptive frictional potential between social units, guarding against the deeper divisions that crude social unification brings.

War, as external policy of primitive society, relates to its internal policy, to what one might call the intransigent conservatism of this society, expressed as the incessant reference to the traditional system of norms, to the ancestral Law which must always be respected, which cannot be altered. What is primitive society seeking to conserve with its conservatism? It is seeking to conserve its very being; it wants to persevere in its being. But what is this being? It is an undivided being; the social body is homogeneous; the community is a *We*.¹⁴²

Some cultures that Clastres studied at first hand in the Amazon did have chiefs, of a sort,¹⁴³ but he saw these leaders as rather hollow figures, in terms of power, being *representatives* of the community in a way that makes our use of the term for our politicians seem like a euphemism. Clastres believes that "in his discourse, the chief never expresses the flights of his individual desire or the statement of his private law, but only the sociological desire that society remain undivided, and the text of Law

that no one has established, for it has nothing to do with human decision. The legislators are also the founders of society—the mythical ancestors, the cultural heroes, the gods.¹⁴⁴ The social scale is small enough that, without any monopoly on violence, the chief is very much the servant of the people, who are prepared to depose or kill him if his personal desires are seen to obstruct his expression of the communal will.

Also, Clastres sees the role of the warrior in such societies as rather tragic. While their exploits do garner *prestige* (honour or glory), they gain little *power* (ability to effect social control). He recognizes the potential of a “warrior class” emerging from any dependence on war to maintain social unity, but sees the emphasis on honour rather than power as the reward for battle as leaving warriors, if anything, more exploited by than exploiting society.

There are a number of problems with Clastres’ theory. The obvious inequality in social standing between men and women—most striking among the Yanomami—is dismissed unsatisfactorily with a discussion of men’s association, through their being warriors on a certain track to an inevitable bloody demise, with death, and women’s association, through childbirth, with life, and the power they can exercise in refusing to give birth.

There are also questions left dangling about the origin of the state, which his theories are meant to address. In his discussion of the seminal work of Étienne de La Boétie (a friend of Montaigne’s who asserted that tyrants have power because people give it to them) Clastres resorts to calling the state’s genesis “the misfortune”, and leaves it mostly unelaborated. He also never seems to put forward any evidence that primitive peoples consciously connect their antagonism towards neighbouring groups with the maintenance of small-scale autonomy. Presumably he sees war’s anti-state role as a function of the general primitive social structure, not the result of intent. However, some of his rhetoric suggests otherwise.

Despite its failings, Clastres’ work deserves attention for its independence of thought and challenges to both sides of the traditional “primitive violence” debate. If accepted, though, his work stands as rather pessimistic. He firmly rejects the standard accusations of wanting to “return” to primitive life, saying, “I content myself with describing the Savages”;¹⁴⁵ and he explicitly sees the transition from pre-state to the state as being a one-way street. At best, we learn to appreciate that a reversal in libertarian ambitions has transpired. If primitive society maintained its political freedom through dispersive war and social conservatism, our best bets, on the other hand—given our technologies of destruction and intransigent institutions—seem to be non-violence and novelty.

APPENDIX II

The Stoned Ape Hypothesis

TERENCE MCKENNA—an Ecology and Conservation graduate of an experimental Berkeley college in 1969, a vocal advocate of plant psychedelics, adopted as a guru figure by early 1990s rave culture—is perhaps an unlikely believer in the brutishness of humanity’s “state of nature.”

However, along with his anarchic anti-politics and penchant for consciousness expansion, he inherited from the sixties that period’s popular palaeoanthropology. Writers such as Robert Ardrey (author of *African Genesis*, 1961) and Desmond Morris (*The Naked Ape*, 1967) formulated the “killer ape” theory, which emphasized the importance of violence and male social hierarchies among our primate forebears. With Lawrence Keeley and Steven Pinker claiming that Rousseauian ideals prevailed in 20th century theories of early humanity, it’s a little odd to think of this kind of hypothesis dominating the public discourse of this supposedly peace-loving decade. However, its strong influence can clearly be seen in the opening ‘Dawn of Man’ sequence of that psychedelic classic, 2001: *A Space Odyssey*—and in McKenna’s theories about the influence of psilocybin mushrooms on human evolution in his book *Food of the Gods*. To what extent this vision of early hominids is undermined by bonobos and other evidence isn’t something I want to get into here. Accepting that McKenna believed it, though, lays the groundwork for understanding his theories.

He basically believed that, as our proto-human ancestors emerged from the forests onto the grasslands of tropical and sub-tropical Africa, their experiments with the wide variety of novel plant foods led them to discover, in the dung of wild cattle, fungi rich with psilocybin, a potent tryptamine hallucinogen. From that point on, until climate change erased the plentiful supplies of mushrooms from the African savannah, McKenna sees human development as a being channelled via a symbiotic bond with this natural transcendence catalyst. He sees our part of the symbiosis deal as involving several layers of benefits to psilocybin ingestion:

- Low doses of psilocybin have been shown to enhance visual acuity, an undoubted boon for hunters.

- Moderate doses stimulate arousal, including sexual arousal, leading to more frequent sex and—McKenna argues—a great number of offspring, and hence an adaptive advantage.
- High doses dissolve the ego and open experience up to religious and transcendent dimensions, and the catalysis of linguistic powers, thus contributing to the evolution of these crucial aspects of human being.

The important bit for us here is that McKenna saw the human “state of nature” as one that carried with it the aggressive, male-dominated hierarchies of primates. His “High Plains of Eden”, the African Palaeolithic, represented the discovery of something—psilocybin—that *suppressed* this social pattern, keeping the nascent ego at bay and encouraging a more co-operative, feminine, orgiastic culture.

For a very long time, as we evolved out of the animal nature, perhaps a hundred thousand years, psilocybin was part of our diet and our rituals and our religion. And though those individuals taking the psilocybin didn't know it, it was having a very profound effect upon them. What it was doing was it was suppressing a primate behavior that is so basic to primates that it goes clear back to squirrel monkeys. And what that behavior is is a tendency to form what are called male-dominance hierarchies. And we all know what this is, because it bedevils our own political situation, and our own effort to create a reasonable society. But there was a great long period in the human past when this tendency was pharmacologically suppressed, in the same way that you would give Prozac to somebody to suppress a tendency to manic-depression. In other words, what the shamans of the High Paleolithic figured out was how to medicate people so that they would live together in harmony, decency, and dignity.¹⁴⁶

For McKenna, peaceful proto-Neolithic cultures such as the Natufians (see Appendix I) were fading traces of this age-old African tradition, and the loss of access to the mushroom became a prime cause of the descent into agriculture, social hierarchies and brutalization.

The old dominance hierarchy hard-wiring re-asserted itself in the ancient Middle East with the invention of agriculture, the need to become sedentary in order to carry out agriculture, the need to defend surplus, the establishment of kingship. These are a re-assertion of an older pattern that had been interrupted by a factor in the diet which basically made people mellow. . . . The bestial nature, the animal nature, that had been suppressed by the psilocybin in the diet, re-emerged, so you get male dominance, standing armies, kingship, walled cities, the whole bit that leads to western civilization.¹⁴⁷

As with Pierre Clastres' work (Appendix I), but for different reasons, this is a fascinating upheaval of the customary Hobbes versus Rousseau axis. McKenna has

modern hierarchical state-based societies as an *irruption*, rather than a *containment*, of a warring “state of nature.” And a superficially Rousseauian archaic idyll is envisioned not as our default condition, but as a profoundly elaborated socio-spiritual complex, modifying our animality through symbiosis with a plant that seems to manifest communion with the Gaian planetary mind. If nothing else, absorbing such boldly independent theorizing goes a long way to creatively upsetting the worn ruts of scholarly debate.

Interestingly, in a near mirror-image of McKenna’s vision, some have argued against the innatist biological theories of war by highlighting the extent to which people seem to require some form of altered consciousness or intoxication in order to *do battle*. Among the Avatip of New Guinea,

Headhunting raids required special magic, which placed the fighters in a trance-like state of dissociation and relieved them of accountability for their actions; it was supposed to make them capable of killing even their own wives and children. That is to say, the ability to kill had to be imparted by magic and ritual, and deliberately removed at the end of raids.¹⁴⁸

The need for artificial induction of battle rage certainly upsets simple notions of “hard-wired violence.” But in turn, for some people they call into question McKenna’s idea that psychedelics automatically chill out a supposed primate tendency towards aggression. One might point to Amazonian peoples such as the Jivaro and the Yanomami, noted for both violence and ritual use of one of McKenna’s favourite tipples, the *ayahuasca* brew, which contains DMT—closely related to psilocybin. Whether Amazonian conflicts have been affected by colonization or not, the juxtaposition of tryptamines and dominator violence apparently suggests that the former don’t automatically suppress the latter. I never heard McKenna address this point, but I imagine he would have drawn attention to the second crucial component of *ayahuasca*, a vine which contains harmala alkaloids such as harmine. Noted pharmacologist Alexander Shulgin cites reports of harmine experiences in which sensations of “lightness” alternated with instances of “irrational aggression”. One report said: “The excitement I felt was increased even in a belligerent way. Although it is not my nature, I started a fight with a man in the street”¹⁴⁹ However, harmine’s synergy with the other ingredients of *ayahuasca* appears to at least transform this potential. *Ayahuasca*’s humbling visionary effects and its traditional ceremonial contexts seem to leave most of its association with conflict firmly embedded in specific and complex Amazonian cultural situations.

The only recorded traditions of psilocybin mushroom use are found around the Oaxacan highlands of Mexico, probably trace survivals of Aztec traditions. The social

context for its use there by healers is certainly far removed from the hypothetical situation envisioned by McKenna for archaic Africa. In the end, as ever with psychedelics, we have to remember the importance of “set and setting,” of the profound difference to the experience that is made by the nature of the immediate situation. Yet again, examples from one corner of history may not be easily applicable to other areas; yet again, above our prehistory in Africa hovers a hazy question mark.

WHEN MCKENNA RETURNED in 1971 from a psychedelic quest in the Amazon with his brother Dennis, he approached Dr. Gunther Stent, a noted molecular biologist at the University of California in Berkeley. McKenna was hoping for feedback from the “real experts” on a dense, fantastical hypothesis he and Dennis had concocted in the depths of the jungle.

Their “hypercarboration” theory, based on enthusiastic experimentation, involved setting up harmonic resonance between the human voice and the genetic structures of hallucinogenic compounds coursing through the bloodstream, in an effort to exteriorize a hyperdimensional information matrix that the brothers associated with the alchemists’ fabled Philosopher’s Stone, no less. Predictably, the austere Dr. Stent was unimpressed. Sighing, he told the awe-struck McKenna: “My dear young friend, these ideas are not *even* fallacious.”¹⁵⁰

This withering response probably refers to the notion of “falsifiability.” Some positivist schools of science hold that a theory which can’t be shown to be false (or true) by experiment or observation is worse than false—it’s senseless. When faced with the idea that mushroom use influenced early human development so profoundly, some people share Dr. Stent’s reaction to hypercarboration, and treat it as unworthy of consideration.

The archaeological invisibility of the Palaeolithic, relative to more recent history, leaves so much scope for speculation that in a way we have to pay even more attention to the few landmarks of evidence we have, lest we get hopelessly lost. Still, to demand falsifiability from any theory of early humanity—let alone one involving so perishable an item as a mushroom—is to drastically misunderstand the scope of palaeoanthropology. For myself, while I have reservations about McKenna’s speculation, I can’t in good conscience close the door on it. If I did, integrity would demand that the door be closed on much of what is interesting about studying prehistory; indeed, much of our vision of the possibilities of prehistory would be blotted out. Specifically regarding the Stoned Ape Hypothesis, perhaps it’s too much to expect of a culture in the grip of a neurotic love/hate relationship with psychoactive substances to dispassionately assess the evidence.

NOTES

1. Recommended in-depth studies of this topic include *Time's Arrow*, *Time's Cycle* by Stephen Jay Gould, *The Great Year* by Nicholas Campion, and *Time Maps* by Eviatar Zerubavel. An interesting view is also given by David Christian's *Maps of Time*.

2. http://www.ted.com/talks/steven_pinker_on_the_myth_of_violence.html

3. In *The Mind in the Cave* (2002) and *Inside the Neolithic Mind* (2005)

4. Quoted in Hillman (2004, p. 215)

5. From *The Social Contract* (1762)

6. With the potential exception of Steven LeBlanc's *Constant Battles*, which enigmatically refers to the Noble Savage as "a concept formulated in the nineteenth century" (p. 104). I'm not sure what this refers to if not Ellingson's thesis.

7. http://en.wikiquote.org/wiki/John_Dryden

8. Quoted in Ellingson (2001, pp. 21-22)

9. Ellingson (2001, p. 24)

10. Quoted in Ellingson (2001, p.83)

11. Quoted in Ellingson (2001, p. 81)

12. Quoted in Ellingson (2001, p. 82)

13. Ellingson (2001, p. 100)

14. Quoted in Ellingson (2001, p.299)

15. Quoted in Ellingson (2001, p. 292)

16. Quoted in Ellingson (2001, p. 293)

17. Darwin (1871)

18. Quoted in Ellingson (2001, p. 146)

19. Quoted in Ellingson (2001, p. 294)

20. <http://www.ft.com/cms/s/2/b53e82c2-77e2-11de-9713-00144feabdco.html>

21. Keeley (1996, p. 168)

22. Ferguson (2006, p. 475)

23. Hobbes (1651, ch. 13)

24. Mithen (2006, p. 227)

25. Hobbes (1651, ch. 4)

26. Schleidt & Shalter (2003)

27. Campion (1994, p. 420)

28. Campion (1994, p. 111)

29. Pinker (2002, p. 55-56)

30. Pinker (2002, p. 11) quotes this line of Mao Zedong's. However, it's important to note that in its original context, it doesn't seem that Mao—as the frame of Pinker's argument suggests—was stating a belief about human nature. The full quotation makes it clear that Mao's "blankness" refers to a socio-economic state, not an innate condition: "Apart from their other characteristics, the outstanding thing about China's 600 million people is that they are 'poor and blank'. This may seem a bad thing, but in reality it is a good thing. Poverty gives rise to the desire for change, the desire for action and the desire for revolution. On a blank sheet of paper free from any mark, the freshest and most beautiful characters can be written; the freshest and most beautiful pictures can be painted." From 'Introducing a Co-operative' (April 15, 1958). <http://trotsky.org/reference/archive/mao/works/red-book/cho3.htm>

31. Pinker (2002, p. 56)

32. Turner & Sponsel (2000)

33. Quoted in Pinker (2002, p. 117)

34. Pinker (2002, p. 119)

35. See <http://condor.depaul.edu/~mfiddler/hyphen/humunivers.htm>

36. <http://andromeda.rutgers.edu/~socant/brian.htm>

37. Ferguson & Whitehead (1992, p. 3)

38. Keeley (1996, p. 21)

39. Quoted in Ferguson (2006, p. 476)

40. Keeley (1996, p. x)

41. Ferguson (2006, p. 496)
42. Ferguson (2003, p. 29)
43. Keeley's (1996) graphs are shown and discussed on pp. 88–91, based on data given in tables on pp. 195–197. I've redrawn the graphs and based my calculations on these tables. Pinker uses Keeley's second graph (percentage of male deaths caused by war) in his work (2002) on p. 57.
44. Keeley (1996, p. 14)
45. Keeley (1996, p. 175)
46. Keeley (1996, ch. 5)
47. Good (1995, p. 87)
48. Thorpe (2003, pp. 149–150)
49. <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2066rank.html>
50. Ferguson (1995, p. 369)
51. <http://users.erols.com/mwhite28/warstat8.htm#Total>
52. Keeley (1996, p. 89)
53. Pinker (2002, p. 56)
54. Kelly (2000, p. 22)
55. Calculated from data at http://www.fbi.gov/ucr/08aprelim/table_4mt-oh.html
56. http://www.nationmaster.com/graph/cr_i_mur_percap-crime-murders-per-capita
57. Kelly (2000, p. 22)
58. Keeley (1996, p. 88)
59. Keeley (1996, pp. 21–22)
60. Keeley (1996, p. 91)
61. Ferguson (1992, p. 27)
62. Keeley (1996, p. 150)
63. Originally subtitled (perhaps to echo Keeley's work) *The Myth of the Peaceful, Noble Savage*.
64. LeBlanc (2003, p. 202)
65. See Godesky (2007a)
66. See Ferguson (1995)
67. For example, Carol Ember's 1978 calculation that 90 percent of hunter-gatherers engage in warfare—cited by Pinker (2002, p. 57)
68. For example, Mithen (2003, pp. 178–195)
69. Godesky (2007b), quoting Richard Manning's book *Against the Grain: How Agriculture Has Hijacked Civilization*.
70. Thorpe (2003, p. 155)
71. Angela Close, quoted in Mithen (2003, p. 452)
72. <http://www.mhecopark.org/ecology/pre-1842/05-oneotasubsistence.php>
73. http://en.wikipedia.org/wiki/Iowa_archaeology#Oneota_.281250-1700.29
74. Waldram, Herring and Young (1995, p. 40). Oddly, Keeley's graph undercuts the data given for this culture in the table in the appendix by about 6%.
75. <http://www.mnsu.edu/emuseum/archaeology/sites/northamerica/crowcreekmassacre.html>
76. <http://archaeology.about.com/od/vterms/g/vedback.htm>
77. See Schulting (1996)
78. See Early and Peters (2000, pp. 93–95)
79. Keeley (1996, p. 91)
80. Keeley (1996, p. 31)
81. Shafer (2003, p. 112)
82. LeBlanc (2003, p. 56)
83. Keeley (1996, p. 36)
84. Keeley (1996, p. 174)
85. LeBlanc (2003, p. 31)
86. LeBlanc (2003, p. 134)
87. LeBlanc (2003, p. 127)
88. <http://bloggingheads.tv/diavlogs/14196> around 39:00.
89. Ferguson (2003, p. 31)
90. Ferguson (2003, p. 33)
91. Basic data about chimpanzees are taken from <http://en.wikipedia.org/wiki/Chimpanzee>, <http://en.wikipedia.org/wiki/Bonobo> and <http://en.wikipedia.org/wiki/Hominidae>.
92. <http://www.scientificamerican.com/article.cfm?id=human-chimp-gene-gap-wide>
93. Bloom (1995, pp. 28–29)
94. For information on this work I'm indebted to Jim Moore's review from *The American Journal of Physical Anthropology* (<http://cogprints.org/738/o/Power.html>) and Theodore D. Kemper's review from *The*

American Journal of Sociology. To be cautious in such second-hand citation, I've erred on the side of Moore's rather critical review.

95. <http://cogprints.org/738/o/Power.html>
96. Ferguson (1995, p. 349)
97. <http://www.iucnredlist.org/details/15933/o>
98. See Bradshaw and Watkins (2006)
99. <http://www.cosmosmagazine.com/news/2253/bonobos-have-violent-streak-too-study-says>
100. http://www.newyorker.com/reporting/2007/07/30/070730fa_fact_parker
101. Keeley (1996, pp. 157-159)
102. Keeley (1996, p. 130)
103. Pinker (2003, p. 317)
104. Pinker (2003, p. 329)
105. Pinker (2003, p. 319)
106. Pinker (2003, p. 323)
107. Kelly (2000, p. 159)
108. Kelly (2000, p. 73)
109. Kelly (2000, p. 73)
110. Kelly (2000, p. 37)
111. Quoted in Kelly (2000, p. 102)
112. Quoted in Kelly (2000, p. 103)
113. Keeley (1996, pp. 140-141)
114. LeBlanc (2003, p. 69)
115. See Hames (2007) and Ellingson (2001, pp. 342-358)
116. Ellingson (2001, p. 355)
117. <http://www.rae.org/savage.html>
118. Monbiot (2009)
119. See <http://www.megafauna.com/>
120. Mithen (2003, pp. 246-257)
121. Godesky (2005)
122. http://en.wikipedia.org/wiki/Holocene_extinction
123. LeBlanc (2003, p. 25)
124. LeBlanc (2003, p. 29)
125. See Hames (2007)
126. Hames (2007, p. 180)
127. See Genesis 1:26 and Luke 12:41-48
128. Keeley (1996, p. 29)
129. Quinn (1999, p. 60)

130. See <http://rushkoff.com/videoaudio/howard-bloom/>, around 56:12-57:25

131. See <http://www.monbiot.com/archives/2009/09/29/the-population-myth/>
132. See Pendell (2006) and http://en.wikipedia.org/wiki/Horizon_anarchism
133. Kelly (2000, p. 161)
134. Ferguson (2008, p. 35)
135. Ferguson (2006, p. 505)
136. LeBlanc (2003, p. 230)
137. Mithen (2003, p. 48)
138. Quoted in Ellingson (2001, p. 353)
139. <http://www.semiotexte.com/authors/clastres.html>
140. <http://tank.nationalreview.com/post/?q=ZjMyZjM5MmQxMDFhNjI5N2YxODc5MTRhODhhMDRmMWM=>
141. Mithen (2003, p. 43)
142. Clastres (1994, p. 163)
143. It's worth noting that the "tribal" structure of many (though of course, not all) indigenous peoples emerged out of the necessities of contact with colonial powers, who could only interact with them via the familiar medium of a "leader." See Ferguson and Whitehead (1992). This dynamic is often echoed in the inability of the media and police to relate to the frequently non-hierarchical organization of modern grassroots protest groups.
144. Clastres (1994, p. 156)
145. Clastres (1994, p. 120)
146. <http://users.lycaem.org/~sputnik/McKenna/Evolution/theory.html>
147. <http://users.lycaem.org/~sputnik/McKenna/Evolution/theory.html>
148. S. Harrison, quoted in Thorpe (2003, p. 148)
149. http://www.erowid.org/library/books_online/tihkal/tihkal14.shtml
150. McKenna (1993, p. 165)

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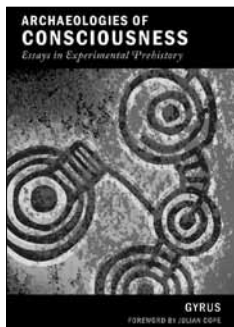
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