

THE BETTER ANGELS OF OUR NATURE

WHY VIOLENCE HAS DECLINED

STEVEN PINKER

VIKING

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TO

Eva, Carl, and Eric

Jack and David

Yael and Danielle

and the world they will inherit

What a chimera then is man! What a novelty, what a monster, what a chaos, what a contradiction, what a prodigy! Judge of all things, feeble earthworm, repository of truth, sewer of uncertainty and error, the glory and the scum of the universe.

—*Blaise Pascal*

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PREFACE

This book is about what may be the most important thing that has ever happened in human history. Believe it or not—and I know that most people do not—violence has declined over long stretches of time, and today we may be living in the most peaceable era in our species' existence. The decline, to be sure, has not been smooth; it has not brought violence down to zero; and it is not guaranteed to continue. But it is an unmistakable development, visible on scales from millennia to years, from the waging of wars to the spanking of children.

No aspect of life is untouched by the retreat from violence. Daily existence is very different if you always have to worry about being abducted, raped, or killed, and it's hard to develop sophisticated arts, learning, or commerce if the institutions that support them are looted and burned as quickly as they are built.

The historical trajectory of violence affects not only how life is lived but how it is understood. What could be more fundamental to our sense of meaning and purpose than a conception of whether the strivings of the human race over long stretches of time have left us better or worse off? How, in particular, are we to make sense of *modernity*—of the erosion of family, tribe, tradition, and religion by the forces of individualism, cosmopolitanism, reason, and science? So much depends on how we understand the legacy of this transition: whether we see our world as a nightmare of crime, terrorism, genocide, and war, or as a period that, by the standards of history, is blessed by unprecedented levels of peaceful coexistence.

The question of whether the arithmetic sign of trends in violence is positive or negative also bears on our conception of human nature. Though theories of human nature rooted in biology are often associated with fatalism about violence, and the theory that the mind is a blank slate is associated with progress, in my view it is the other way around. How are we to understand the natural state of life when our species first emerged and the processes of history began? The belief that violence has increased suggests that the world we made has contaminated us, perhaps irretrievably. The belief that it has decreased suggests that we started off nasty and that the artifices of civilization have moved us in a noble direction, one in which we can hope to continue.

This is a big book, but it has to be. First I have to convince you that violence really has gone down over the course of history, knowing that the very idea invites skepticism, incredulity, and sometimes anger. Our cognitive faculties predispose us to believe that we live in violent times, especially when they are stoked by media that follow the watchword "If it bleeds, it leads." The human mind tends to estimate the probability of an event from the ease with which it can recall examples, and scenes of carnage are more likely to be beamed into our homes and burned into our memories than footage of people dying of old age.¹ No matter how small the percentage of violent deaths may be, in absolute numbers there will always be enough of them to fill the evening news, so people's impressions of violence will be disconnected from the actual proportions.

Also distorting our sense of danger is our moral psychology. No one has ever recruited activists to a cause by announcing that things are getting better, and bearers of good news are often advised to keep their mouths shut lest they lull people into complacency. Also, a large swath of our intellectual culture is loath to admit that there could be anything good about civilization, modernity, and Western society. But perhaps the main cause of the illusion of ever-present violence springs from one of the forces that

drove violence down in the first place. The decline of violent behavior has been paralleled by a decline in attitudes that tolerate or glorify violence, and often the attitudes are in the lead. By the standards of the mass atrocities of human history, the lethal injection of a murderer in Texas, or an occasional hate crime in which a member of an ethnic minority is intimidated by hooligans, is pretty mild stuff. But from a contemporary vantage point, we see them as signs of how low our behavior can sink, not of how high our standards have risen.

In the teeth of these preconceptions, I will have to persuade you with numbers, which I will glean from datasets and depict in graphs. In each case I'll explain where the numbers came from and do my best to interpret the ways they fall into place. The problem I have set out to understand is the reduction in violence at many scales—in the family, in the neighborhood, between tribes and other armed factions, and among major nations and states. If the history of violence at each level of granularity had an idiosyncratic trajectory, each would belong in a separate book. But to my repeated astonishment, the global trends in almost all of them, viewed from the vantage point of the present, point downward. That calls for documenting the various trends between a single pair of covers, and seeking commonalities in when, how, and why they have occurred.

Too many kinds of violence, I hope to convince you, have moved in the same direction for it all to be a coincidence, and that calls for an explanation. It is natural to recount the history of violence as a moral saga—a heroic struggle of justice against evil—but that is not my starting point. My approach is scientific in the broad sense of seeking explanations for why things happen. We may discover that particular advance in peacefulness was brought about by moral entrepreneurs and their movements. But we may also discover that the explanation is more prosaic, like a change in technology, governance, commerce, or knowledge. Nor can we understand the decline of violence as an unstoppable force for progress that is carrying us toward an omega point of perfect peace. It is a collection of statistical trends in the behavior of groups of humans in various epochs, and as such it calls for an explanation in terms of psychology and history: how human minds deal with changing circumstances.

A large part of the book will explore the psychology of violence and nonviolence. The theory of mind that I will invoke is the synthesis of cognitive science, affective and cognitive neuroscience, social and evolutionary psychology, and other sciences of human nature that I explored in *How the Mind Works*, *The Blank Slate*, and *The Stuff of Thought*. According to this understanding, the mind is a complex system of cognitive and emotional faculties implemented in the brain which owe their basic design to the processes of evolution. Some of these faculties incline us toward various kinds of violence. Others—“the better angels of our nature,” in Abraham Lincoln’s words—incline us toward cooperation and peace. The way to explain the decline of violence is to identify the changes in our cultural and material milieu that have given our peaceable motives the upper hand.

Finally, I need to show how our history has engaged our psychology. Everything in human affairs is connected to everything else, and that is especially true of violence. Across time and space, the more peaceable societies also tend to be richer, healthier, better educated, better governed, more respectful of their women, and more likely to engage in trade. It’s not easy to tell which of these happy traits got the virtuous circle started and which went along for the ride, and it’s tempting to resign oneself to unsatisfying circularities, such as that violence declined because the culture got less violent. Social scientists distinguish “endogenous” variables—those that are inside the system, where they may be affected by the very phenomenon they are trying to explain—from the “exogenous” ones—those that are set in motion by forces from the outside. Exogenous forces can originate in the practical realm, such as changes in technology, demographics, and the mechanisms of commerce and governance. Bu

they can also originate in the intellectual realm, as new ideas are conceived and disseminated and take on a life of their own. The most satisfying explanation of a historical change is one that identifies an exogenous trigger. To the best that the data allow it, I will try to identify exogenous forces that have engaged our mental faculties in different ways at different times and that thereby can be said to have caused the declines in violence.

The discussions that try to do justice to these questions add up to a big book—big enough that it won't spoil the story if I preview its major conclusions. *The Better Angels of Our Nature* is a tale of six trends, five inner demons, four better angels, and five historical forces.

Six Trends (chapters 2 through 7). To give some coherence to the many developments that make up our species' retreat from violence, I group them into six major trends.

The first, which took place on the scale of millennia, was the transition from the anarchy of the hunting, gathering, and horticultural societies in which our species spent most of its evolutionary history to the first agricultural civilizations with cities and governments, beginning around five thousand years ago. With that change came a reduction in the chronic raiding and feuding that characterized life in a state of nature and a more or less fivefold decrease in rates of violent death. I call this imposition of peace the Pacification Process.

The second transition spanned more than half a millennium and is best documented in Europe. Between the late Middle Ages and the 20th century, European countries saw a tenfold-to-fiftyfold decline in their rates of homicide. In his classic book *The Civilizing Process*, the sociologist Norbert Elias attributed this surprising decline to the consolidation of a patchwork of feudal territories into large kingdoms with centralized authority and an infrastructure of commerce. With a nod to Elias, I call this trend the Civilizing Process.

The third transition unfolded on the scale of centuries and took off around the time of the Age of Reason and the European Enlightenment in the 17th and 18th centuries (though it had antecedents in classical Greece and the Renaissance, and parallels elsewhere in the world). It saw the first organized movements to abolish socially sanctioned forms of violence like despotism, slavery, dueling, judicial torture, superstitious killing, sadistic punishment, and cruelty to animals, together with the first stirrings of systematic pacifism. Historians sometimes call this transition the Humanitarian Revolution.

The fourth major transition took place after the end of World War II. The two-thirds of a century since then have been witness to a historically unprecedented development: the great powers, and developed states in general, have stopped waging war on one another. Historians have called this blessed state of affairs the Long Peace.²

The fifth trend is also about armed combat but is more tenuous. Though it may be hard for news readers to believe, since the end of the Cold War in 1989, organized conflicts of all kinds—civil wars, genocides, repression by autocratic governments, and terrorist attacks—have declined throughout the world. In recognition of the tentative nature of this happy development, I will call it the New Peace.

Finally, the postwar era, symbolically inaugurated by the Universal Declaration of Human Rights in 1948, has seen a growing revulsion against aggression on smaller scales, including violence against ethnic minorities, women, children, homosexuals, and animals. These spin-offs from the concept of human rights—civil rights, women's rights, children's rights, gay rights, and animal rights—were asserted in a cascade of movements from the late 1950s to the present day which I will call the Rights Revolutions.

Five Inner Demons (chapter 8). Many people implicitly believe in the Hydraulic Theory of Violence that humans harbor an inner drive toward aggression (a death instinct or thirst for blood), which builds up inside us and must periodically be discharged. Nothing could be further from a contemporary scientific understanding of the psychology of violence. Aggression is not a single motive, let alone a mounting urge. It is the output of several psychological systems that differ in their environmental triggers, their internal logic, their neurobiological basis, and their social distribution. Chapter 8 is devoted to explaining five of them. *Predatory* or *instrumental violence* is simply violence deployed as a practical means to an end. *Dominance* is the urge for authority, prestige, glory, and power, whether it takes the form of macho posturing among individuals or contests for supremacy among racial, ethnic, religious, or national groups. *Revenge* fuels the moralistic urge toward retribution, punishment, and justice. *Sadism* is pleasure taken in another's suffering. And *ideology* is a shared belief system, usually involving a vision of utopia, that justifies unlimited violence in pursuit of unlimited good.

Four Better Angels (chapter 9). Humans are not innately good (just as they are not innately evil), but they come equipped with motives that can orient them away from violence and toward cooperation and altruism. *Empathy* (particularly in the sense of sympathetic concern) prompts us to feel the pain of others and to align their interests with our own. *Self-control* allows us to anticipate the consequences of acting on our impulses and to inhibit them accordingly. The *moral sense* sanctifies a set of norms and taboos that govern the interactions among people in a culture, sometimes in ways that decrease violence, though often (when the norms are tribal, authoritarian, or puritanical) in ways that increase it. And the faculty of *reason* allows us to extricate ourselves from our parochial vantage points, to reflect on the ways in which we live our lives, to deduce ways in which we could be better off, and to guide the application of the other better angels of our nature. In one section I will also examine the possibility that in recent history *Homo sapiens* has literally evolved to become less violent in the biologist's technical sense of a change in our genome. But the focus of the book is on transformations that are strictly environmental: changes in historical circumstances that engage a fixed human nature in different ways.

Five Historical Forces (chapter 10). In the final chapter I try to bring the psychology and history back together by identifying exogenous forces that favor our peaceable motives and that have driven the multiple declines in violence.

The *Leviathan*, a state and judiciary with a monopoly on the legitimate use of force, can defuse the temptation of exploitative attack, inhibit the impulse for revenge, and circumvent the self-serving biases that make all parties believe they are on the side of the angels. *Commerce* is a positive-sum game in which everybody can win; as technological progress allows the exchange of goods and ideas over longer distances and among larger groups of trading partners, other people become more valuable alive than dead, and they are less likely to become targets of demonization and dehumanization. *Feminization* is the process in which cultures have increasingly respected the interests and values of women. Since violence is largely a male pastime, cultures that empower women tend to move away from the glorification of violence and are less likely to breed dangerous subcultures of rootless young men. The forces of *cosmopolitanism* such as literacy, mobility, and mass media can prompt people to take the perspective of people unlike themselves and to expand their circle of sympathy to embrace them. Finally, an intensifying application of knowledge and rationality to human affairs—the

escalator of reason—can force people to recognize the futility of cycles of violence, to ramp down the privileging of their own interests over others', and to reframe violence as a problem to be solved rather than a contest to be won.

As one becomes aware of the decline of violence, the world begins to look different. The past seems less innocent; the present less sinister. One starts to appreciate the small gifts of coexistence that would have seemed utopian to our ancestors: the interracial family playing in the park, the comedian who lands a zinger on the commander in chief, the countries that quietly back away from a crisis instead of escalating to war. The shift is not toward complacency: we enjoy the peace we find today because people in past generations were appalled by the violence in their time and worked to reduce it, and so we should work to reduce the violence that remains in our time. Indeed, it is a recognition of the decline of violence that best affirms that such efforts are worthwhile. Man's inhumanity to man has long been a subject for moralization. With the knowledge that something has driven it down, we can also treat it as a matter of cause and effect. Instead of asking, "Why is there war?" we might ask, "Why is there peace?" We can obsess not just over what we have been doing wrong but also over what we have been doing right. Because we *have* been doing something right, and it would be good to know what, exactly, it is.

Many people have asked me how I became involved in the analysis of violence. It should not be a mystery: violence is a natural concern for anyone who studies human nature. I first learned of the decline of violence from Martin Daly and Margo Wilson's classic book in evolutionary psychology, *Homicide*, in which they examined the high rates of violent death in nonstate societies and the decline in homicide from the Middle Ages to the present. In several of my previous books I cited those downward trends, together with humane developments such as the abolition of slavery, despotism, and cruel punishments in the history of the West, in support of the idea that moral progress is compatible with a biological approach to the human mind and an acknowledgment of the dark side of human nature.³ I reiterated these observations in response to the annual question on the online forum www.edge.org, which in 2007 was "What Are You Optimistic About?" My squib provoked a flurry of correspondence from scholars in historical criminology and international studies who told me that the evidence for a historical reduction in violence is more extensive than I had realized.⁴ It was their data that convinced me that there was an underappreciated story waiting to be told.

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A FOREIGN COUNTRY

The past is a foreign country: they do things differently there.

—L. P. Hartley

If the past is a foreign country, it is a shockingly violent one. It is easy to forget how dangerous life used to be, how deeply brutality was once woven into the fabric of daily existence. Cultural memory pacifies the past, leaving us with pale souvenirs whose bloody origins have been bleached away. A woman donning a cross seldom reflects that this instrument of torture was a common punishment in the ancient world; nor does a person who speaks of a *whipping boy* ponder the old practice of flogging an innocent child in place of a misbehaving prince. We are surrounded by signs of the depravity of our ancestors' way of life, but we are barely aware of them. Just as travel broadens the mind, a literal-minded tour of our cultural heritage can awaken us to how differently they did things in the past.

In a century that began with 9/11, Iraq, and Darfur, the claim that we are living in an unusually peaceful time may strike you as somewhere between hallucinatory and obscene. I know from conversations and survey data that most people refuse to believe it.¹ In succeeding chapters I will make the case with dates and data. But first I want to soften you up by reminding you of incriminating facts about the past that you have known all along. This is not just an exercise in persuasion. Scientists often probe their conclusions with a sanity check, a sampling of real-world phenomena to reassure themselves they haven't overlooked some flaw in their methods and wandered into a preposterous conclusion. The vignettes in this chapter are a sanity check on the data to come.

What follows is a tour of the foreign country called the past, from 8000 BCE to the 1970s. It is not a grand tour of the wars and atrocities that we already commemorate for their violence, but rather a series of glimpses behind deceptively familiar landmarks to remind us of the viciousness they conceal. The past, of course, is not a single country, but encompasses a vast diversity of cultures and customs. What they have in common is the shock of the old: a backdrop of violence that was endured and often embraced, in ways that startle the sensibilities of a 21st-century Westerner.

HUMAN PREHISTORY

In 1991 two hikers stumbled upon a corpse poking out of a melting glacier in the Tyrolean Alps. Thinking that it was the victim of a skiing accident, rescue workers jackhammered the body out of the ice, damaging his thigh and his backpack in the process. Only when an archaeologist spotted a

Neolithic copper ax did people realize that the man was five thousand years old.²

Ötzi the Iceman, as he is now called, became a celebrity. He appeared on the cover of *Time* magazine and has been the subject of many books, documentaries, and articles. Not since Mel Brooks's 2000 Year Old Man ("I have more than 42,000 children and not one comes to visit me") has a kilogenarian had so much to tell us about the past. Ötzi lived during the crucial transition in human prehistory when agriculture was replacing hunting and gathering, and tools were first made of metal rather than stone. Together with his ax and backpack, he carried a quiver of fletched arrows, a wood-handled dagger, and an ember wrapped in bark, part of an elaborate fire-starting kit. He wore a bearskin cap with a leather chinstrap, leggings sewn from animal hide, and waterproof snowshoes made from leather and twine and insulated with grass. He had tattoos on his arthritic joints, possibly sign of acupuncture, and carried mushrooms with medicinal properties.

Ten years after the Iceman was discovered, a team of radiologists made a startling discovery: Ötzi had an arrowhead embedded in his shoulder. He had not fallen in a crevasse and frozen to death, as scientists had originally surmised; he had been murdered. As his body was examined by the the CSI Neolithic team, the outlines of the crime came into view. Ötzi had unhealed cuts on his hands and wounds on his head and chest. DNA analyses found traces of blood from two other people on one of his arrowheads, blood from a third on his dagger, and blood from a fourth on his cape. According to one reconstruction, Ötzi belonged to a raiding party that clashed with a neighboring tribe. He killed a man with an arrow, retrieved it, killed another man, retrieved the arrow again, and carried a wounded comrade on his back before fending off an attack and being felled by an arrow himself.

Ötzi is not the only millennia-old man who became a scientific celebrity at the end of the 20th century. In 1996 spectators at a hydroplane race in Kennewick, Washington, noticed some bones poking out of a bank of the Columbia River. Archaeologists soon recovered the skeleton of a man who had lived 9,400 years ago.³ Kennewick Man quickly became the object of highly publicized legal and scientific battles. Several Native American tribes fought for custody of the skeleton and the right to bury it according to their traditions, but a federal court rejected their claims, noting that no human culture has ever been in continuous existence for nine millennia. When the scientific studies resumed anthropologists were intrigued to learn that Kennewick Man was anatomically very different from today's Native Americans. One report argued that he had European features; another that he matched the Ainu, the aboriginal inhabitants of Japan. Either possibility would imply that the Americas had been peopled by several independent migrations, contradicting DNA evidence suggesting that Native Americans are descendants of a single group of migrants from Siberia.

For plenty of reasons, then, Kennewick Man has become an object of fascination among the scientifically curious. And here is one more. Lodged in Kennewick Man's pelvis is a stone projectile. Though the bone had partially healed, indicating that he didn't die from the wound, the forensic evidence is unmistakable: Kennewick Man had been shot.

These are just two examples of famous prehistoric remains that have yielded grisly news about how their owners met their ends. Many visitors to the British Museum have been captivated by Lindow Man, an almost perfectly preserved two-thousand-year-old body discovered in an English peat bog in 1984.⁴ We don't know how many of his children visited him, but we do know how he died. His skull had been fractured with a blunt object; his neck had been broken by a twisted cord; and for good measure his throat had been cut. Lindow Man may have been a Druid who was ritually sacrificed in three ways to satisfy three gods. Many other bog men and women from northern Europe show signs of having been strangled, bludgeoned, stabbed, or tortured.

In a single month while researching this book, I came across two new stories about remarkably preserved human remains. One is a two-thousand-year-old skull dug out of a muddy pit in northern England. The archaeologist who was cleaning the skull felt something move, looked through the opening at the base, and saw a yellow substance inside, which turned out to be a preserved brain. Once again, the unusual state of preservation was not the only noteworthy feature about the find. The skull had been deliberately severed from the body, suggesting to the archaeologist that it was a victim of human sacrifice.⁵ The other discovery was of a 4,600-year-old grave in Germany that held the remains of a man, a woman, and two boys. DNA analyses showed that they were members of a single nuclear family, the oldest known to science. The foursome had been buried at the same time—signs, the archaeologists said, that they had been killed in a raid.⁶

What is it about the ancients that they couldn't leave us an interesting corpse without resorting to foul play? Some cases may have an innocent explanation based in taphonomy, the processes by which bodies are preserved over long spans of time. Perhaps at the turn of the first millennium the only bodies that got dumped into bogs, there to be pickled for posterity, were those that had been ritually sacrificed. But with most of the bodies, we have no reason to think that they were preserved only because they had been murdered. Later we will look at the results of forensic investigations that can distinguish how an ancient body met its end from how it came down to us. For now, prehistoric remains convey the distinct impression that The Past is a place where a person had a high chance of coming to bodily harm.

HOMERIC GREECE

Our understanding of prehistoric violence depends on the happenstance of which bodies were accidentally embalmed or fossilized, and so it must be radically incomplete. But once written language began to spread, ancient people left us with better information about how they conducted their affairs.

Homer's *Iliad* and *Odyssey* are considered the first great works of Western literature, and occupy the top slots in many guides to cultural literacy. Though these narratives are set at the time of the Trojan War around 1200 BCE, they were written down much later, between 800 and 650 BCE, and are thought to reflect life among the tribes and chiefdoms of the eastern Mediterranean in that era.⁷

Today one often reads that total war, which targets an entire society rather than just its armed forces, is a modern invention. Total war has been blamed on the emergence of nation-states, on universalist ideologies, and on technologies that allow killing at a distance. But if Homer's depictions are accurate (and they do jibe with archaeology, ethnography, and history), then the wars in archaic Greece were as total as anything in the modern age. Agamemnon explains to King Menelaus his plan for war:

Menelaus, my soft-hearted brother, why are you so concerned for these men? Did the Trojans treat you as handsomely when they stayed in your palace? No: we are not going to leave a single one of them alive, down to the babies in their mothers' wombs—not even they must live. The whole people must be wiped out of existence, and none be left to think of them and shed a tear.⁸

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