The Better Angels of Our Nature: Why Violence Has Declined

By Steven Pinker

The Better Angels of Our Nature: Why Violence Has Declined By Steven Pinker

Selected by *The New York Times Book Review* as a Notable Book of the Year

The author of *The New York Times* bestseller *The Stuff of Thought* offers a controversial history of violence.

Faced with the ceaseless stream of news about war, crime, and terrorism, one could easily think we live in the most violent age ever seen. Yet as New York Times bestselling author Steven Pinker shows in this startling and engaging new work, just the opposite is true: violence has been diminishing for millenia and we may be living in the most peaceful time in our species's existence. For most of history, war, slavery, infanticide, child abuse, assassinations, programs, gruesom punishments, deadly quarrels, and genocide were ordinary features of life. But today, Pinker shows (with the help of more than a hundred graphs and maps) all these forms of violence have dwindled and are widely condemned. How has this happened?

This groundbreaking book continues Pinker's exploration of the esesnce of human nature, mixing psychology and history to provide a remarkable picture of an increasingly nonviolent world. The key, he explains, is to understand our intrinsic motives--the inner demons that incline us toward violence and the better angels that steer us away--and how changing circumstances have allowed our better angels to prevail. Exploding fatalist myths about humankind's inherent violence and the curse of modernity, this ambitious and provocative book is sure to be hotly debated in living rooms and the Pentagon alike, and will challenge and change the way we think about our society.

⬇ [**Download** The Better Angels of Our Nature: Why Violence Has ...pdf](#)

📄 [**Read Online** The Better Angels of Our Nature: Why Violence Ha ...pdf](#)

The Better Angels of Our Nature: Why Violence Has Declined

By Steven Pinker

The Better Angels of Our Nature: Why Violence Has Declined By Steven Pinker

Selected by *The New York Times Book Review* **as a Notable Book of the Year**

The author of *The New York Times* **bestseller** *The Stuff of Thought* **offers a controversial history of violence.**

Faced with the ceaseless stream of news about war, crime, and terrorism, one could easily think we live in the most violent age ever seen. Yet as New York Times bestselling author Steven Pinker shows in this startling and engaging new work, just the opposite is true: violence has been diminishing for millenia and we may be living in the most peaceful time in our species's existence. For most of history, war, slavery, infanticide, child abuse, assassinations, programs, gruesom punishments, deadly quarrels, and genocide were ordinary features of life. But today, Pinker shows (with the help of more than a hundred graphs and maps) all these forms of violence have dwindled and are widely condemned. How has this happened?

This groundbreaking book continues Pinker's exploration of the esesnce of human nature, mixing psychology and history to provide a remarkable picture of an increasingly nonviolent world. The key, he explains, is to understand our intrinsic motives--the inner demons that incline us toward violence and the better angels that steer us away--and how changing circumstances have allowed our better angels to prevail. Exploding fatalist myths about humankind's inherent violence and the curse of modernity, this ambitious and provocative book is sure to be hotly debated in living rooms and the Pentagon alike, and will challenge and change the way we think about our society.

The Better Angels of Our Nature: Why Violence Has Declined By Steven Pinker Bibliography

- Sales Rank: #42915 in eBooks
- Published on: 2011-10-04
- Released on: 2011-10-04
- Format: Kindle eBook

⬇ **Download** The Better Angels of Our Nature: Why Violence Has ...pdf

📄 **Read Online** The Better Angels of Our Nature: Why Violence Ha ...pdf

Download and Read Free Online The Better Angels of Our Nature: Why Violence Has Declined By Steven Pinker

Editorial Review

Review
"For anyone interested in human nature, the material is engrossing, and when the going gets heavy, Pinker knows how to lighten it with ironic comments and a touch of humor ... a supremely important book. To have command of so much research, spread across so many different fields, is a masterly achievement." — *The New York Times Book Review*

"...an extraordinary range of research ... a masterly effort." — *The Wall Street Journal*

" ...*Better Angels* is a monumental achievement. His book should make it much harder for pessimists to cling to their gloomy vision of the future. Whether war is an ancient adaptation or a pernicious cultural infection, we are learning how to overcome it." — **Slate.com**

About the Author
Steven Pinker is Harvard College Professor of Psychology at Harvard University. A two-time Pulitzer finalist and the winner of many prizes for his research, teaching, and books, he has been named one of Time's 100 most influential people in the world today and Foreign Policy's 100 Global Thinkers. He lives in Cambridge.

Excerpt. © Reprinted by permission. All rights reserved.

Praise for Steven Pinker's *The Better Angels of Our Nature*

A *New York Times* Notable Book

A *Library Journal* Best Book of the Year

One of Amazon's 100 Best Books of the Year

A NetGalley Best of 2011

"For anyone interested in human nature, the material is engrossing, and when the going gets heavy, Pinker knows how to lighten it with ironic comments and a touch of humor. . . . A supremely important book. To have command of so much research, spread across so many different fields, is a masterly achievement."

—*The New York Times Book Review*

"An extraordinary range of research . . . a masterly effort."
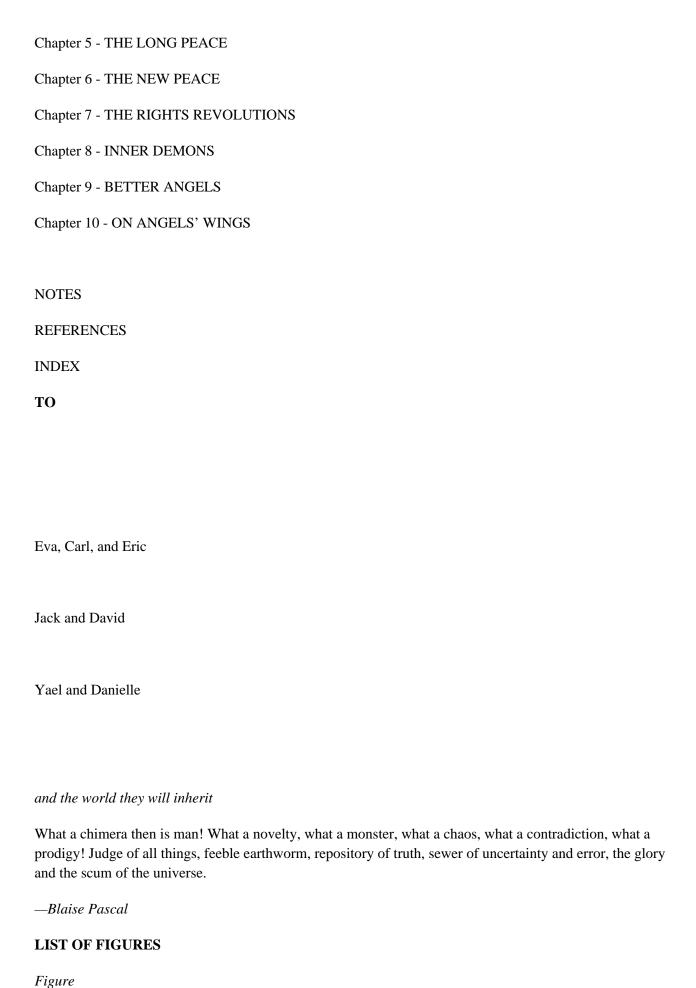
—*The Wall Street Journal*

"It is quite a story, and Pinker tells it ably. There are stimulating thoughts on nearly every page."

—*New York*

"*Better Angels* is a monumental achievement. His book should make it much harder for pessimists to cling to

their gloomy vision of the future. Whether war is an ancient adaptation or a pernicious cultural infection, we are learning how to overcome it."

—Slate.com

"Classic Pinker, jammed with facts, figures, and points of speculative departure; a big, complex book, well worth the effort for the good news that it delivers."

—*Kirkus Reviews*

"This long, well-researched, comprehensive tour de force provides a helpful look at the human condition."

—*Booklist*

"A hugely important work and major contribution to historiography."

—Niall Ferguson, professor of history, Harvard University, and

author of *Civilization: The West and the Rest*

PENGUIN BOOKS

THE BETTER ANGELS OF OUR NATURE

Table of Contents

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

LIST OF FIGURES

Figure

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 xxi 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 a 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. But 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.

1

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 a 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 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 plans 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

In his book *The Rape of Troy,* the literary scholar Jonathan Gottschall discusses how archaic Greek wars were carried out:

Fast ships with shallow drafts are rowed onto beaches and seaside communities are sacked before neighbors can lend defensive support. The men are usually killed, livestock and other portable wealth are plundered, and women are carried off to live among the victors and perform sexual and menial labors. Homeric men live with the possibility of sudden, violent death, and the women live in fear for their men and children, and of sails on the horizon that may harbinger new lives of rape and slavery.9

We also commonly read that 20th-century wars were unprecedentedly destructive because they were fought with machine guns, artillery, bombers, and other long-distance weaponry, freeing soldiers from natural inhibitions against face-to-face combat and allowing them to kill large numbers of faceless enemies without mercy. According to this reasoning, handheld weapons are not nearly as lethal as our high-tech methods of battle. But Homer vividly described the large-scale damage that warriors of his day could inflict. Gottschall offers a sample of his imagery:

Breached with surprising ease by the cold bronze, the body's contents pour forth in viscous torrents: portions of brains emerge at the ends of quivering spears, young men hold back their viscera with desperate hands, eyes are knocked or cut from skulls and glimmer sightlessly in the dust. Sharp points forge new entrances and exits in young bodies: in the center of foreheads, in temples, between the eyes, at the base of the neck, clean through the mouth or cheek and out the other side, through flanks, crotches, buttocks, hands, navels, backs, stomachs, nipples, chests, noses, ears, and chins.... Spears, pikes, arrows, swords, daggers, and rocks lust for the savor of flesh and blood. Blood sprays forth and mists the air. Bone fragments fly. Marrow boils from fresh stumps....

In the aftermath of battle, blood flows from a thousand mortal or maiming wounds, turns dust to mud, and fattens the grasses of the plain. Men plowed into the soil by heavy chariots, sharp-hoofed stallions, and the sandals of men are past recognition. Armor and weaponry litter the field. Bodies are everywhere, decomposing, deliquescing, feasting dogs, worms, flies, and birds.10

The 21st century has certainly seen the rape of women in wartime, but it has long been treated as an atrocious war crime, which most armies try to prevent and the rest deny and conceal. But for the heroes of the *Iliad*, female flesh was a legitimate spoil of war: women were to be enjoyed, monopolized, and disposed of at their pleasure. Menelaus launches the Trojan War when his wife, Helen, is abducted. Agamemnon brings disaster to the Greeks by refusing to return a sex slave to her father, and when he relents, he appropriates one belonging to Achilles, later compensating him with twenty-eight replacements. Achilles, for his part, offers this pithy description of his career: "I have spent many sleepless nights and bloody days in battle, fighting men for their women."11 When Odysseus returns to his wife after twenty years away, he murders the men who courted her while everyone thought he was dead, and when he discovers that the men had consorted with the concubines of his household, he has his son execute the concubines too.

These tales of massacre and rape are disturbing even by the standards of modern war documentaries. Homer and his characters, to be sure, deplored the waste of war, but they accepted it as an inescapable fact of life, like the weather—something that everyone talked about but no one could do anything about. As Odysseus put it, "[We are men] to whom Zeus has given the fate of winding down our lives in painful wars, from youth until we perish, each of us." The men's ingenuity, applied so resourcefully to weapons and strategy, turned up empty-handed when it came to the earthly causes of war. Rather than framing the scourge of warfare as a human problem for humans to solve, they concocted a fantasy of hotheaded gods and attributed their own tragedies to the gods' jealousies and follies.

THE HEBREW BIBLE

Like the works of Homer, the Hebrew Bible (Old Testament) was set in the late 2nd millennium BCE but written more than five hundred years later.12 But unlike the works of Homer, the Bible is revered today by billions of people who call it the source of their moral values. The world's bestselling publication, the Good Book has been translated into three thousand languages and has been placed in the nightstands of hotels all over the world. Orthodox Jews kiss it with their prayer shawls; witnesses in American courts bind their oaths by placing a hand on it. Even the president touches it when taking the oath of office. Yet for all this reverence, the Bible is one long celebration of violence.

In the beginning God created the heaven and the earth. And the Lord God formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul. And the Lord God took one of Adam's ribs, and made he a woman. And Adam called his wife's name Eve; because she was the mother of all living. And Adam knew Eve his wife; and she conceived, and bare Cain. And she again bare his brother Abel. And Cain talked with Abel his brother: and it came to pass, when they were in the field, that Cain rose up against Abel his brother, and slew him. With a world population of exactly four, that works out to a homicide rate of 25 percent, which is about a thousand times higher than the equivalent rates in Western countries today.

No sooner do men and women begin to multiply than God decides they are sinful and that the suitable punishment is genocide. (In Bill Cosby's comedy sketch, a neighbor begs Noah for a hint as to why he is building an ark. Noah replies, "How long can you tread water?") When the flood recedes, God instructs Noah in its moral lesson, namely the code of vendetta: "Whoso sheddeth man's blood, by man shall his blood be shed."

The next major figure in the Bible is Abraham, the spiritual ancestor of Jews, Christians, and Muslims. Abraham has a nephew, Lot, who settles in Sodom. Because the residents engage in anal sex and comparable sins, God immolates every man, woman, and child in a divine napalm attack. Lot's wife, for the crime of turning around to look at the inferno, is put to death as well.

Abraham undergoes a test of his moral values when God orders him to take his son Isaac to a mountaintop, tie him up, cut his throat, and burn his body as a gift to the Lord. Isaac is spared only because at the last moment an angel stays his father's hand. For millennia readers have puzzled over why God insisted on this horrifying trial. One interpretation is that God intervened not because Abraham had passed the test but because he had failed it, but that is anachronistic: obedience to divine authority, not reverence for human life, was the cardinal virtue.

Isaac's son Jacob has a daughter, Dinah. Dinah is kidnapped and raped—apparently a customary form of courtship at the time, since the rapist's family then offers to purchase her from her own family as a wife for the rapist. Dinah's brothers explain that an important moral principle stands in the way of this transaction: the rapist is uncircumcised. So they make a counteroffer: if all the men in the rapist's hometown cut off their foreskins, Dinah will be theirs. While the men are incapacitated with bleeding penises, the brothers invade the city, plunder and destroy it, massacre the men, and carry off the women and children. When Jacob worries that neighboring tribes may attack them in revenge, his sons explain that it was worth the risk: "Should our sister be treated like a whore?" 13 Soon afterward they reiterate their commitment to family values by selling their brother Joseph into slavery.

Jacob's descendants, the Israelites, find their way to Egypt and become too numerous for the Pharaoh's liking, so he enslaves them and orders that all the boys be killed at birth. Moses escapes the mass infanticide and grows up to challenge the Pharaoh to let his people go. God, who is omnipotent, could have softened Pharaoh's heart, but he hardens it instead, which gives him a reason to afflict every Egyptian with painful boils and other miseries before killing every one of *their* firstborn sons. (The word *Passover* alludes to the executioner angel's passing over the households with Israelite firstborns.) God follows this massacre with another one when he drowns the Egyptian army as they pursue the Israelites across the Red Sea.

The Israelites assemble at Mount Sinai and hear the Ten Commandments, the great moral code that outlaws engraved images and the coveting of livestock but gives a pass to slavery, rape, torture, mutilation, and genocide of neighboring tribes. The Israelites become impatient while waiting for Moses to return with an expanded set of laws, which will prescribe the death penalty for blasphemy, homosexuality, adultery, talking back to parents, and working on the Sabbath. To pass the time, they worship a statue of a calf, for which the punishment turns out to be, you guessed it, death. Following orders from God, Moses and his brother Aaron kill three thousand of their companions.

God then spends seven chapters of Leviticus instructing the Israelites on how to slaughter the steady stream of animals he demands of them. Aaron and his two sons prepare the tabernacle for the first service, but the sons slip up and use the wrong incense. So God burns them to death.

As the Israelites proceed toward the promised land, they meet up with the Midianites. Following orders from God, they slay the males, burn their city, plunder the livestock, and take the women and children captive. When they return to Moses, he is enraged because they spared the women, some of whom had led the Israelites to worship rival gods. So he tells his soldiers to complete the genocide and to reward themselves with nubile sex slaves they may rape at their pleasure: "Now therefore kill every male among the little ones, and kill every woman that hath known man by lying with him. But all the women children, that have not known a man by lying with him, keep alive for yourselves." 14

In Deuteronomy 20 and 21, God gives the Israelites a blanket policy for dealing with cities that don't accept them as overlords: smite the males with the edge of the sword and abduct the cattle, women, and children. Of course, a man with a beautiful new captive faces a problem: since he has just murdered her parents and brothers, she may not be in the mood for love. God anticipates this nuisance and offers the following solution: the captor should shave her head, pare her nails, and imprison her in his house for a month while she cries her eyes out. Then he may go in and rape her.

With a designated list of other enemies (Hittites, Amorites, Canaanites, Perizzites, Hivites, and Jebusites), the genocide has to be total: "Thou shalt save alive nothing that breatheth: But thou shalt utterly destroy them . . . as the Lord thy God has commanded thee." 15

Joshua puts this directive into practice when he invades Canaan and sacks the city of Jericho. After the walls came tumbling down, his soldiers "utterly destroyed all that was in the city, both man and woman, young and old, and ox, and sheep, and ass, with the edge of the sword."16 More earth is scorched as Joshua "smote all the country of the hills, and of the south, and of the vale, and of the springs, and all their kings: he left none remaining, but utterly destroyed all that breathed, as the Lord God of Israel commanded." 17

The next stage in Israelite history is the era of the judges, or tribal chiefs. The most famous of them, Samson, establishes his reputation by killing thirty men during his wedding feast because he needs their clothing to pay off a bet. Then, to avenge the killing of his wife and her father, he slaughters a thousand Philistines and sets fire to their crops; after escaping capture, he kills another thousand with the jawbone of an ass. When he is finally captured and his eyes are burned out, God gives him the strength for a 9/11-like suicide attack in which he implodes a large building, crushing the three thousand men and women who are worshipping inside it.

Israel's first king, Saul, establishes a small empire, which gives him the opportunity to settle an old score. Centuries earlier, during the Israelites' exodus from Egypt, the Amalekites had harassed them, and God commanded the Israelites to "wipe out the name of Amalek." So when the judge Samuel anoints Saul as king, he reminds Saul of the divine decree: "Now go and smite Amalek, and utterly destroy all that they have, and spare them not; but slay both man and woman, infant and suckling, ox and sheep, camel and ass." 18 Saul carries out the order, but Samuel is furious to learn that he has spared their king, Agag. So Samuel "hewed Agag in pieces before the Lord."

Saul is eventually overthrown by his son-in-law David, who absorbs the southern tribes of Judah, conquers Jerusalem, and makes it the capital of a kingdom that will last four centuries. David would come to be celebrated in story, song, and sculpture, and his six-pointed star would symbolize his people for three thousand years. Christians too would revere him as the forerunner of Jesus.

But in Hebrew scripture David is not just the "sweet singer of Israel," the chiseled poet who plays a harp and composes the Psalms. After he makes his name by killing Goliath, David recruits a gang of guerrillas, extorts wealth from his fellow citizens at swordpoint, and fights as a mercenary for the Philistines. These achievements make Saul jealous: the women in his court are singing, "Saul has killed by the thousands, but David by the tens of thousands." So Saul plots to have him assassinated.19 David narrowly escapes before staging a successful coup.

When David becomes king, he keeps up his hard-earned reputation for killing by the tens of thousands. After his general Joab "wasted the country of the children of Ammon," David "brought out the people that were in it, and cut them with saws, and with harrows of iron, and with axes." 20 Finally he manages to do *something* that God considers immoral: he orders a census. To punish David for this lapse, God kills seventy thousand of his citizens.

Within the royal family, sex and violence go hand in hand. While taking a walk on the palace roof one day, David peeping-toms a naked woman, Bathsheba, and likes what he sees, so he sends her husband to be killed in battle and adds her to his seraglio. Later one of David's children rapes another one and is killed in revenge by a third. The avenger, Absalom, rounds up an army and tries to usurp David's throne by having sex with ten of his concubines. (As usual, we are not told how the concubines felt about all this.) While fleeing David's army, Absalom's hair gets caught in a tree, and David's general thrusts three spears into his heart. This does not put the family squabbles to an end. Bathsheba tricks a senile David into anointing their son Solomon as his successor. When the legitimate heir, David's older son Adonijah, protests, Solomon has him killed.

King Solomon is credited with fewer homicides than his predecessors and is remembered instead for building the Temple in Jerusalem and for writing the books of Proverbs, Ecclesiastes, and the Song of Songs (though with a harem of seven hundred princesses and three hundred concubines, he clearly didn't spend all his time writing). Most of all he is remembered for his eponymous virtue, "the wisdom of Solomon." Two prostitutes sharing a room give birth a few days apart. One of the babies dies, and each woman claims that the surviving boy is hers. The wise king adjudicates the dispute by pulling out a sword and threatening to butcher the baby and hand each woman a piece of the bloody corpse. One woman withdraws her claim, and Solomon awards the baby to her. "When all Israel heard of the verdict that the king had rendered, they stood in awe of the king, because they saw that he had divine wisdom in carrying out justice." 21

The distancing effect of a good story can make us forget the brutality of the world in which it was set. Just imagine a judge in family court today adjudicating a maternity dispute by pulling out a chain saw and threatening to butcher the baby before the disputants' eyes. Solomon was confident that the more humane woman (we are never told that she was the mother) would reveal herself, and that the other woman was so spiteful that she would allow a baby to be slaughtered in front of her—and he was right! And he must have been prepared, in the event he was wrong, to carry out the butchery or else forfeit all credibility. The women, for their part, must have believed that their wise king was capable of carrying out this grisly murder.

The Bible depicts a world that, seen through modern eyes, is staggering in its savagery. People enslave, rape, and murder members of their immediate families. Warlords slaughter civilians indiscriminately, including the children. Women are bought, sold, and plundered like sex toys. And Yahweh tortures and massacres people by the hundreds of thousands for trivial disobedience or for no reason at all. These atrocities are neither isolated nor obscure. They implicate all the major characters of the Old Testament, the ones that Sunday-school children draw with crayons. And they fall into a continuous plotline that stretches for millennia, from Adam and Eve through Noah, the patriarchs, Moses, Joshua, the judges, Saul, David, Solomon, and beyond. According to the biblical scholar Raymund Schwager, the Hebrew Bible "contains over six hundred passages that explicitly talk about nations, kings, or individuals attacking, destroying, and killing others. . . . Aside from the approximately one thousand verses in which Yahweh himself appears as the direct executioner of violent punishments, and the many texts in which the Lord delivers the criminal to the punisher's sword, in over one hundred other passages Yahweh expressly gives the command to kill people."22 Matthew White, a self-described atrocitologist who keeps a database with the estimated death tolls of history's major wars, massacres, and genocides, counts about 1.2 million deaths from mass killing that are specifically enumerated in the Bible. (He excludes the half million casualties in the war between Judah and Israel described in 2 Chronicles 13 because he considers the body count historically implausible.) The victims of the Noachian flood would add another 20 million or so to the total.23

The good news, of course, is that most of it never happened. Not only is there no evidence that Yahweh inundated the planet and incinerated its cities, but the patriarchs, exodus, conquest, and Jewish empire are almost certainly fictions. Historians have found no mention in Egyptian writings of the departure of a million slaves (which could hardly have escaped the Egyptians' notice); nor have archaeologists found evidence in

the ruins of Jericho or neighboring cities of a sacking around 1200 BCE. And if there was a Davidic empire stretching from the Euphrates to the Red Sea around the turn of the 1st millennium BCE, no one else at the time seemed to have noticed it.24

Modern biblical scholars have established that the Bible is a wiki. It was compiled over half a millennium from writers with different styles, dialects, character names, and conceptions of God, and it was subjected to haphazard editing that left it with many contradictions, duplications, and non sequiturs.

The oldest parts of the Hebrew Bible probably originated in the 10th century BCE. They included origin myths for the local tribes and ruins, and legal codes adapted from neighboring civilizations in the Near East. The texts probably served as a code of frontier justice for the Iron Age tribes that herded livestock and farmed hillsides in the southeastern periphery of Canaan. The tribes began to encroach on the valleys and cities, engaged in some marauding every now and again, and may even have destroyed a city or two. Eventually their myths were adopted by the entire population of Canaan, unifying them with a shared genealogy, a glorious history, a set of taboos to keep them from defecting to foreigners, and an invisible enforcer to keep them from each other's throats. A first draft was rounded out with a continuous historical narrative around the late 7th to mid-6th century BCE, when the Babylonians conquered the Kingdom of Judah and forced its inhabitants into exile. The final edit was completed after their return to Judah in the 5th century BCE.

Though the historical accounts in the Old Testament are fictitious (or at best artistic reconstructions, like Shakespeare's historical dramas), they offer a window into the lives and values of Near Eastern civilizations in the mid-1st millennium BCE. Whether or not the Israelites actually engaged in genocide, they certainly thought it was a good idea. The possibility that a woman had a legitimate interest in not being raped or acquired as sexual property did not seem to register in anyone's mind. The writers of the Bible saw nothing wrong with slavery or with cruel punishments like blinding, stoning, and hacking someone to pieces. Human life held no value in comparison with unthinking obedience to custom and authority.

If you think that by reviewing the literal content of the Hebrew Bible I am trying to impugn the billions of people who revere it today, then you are missing the point. The overwhelming majority of observant Jews and Christians are, needless to say, thoroughly decent people who do not sanction genocide, rape, slavery, or stoning people for frivolous infractions. Their reverence for the Bible is purely talismanic. In recent millennia and centuries the Bible has been spin-doctored, allegorized, superseded by less violent texts (the Talmud among Jews and the New Testament among Christians), or discreetly ignored. And *that* is the point. Sensibilities toward violence have changed so much that religious people today compartmentalize their attitude to the Bible. They pay it lip service as a symbol of morality, while getting their actual morality from more modern principles.

THE ROMAN EMPIRE AND EARLY CHRISTENDOM

Christians downplay the wrathful deity of the Old Testament in favor of a newer conception of God, exemplified in the New Testament (the Christian Bible) by his son Jesus, the Prince of Peace. Certainly loving one's enemies and turning the other cheek constitute an advance over utterly destroying all that breatheth. Jesus, to be sure, was not above using violent imagery to secure the loyalty of his flock. In Matthew 10:34–37 he says:

Think not that I am come to send peace on earth: I came not to send peace, but a sword. For I am come to set a man at variance against his father, and the daughter against her mother, and the daughter in law against her mother in law. And a man's foes shall be they of his own household. He that loveth father or mother more than me is not worthy of me: and he that loveth son or daughter more than me is not worthy of me.

It's not clear what he planned to do with that sword, but there's no evidence that he smote anyone with the edge of it.

Of course, there's no direct evidence for anything that Jesus said or did.25 The words attributed to Jesus were written decades after his death, and the Christian Bible, like the Hebrew one, is riddled with contradictions, uncorroborated histories, and obvious fabrications. But just as the Hebrew Bible offers a glimpse into the values of the middle of the 1st millennium BCE, the Christian Bible tells us much about the first two centuries CE. Indeed, in that era the story of Jesus was by no means unique. A number of pagan myths told of a savior who was sired by a god, born of a virgin at the winter solstice, surrounded by twelve zodiacal disciples, sacrificed as a scapegoat at the spring equinox, sent into the underworld, resurrected amid much rejoicing, and symbolically eaten by his followers to gain salvation and immortality.26

The backdrop of the story of Jesus is the Roman Empire, the latest in a succession of conquerors of Judah. Though the first centuries of Christianity took place during the Pax Romana (the Roman Peace), the alleged peacefulness has to be understood in relative terms. It was a time of ruthless imperial expansion, including the conquest of Britain and the deportation of the Jewish population of Judah following the destruction of the Second Temple in Jerusalem.

The preeminent symbol of the empire was the Colosseum, visited today by millions of tourists and emblazoned on pizza boxes all over the world. In this stadium, Super Bowl–sized audiences consumed spectacles of mass cruelty. Naked women were tied to stakes and raped or torn apart by animals. Armies of captives massacred each other in mock battles. Slaves carried out literal enactments of mythological tales of mutilation and death—for example, a man playing Prometheus would be chained to a rock, and a trained eagle would pull out his liver. Gladiators fought each other to the death; our thumbs-up and thumbs-down gestures may have come from the signals flashed by the crowd to a victorious gladiator telling him whether to administer the coup de grâce to his opponent. About half a million people died these agonizing deaths to provide Roman citizens with their bread and circuses. The grandeur that was Rome casts our violent entertainment in a different light (to say nothing of our "extreme sports" and "sudden-death overtime"). 27

The most famous means of Roman death, of course, was crucifixion, the source of the word *excruciating*. Anyone who has ever looked up at the front of a church must have given at least a moment's thought to the unspeakable agony of being nailed to a cross. Those with a strong stomach can supplement their imagination by reading a forensic investigation of the death of Jesus Christ, based on archaeological and historical sources, which was published in 1986 in the *Journal of the American Medical Association*.28

A Roman execution began with a scourging of the naked prisoner. Using a short whip made of braided leather embedded with sharpened stones, Roman soldiers would flog the man's back, buttocks, and legs. According to the *JAMA* authors, "The lacerations would tear into the underlying skeletal muscles and produce quivering ribbons of bleeding flesh." The prisoner's arms would then be tied around a hundred-pound crossbar, and he would be forced to carry it to a site where a post was embedded in the ground. The man would be thrown onto his shredded back and nailed through the wrists to the crossbar. (Contrary to the familiar depictions, the flesh of the palms cannot support the weight of a man.) The victim was hoisted onto the post and his feet were nailed to it, usually without a supporting block. The man's rib cage was distended by the weight of his body pulling on his arms, making it difficult to exhale unless he pulled his arms or pushed his legs against the nails. Death from asphyxiation and loss of blood would come after an ordeal ranging from three or four hours to three or four days. The executioners could prolong the torture by resting the man's weight on a seat, or hasten death by breaking his legs with a club.

Though I like to think that nothing human is foreign to me, I find it impossible to put myself in the minds of the ancients who devised this orgy of sadism. Even if I had custody of Hitler and could mete out the desert of

my choice, it would not occur to me to inflict a torture like that on him. I could not avoid wincing in sympathy, would not want to become the kind of person who could indulge in such cruelty, and could see no point in adding to the world's reservoir of suffering without a commensurate benefit. (Even the practical goal of deterring future despots, I would reason, is better served by maximizing the expectation that they will be brought to justice than by maximizing the gruesomeness of the penalty.) Yet in the foreign country we call the past, crucifixion was a common punishment. It was invented by the Persians, carried back to Europe by Alexander the Great, and widely used in Mediterranean empires. Jesus, who was convicted of minor rabble-rousing, was crucified along with two common thieves. The outrage that the story was meant to arouse was not that petty crimes were punishable by crucifixion but that Jesus was treated like a petty criminal.

The crucifixion of Jesus, of course, was never treated lightly. The cross became the symbol of a movement that spread through the ancient world, was adopted by the Roman Empire, and two millennia later remains the world's most recognizable symbol. The dreadful death it calls to mind must have made it an especially potent meme. But let's step outside our familiarity with Christianity and ponder the mindset that tried to make sense of the crucifixion. By today's sensibilities, it's more than a little macabre that a great moral movement would adopt as its symbol a graphic representation of a revolting means of torture and execution. (Imagine that the logo of a Holocaust museum was a shower nozzle, or that survivors of the Rwandan genocide formed a religion around the symbol of a machete.) More to the point, what was the lesson that the first Christians drew from the crucifixion? Today such a barbarity might galvanize people into opposing brutal regimes, or demanding that such torture never again be inflicted on a living creature. But those weren't the lessons the early Christians drew at all. No, the execution of Jesus is The Good News, a necessary step in the most wonderful episode in history. In allowing the crucifixion to take place, God did the world an incalculable favor. Though infinitely powerful, compassionate, and wise, he could think of no other way to reprieve humanity from punishment for its sins (in particular, for the sin of being descended from a couple who had disobeyed him) than to allow an innocent man (his son no less) to be impaled through the limbs and slowly suffocate in agony. By acknowledging that this sadistic murder was a gift of divine mercy, people could earn eternal life. And if they failed to see the logic in all this, their flesh would be seared by fire for all eternity.

According to this way of thinking, death by torture is not an unthinkable horror; it has a bright side. It is a route to salvation, a part of the divine plan. Like Jesus, the early Christian saints found a place next to God by being tortured to death in ingenious ways. For more than a millennium, Christian martyrologies described these torments with pornographic relish.29

Here are just a few saints whose names, if not their causes of death, are widely known. Saint Peter, an apostle of Jesus and the first Pope, was crucified upside down. Saint Andrew, the patron saint of Scotland, met his end on an X-shaped cross, the source of the diagonal stripes on the Union Jack. Saint Lawrence was roasted alive on a gridiron, a detail unknown to most Canadians who recognize his name from the river, the gulf, and one of Montreal's two major boulevards. The other one commemorates Saint Catherine, who was broken on the wheel, a punishment in which the executioner tied the victim to a wagon wheel, smashed his or her limbs with a sledgehammer, braided the shattered but living body through the spokes, and hoisted it onto a pole for birds to peck while the victim slowly died of hemorrhage and shock. (Catherine's wheel, studded with spikes, adorns the shield of the eponymous college at Oxford.) Saint Barbara, namesake of the beautiful California city, was hung upside down by her ankles while soldiers ripped her body with iron claws, amputated her breasts, burned the wounds with hot irons, and beat her head with spiked clubs. And then there's Saint George, the patron saint of England, Palestine, the republic of Georgia, the Crusades, and the Boy Scouts. Because God kept resuscitating him, George got to be tortured to death many times. He was seated astride a sharp blade with weights on his legs, roasted on a fire, pierced through the feet, crushed by a spiked wheel, had sixty nails hammered into his head, had the fat rendered out of his back with candles, and then was sawn in half.

The voyeurism in the martyrologies was employed not to evoke outrage against torture but to inspire reverence for the bravery of the martyrs. As in the story of Jesus, torture was an excellent thing. The saints welcomed their torments, because suffering in this life would be rewarded with bliss in the next one. The Christian poet Prudentius wrote of one of the martyrs, "The mother was present, gazing on all the preparations for her dear one's death and showed no signs of grief, rejoicing rather each time the pan hissing hot above the olive wood roasted and scorched her child."30 Saint Lawrence would become the patron saint of comedians because while he was lying on the gridiron he said to his tormenters, "This side's done, turn me over and have a bite." The torturers were straight men, bit players; when they were put in a bad light it was because they were torturing *our* heroes, not because they used torture in the first place.

The early Christians also extolled torture as just deserts for the sinful. Most people have heard of the seven deadly sins, standardized by Pope Gregory I in 590 CE. Fewer people know about the punishment in hell that was reserved for those who commit them:

Pride: Broken on the wheel
Envy: Put in freezing water
Gluttony: Force-fed rats, toads, and snakes
Lust: Smothered in fire and brimstone
Anger: Dismembered alive
Greed: Put in cauldrons of boiling oil
Sloth: Thrown in snake pits 31

The duration of these sentences, of course, was infinite.

By sanctifying cruelty, early Christianity set a precedent for more than a millennium of systematic torture in Christian Europe. If you understand the expressions *to burn at the stake, to hold his feet to the fire*, *to break a butterfly on the wheel, to be racked with pain, to be drawn and quartered, to disembowel, to flay, to press, the thumbscrew, the garrote, a slow burn,* and *the iron maiden* (a hollow hinged statue lined with nails, later taken as the name of a heavy-metal rock band), you are familiar with a fraction of the ways that heretics were brutalized during the Middle Ages and early modern period.

During the Spanish Inquisition, church officials concluded that the conversions of thousands of former Jews didn't take. To compel the conversos to confess their hidden apostasy, the inquisitors tied their arms behind their backs, hoisted them by their wrists, and dropped them in a series of violent jerks, rupturing their tendons and pulling their arms out of their sockets.32 Many others were burned alive, a fate that also befell Michael Servetus for questioning the trinity, Giordano Bruno for believing (among other things) that the earth went around the sun, and William Tyndale for translating the Bible into English. Galileo, perhaps the most famous victim of the Inquisition, got off easy: he was only *shown* the instruments of torture (in particular, the rack) and was given the opportunity to recant for "having held and believed that the sun is the center of the world and immovable, and that the earth is not the center and moves." Today the rack shows up in cartoons featuring elasticized limbs and bad puns (Stretching exercises; Is this a wind-up? No pain no gain). But at the time it was no laughing matter. The Scottish travel writer William Lithgow, a contemporary of Galileo's, described what it was like to be racked by the Inquisition:

As the levers bent forward, the main force of my knees against the two planks burst asunder the sinews of my hams, and the lids of my knees were crushed. My eyes began to startle, my mouth to foam and froth, and my teeth to chatter like the doubling of a drummer's sticks. My lips were shivering, my groans were vehement, and blood sprang from my arms, broken sinews, hands, and knees. Being loosed from these

pinnacles of pain, I was hand-fast set on the floor, with this incessant imploration: "Confess! Confess!" 33

Though many Protestants were victims of these tortures, when they got the upper hand they enthusiastically inflicted them on others, including a hundred thousand women they burned at the stake for witchcraft between the 15th and 18th centuries.34 As so often happens in the history of atrocity, later centuries would treat these horrors in lighthearted ways. In popular culture today witches are not the victims of torture and execution but mischievous cartoon characters or sassy enchantresses, like Broom-Hilda, Witch Hazel, Glinda, Samantha, and the Halliwell sisters in *Charmed.*

Institutionalized torture in Christendom was not just an unthinking habit; it had a moral rationale. If you really believe that failing to accept Jesus as one's savior is a ticket to fiery damnation, then torturing a person until he acknowledges this truth is doing him the biggest favor of his life: better a few hours now than an eternity later. And silencing a person before he can corrupt others, or making an example of him to deter the rest, is a responsible public health measure. Saint Augustine brought the point home with a pair of analogies: a good father prevents his son from picking up a venomous snake, and a good gardener cuts off a rotten branch to save the rest of the tree.35 The method of choice had been specified by Jesus himself: "If a man abide not in me, he is cast forth as a branch, and is withered; and men gather them, and cast them into the fire, and they are burned."36

Once again, the point of this discussion is not to accuse Christians of endorsing torture and persecution. *Of course* most devout Christians today are thoroughly tolerant and humane people. Even those who thunder from televised pulpits do not call for burning heretics alive or hoisting Jews on the strappado. The question is why they don't, given that their beliefs imply that it would serve the greater good. The answer is that people in the West today compartmentalize their religious ideology. When they affirm their faith in houses of worship, they profess beliefs that have barely changed in two thousand years. But when it comes to their actions, they respect modern norms of nonviolence and toleration, a benevolent hypocrisy for which we should all be grateful.

MEDIEVAL KNIGHTS

If the word *saintly* deserves a second look, so does the word *chivalrous*. The legends of knights and ladies in King Arthur's time have provided Western culture with some of its most romantic images. Lancelot and Guinevere are the archetypes of romantic love, Sir Galahad the embodiment of gallantry. Camelot, the name of King Arthur's court, was used as the title of a Broadway musical, and when word got out after John F. Kennedy's assassination that he had enjoyed the sound track, it became a nostalgic term for his administration. Kennedy's favorite lines reportedly were "Don't let it be forgot that once there was a spot / For one brief shining moment that was known as Camelot."

As a matter of fact, the knightly way of life *was* forgot, which is a good thing for the image of the knightly way of life. The actual content of the tales of medieval chivalry, which were set in the 6th century and written between the 11th and the 13th, was not the stuff of a typical Broadway musical. The medievalist Richard Kaeuper tallied the number of acts of extreme violence in the most famous of these romances, the 13th-century *Lancelot*, and on average found one every four pages.

Limiting ourselves to quantifiable instances, at least eight skulls are split (some to the eyes, some to the teeth, some to the chin), eight unhorsed men are deliberately crushed by the huge hooves of the victor's war-horse (so that they faint in agony, repeatedly), five decapitations take place, two entire shoulders are hewn away, three hands are cut off, three arms are severed at various lengths, one knight is thrown into a blazing fire and two knights are catapulted to sudden death. One woman is painfully bound in iron bands by a knight;

one is kept for years in a tub of boiling water by God, one is narrowly missed by a hurled lance. Women are frequently abducted and we hear at one point of forty rapes....

Beyond these readily enumerable acts there are reports of three private wars (with, in one case, 100 casualties on one side, and with 500 deaths with poison in another).... In one [tournament], to provide the flavor, Lancelot kills the first man he encounters with his lance and then, sword drawn, "struck to the right and the left, killing horses and knights all at the same time, cutting feet and hands, heads and arms, shoulders and thighs, striking down those above him whenever he met them, and leaving a sorrowful wake behind him, so that the whole earth was bathed in blood wherever he passed."[37]

How did the knights ever earn their reputation for being gentlemen? According to *Lancelot*, "Lancelot had the custom of never killing a knight who begged for mercy, unless he had sworn beforehand to do so, or unless he could not avoid it." [38]

As for their vaunted treatment of the ladies, one knight woos a princess by pledging to rape the most beautiful woman he can find on her behalf; his rival promises to send her the heads of the knights he defeats in tournaments. Knights do protect ladies, but only to keep them from being abducted by other knights. According to *Lancelot*, "The customs of the Kingdom of Logres are such that if a lady or a maiden travels by herself, she fears no one. But if she travels in the company of a knight and another knight can win her in battle, the winner can take a lady or maiden in any way he desires without incurring shame or blame."[39] Presumably that is not what most people today mean by the word *chivalry*.

EARLY MODERN EUROPE

In chapter 3 we will see that medieval Europe settles down a bit when the knightly warlords are brought under the control of monarchs in centralized kingdoms. But the kings and queens were hardly paragons of nobility themselves.

Commonwealth schoolchildren are often taught one of the key events in British history with the help of a mnemonic:

King Henry the Eighth, to six wives he was wedded:
One died, one survived, two divorced, two beheaded.

Beheaded! In 1536 Henry had his wife Anne Boleyn decapitated on trumped-up charges of adultery and treason because she gave him a son that did not survive, and he had become attracted to one of her ladies-in-waiting. Two wives later he suspected Catherine Howard of adultery and sent her to the ax as well. (Tourists visiting the Tower of London can see the chopping block for themselves.) Henry was clearly the jealous type: he also had an old boyfriend of Catherine's drawn and quartered, which is to say hanged by the neck, taken down while still alive, disemboweled, castrated, decapitated, and cut into four.

The throne passed to Henry's son Edward, then to Henry's daughter Mary, and then to another daughter, Elizabeth. "Bloody Mary" did not get her nickname by putting tomato juice in her vodka but by having three hundred religious dissenters burned at the stake. And both sisters kept up the family tradition for how to resolve domestic squabbles: Mary imprisoned Elizabeth and presided over the execution of their cousin, Lady Jane Grey, and Elizabeth executed another cousin, Mary Queen of Scots. Elizabeth also had 123 priests drawn and quartered, and had other enemies tortured with bone-crushing manacles, another attraction on display in the Tower. Today the British royal family is excoriated for shortcomings ranging from rudeness to

infidelity. You'd think people would give them credit for not having had a single relative decapitated, nor a single rival drawn and quartered.

Despite signing off on all that torture, Elizabeth I is among England's most revered monarchs. Her reign has been called a golden age in which the arts flourished, especially the theater. It's hardly news that Shakespeare's tragedies depict a lot of violence. But his fictional worlds contained levels of barbarity that can shock even the inured audiences of popular entertainment today. Henry V, one of Shakespeare's heroes, issues the following ultimatum of surrender to a French village during the Hundred Years' War:

why, in a moment look to see

The blind and bloody soldier with foul hand

Defile the locks of your shrill-shrieking daughters;

Your fathers taken by the silver beards,

And their most reverend heads dash'd to the walls,

Your naked infants spitted upon pikes.40

In *King Lear*, the Duke of Cornwall gouges out the eyes of the Earl of Gloucester ("Out, vile jelly!"), whereupon his wife, Regan, orders the earl, bleeding from the sockets, out of the house: "Go thrust him out at gates, and let him smell his way to Dover." In *The Merchant of Venice*, Shylock obtains the right to cut a pound of flesh from the chest of the guarantor of a loan. In *Titus Andronicus*, two men kill another man, rape his bride, cut out her tongue, and amputate her hands. Her father kills the rapists, cooks them in a pie, and feeds them to their mother, whom he then kills before killing his own daughter for having gotten raped in the first place; then he is killed, and his killer is killed.

Entertainment written for children was no less grisly. In 1815 Jacob and Wilhelm Grimm published a compendium of old folktales that had gradually been adapted for children. Commonly known as *Grimm's Fairy Tales*, the collection ranks with the Bible and Shakespeare as one of the bestselling and most respected works in the Western canon. Though it isn't obvious from the bowdlerized versions in Walt Disney films, the tales are filled with murder, infanticide, cannibalism, mutilation, and sexual abuse—grim fairy tales indeed. Take just the three famous stepmother stories:

• During a famine, the father and stepmother of Hansel and Gretel abandon them in a forest so that they will starve to death. The children stumble upon an edible house inhabited by a witch, who imprisons Hansel and fattens him up in preparation for eating him. Fortunately Gretel shoves the witch into a fiery oven, and "the godless witch burned to death in a horrible way." 41

• Cinderella's stepsisters, when trying to squeeze into her slippers, take their mother's advice and cut off a toe or heel to make them fit. Doves notice the blood, and after Cinderella marries the prince, they peck out the stepsisters' eyes, punishing them "for their wickedness and malice with blindness for the rest of their lives."

• Snow White arouses the jealousy of her stepmother, the queen, so the queen orders a hunter to take her into the forest, kill her, and bring back her lungs and liver for the queen to eat. When the queen realizes that

Snow White has escaped, she makes three more attempts on her life, two by poison, one by asphyxiation. After the prince has revived her, the queen crashes their wedding, but "iron slippers had already been heated up for her over a fire of coals.... She had to put on the red-hot iron shoes and dance in them until she dropped to the ground dead." 42

As we shall see, purveyors of entertainment for young children today have become so intolerant of violence that even episodes of the early Muppets have been deemed too dangerous for them. And speaking of puppetry, one of the most popular forms of children's entertainment in Europe used to be the Punch and Judy show. Well into the 20th century, this pair of bickering glove puppets acted out slapstick routines in ornate booths in English seaside towns. The literature scholar Harold Schechter summarizes a typical plot:

It begins when Punch goes to pet his neighbor's dog, which promptly clamps its teeth around the puppet's grotesquely oversized nose. After prying the dog loose, Punch summons the owner, Scaramouche and, after a bit of crude banter, knocks the fellow's head "clean off his shoulders." Punch then calls for his wife, Judy, and requests a kiss. She responds by walloping him in the face. Seeking another outlet for his affection, Punch asks for his infant child and begins to cradle it. Unfortunately, the baby picks that moment to dirty itself. Always the loving family man, Punch reacts by beating the baby's head against the stage, then hurling its dead body into the audience. When Judy reappears and discovers what's happened, she is understandably upset. Tearing Punch's stick from his hands, she begins to lay into him. He wrestles the cudgel away from her, pummels her to death, and then breaks into a triumphant little song:

Who'd be plagued with a wife

That could set himself free

With a rope or a knife

Or a good stick, like me? 43

Even Mother Goose nursery rhymes, which mostly date from the 17th and 18th centuries, are jarring by the standards of what we let small children hear today. Cock Robin is murdered in cold blood. A single mother living in substandard housing has numerous illegitimate children and abuses them with whipping and starvation. Two unsupervised children are allowed to go on a dangerous errand; Jack sustains a head injury that could leave him with brain damage, while Jill's condition is unknown. A drifter confesses that he threw an old man down the stairs. Georgie Porgie sexually harasses underage girls, leaving them with symptoms of post-traumatic stress disorder. Humpty Dumpty remains in critical condition after a crippling accident. A negligent mother leaves a baby unattended on a treetop, with disastrous results. A blackbird swoops down on a domestic employee hanging up laundry and maliciously wounds her nose. Three vision-impaired mice are mutilated with a carving knife. And here comes a candle to light you to bed; here comes a chopper to chop off your head! A recent article in the *Archives of Diseases of Childhood* measured the rates of violence in different genres of children's entertainment. The television programs had 4.8 violent scenes per hour; the nursery rhymes had 52.2.44

HONOR IN EUROPE AND THE EARLY UNITED STATES

If you have an American ten-dollar bill handy, look at the man portrayed on it and give a moment's thought to his life and death. Alexander Hamilton is one of American history's most luminous figures. As a coauthor of the *Federalist Papers*, he helped to articulate the philosophical basis of democracy. As America's first secretary of the treasury, he devised the institutions that support modern market economies. At other times in his life he led three battalions in the Revolutionary War, helped launch the Constitutional Convention, commanded a national army, established the Bank of New York, served in the New York legislature, and founded the *New York Post*.45

Yet in 1804 this brilliant man did something that by today's standards was astonishingly stupid. Hamilton had long exchanged bitchy remarks with his rival Vice President Aaron Burr, and when Hamilton refused to disavow a criticism of Burr that had been attributed to him, Burr challenged him to a duel. Common sense was just one of many forces that could have pulled him away from a date with death.46 The custom of dueling was already on the wane, and Hamilton's state of residence, New York, had outlawed it. Hamilton had lost a son to a duel, and in a letter explaining his response to Burr's challenge, he enumerated five objections to the practice. But he agreed to the duel anyway, because, he wrote, "what men of the world denominate honor" left him no other choice. The following morning he was rowed across the Hudson to face Burr on the New Jersey Palisades. Burr would not be the last vice president to shoot a man, but he was a better shot than Dick Cheney, and Hamilton died the following day.

Nor was Hamilton the only American statesman to be drawn into a duel. Henry Clay fought in one, and James Monroe thought the better of challenging John Adams only because Adams was president at the time. Among the other faces on American currency, Andrew Jackson, immortalized on the twenty-dollar bill, carried bullets from so many duels that he claimed to "rattle like a bag of marbles" when he walked. Even the Great Emancipator on the five-dollar bill, Abraham Lincoln, accepted a challenge to fight a duel, though he set the conditions to ensure that it would not be consummated.

Formal dueling was not, of course, an American invention. It emerged during the Renaissance as a measure to curtail assassinations, vendettas, and street brawls among aristocrats and their retinues. When one man felt that his honor had been impugned, he could challenge the other to a duel and cap the violence at a single death, with no hard feelings among the defeated man's clan or entourage. But as the essayist Arthur Krystal observes, "The gentry . . . took honor so seriously that just about every offense became an offense against honor. Two Englishmen dueled because their dogs had fought. Two Italian gentlemen fell out over the respective merits of Tasso and Ariosto, an argument that ended when one combatant, mortally wounded, admitted that he had not read the poet he was championing. And Byron's great-uncle William, the fifth Baron Byron, killed a man after disagreeing about whose property furnished more game."47

Dueling persisted in the 18th and 19th centuries, despite denunciations by the church and prohibitions by many governments. Samuel Johnson defended the custom, writing, "A man may shoot the man who invades his character, as he may shoot him who attempts to break into his house." Dueling sucked in such luminaries as Voltaire, Napoleon, the Duke of Wellington, Robert Peel, Tolstoy, Pushkin, and the mathematician Évariste Galois, the last two fatally. The buildup, climax, and denouement of a duel were made to order for fiction writers, and the dramatic possibilities were put to use by Sir Walter Scott, Dumas père, de Maupassant, Conrad, Tolstoy, Pushkin, Chekhov, and Thomas Mann.

The career of dueling showcases a puzzling phenomenon we will often encounter: a category of violence can be embedded in a civilization for centuries and then vanish into thin air. When gentlemen agreed to a duel, they were fighting not for money or land or even women but for honor, the strange commodity that exists because everyone believes that everyone else believes that it exists. Honor is a bubble that can be inflated by some parts of human nature, such as the drive for prestige and the entrenchment of norms, and popped by others, such as a sense of humor.48 The institution of formal dueling petered out in the English-speaking

world by the middle of the 19th century, and in the rest of Europe in the following decades. Historians have noted that the institution was buried not so much by legal bans or moral disapproval as by ridicule. When "solemn gentlemen went to the field of honor only to be laughed at by the younger generation, that was more than any custom, no matter how sanctified by tradition, could endure." 49 Today the expression "Take ten paces, turn, and fire" is more likely to call to mind Bugs Bunny and Yosemite Sam than "men of honor."

THE 20th CENTURY

As our tour of the history of forgotten violence comes within sight of the present, the landmarks start to look more familiar. But even the zone of cultural memory from the last century has relics that feel like they belong to a foreign country.

Take the decline of martial culture.50 The older cities in Europe and the United States are dotted with public works that flaunt the nation's military might. Pedestrians can behold statues of commanders on horseback, beefcake sculptures of well-hung Greek warriors, victory arches crowned by chariots, and iron fencing wrought into the shape of swords and spears. Subway stops are named for triumphant battles: the Paris Métro has an Austerlitz station; the London Underground has a Waterloo station. Photos from a century ago show men in gaudy military dress uniforms parading on national holidays and hobnobbing with aristocrats at fancy dinners. The visual branding of long-established states is heavy on aggressive iconography, such as projectiles, edged weapons, birds of prey, and predatory cats. Even famously pacifistic Massachusetts has a seal that features an amputated arm brandishing a sword and a Native American holding a bow and arrow above the state motto, "With the sword we seek peace, but under liberty." Not to be outdone, neighboring New Hampshire adorns its license plates with the motto "Live Free or Die."

But in the West today public places are no longer named after military victories. Our war memorials depict not proud commanders on horseback but weeping mothers, weary soldiers, or exhaustive lists of names of the dead. Military men are inconspicuous in public life, with drab uniforms and little prestige among the hoi polloi. In London's Trafalgar Square, the plinth across from the big lions and Nelson's column was recently topped with a sculpture that is about as far from military iconography as one can imagine: a nude, pregnant artist who had been born without arms and legs. The World War I battlefield in Ypres, Belgium, inspiration for the poem "In Flanders Fields" and the poppies worn in Commonwealth countries on November 11, has just sprouted a memorial to the thousand soldiers who were shot in that war for desertion—men who at the time were despised as contemptible cowards. And the two most recent American state mottoes are Alaska's "North to the Future" and Hawaii's "The life of the land is perpetuated in righteousness" (though when Wisconsin solicited a replacement for "America's Dairyland," one of the entries was "Eat Cheese or Die").

Conspicuous pacifism is especially striking in Germany, a nation that was once so connected to martial values that the words *Teutonic* and *Prussian* became synonyms for rigid militarism. As recently as 1964 the satirist Tom Lehrer expressed a common fear at the prospect of West Germany participating in a multilateral nuclear coalition. In a sarcastic lullaby, the singer reassures a baby:

Once all the Germans were warlike and mean,

But that couldn't happen again.

We taught them a lesson in 1918

And they've hardly bothered us since then.

The fear of a revanchist Germany was revived in 1989, when the Berlin Wall came down and the two Germanys made plans to reunite. Yet today German culture remains racked with soul-searching over its role in the world wars and permeated with revulsion against anything that smacks of military force. Violence is taboo even in video games, and when Parker Brothers tried to introduce a German version of Risk, the board game in which players try to dominate a map of the world, the German government tried to censor it. (Eventually the rules were rewritten so that players were "liberating" rather than conquering their opponents' territories.)51 German pacifism is not just symbolic: in 2003 half a million Germans marched to oppose the American-led invasion of Iraq. The American secretary of defense, Donald Rumsfeld, famously wrote the country off as part of "Old Europe." Given the history of ceaseless war on that continent, the remark may have been the most flagrant display of historical amnesia since the student who complained about the clichés in Shakespeare.

Many of us have lived through another change in Western sensibilities toward military symbolism. When the ultimate military weapons, nuclear bombs, were unveiled in the 1940s and 1950s, people were not repelled, even though the weapons had recently snuffed out a quarter of a million lives and were threatening to annihilate hundreds of millions more. No, the world found them charming! A sexy bathing suit, the bikini, was named after a Micronesian atoll that had been vaporized by nuclear tests, because the designer compared the onlookers' reaction to an atomic blast. Ludicrous "civil defense" measures like backyard fallout shelters and duck-and-cover classroom drills encouraged the delusion that a nuclear attack would be no big deal. To this day triple-triangle fallout shelter signs rust above the basement entrances of many American apartment buildings and schools. Many commercial logos from the 1950s featured mushroom clouds, including Atomic Fireball Jawbreaker candies, the Atomic Market (a mom-and-pop grocery store not far from MIT), and the Atomic Café, which lent its name to a 1982 documentary on the bizarre nonchalance with which the world treated nuclear weapons through the early 1960s, when horror finally began to sink in.

Another major change we have lived through is an intolerance of displays of force in everyday life. In earlier decades a man's willingness to use his fists in response to an insult was the sign of respectability.52 Today it is the sign of a boor, a symptom of impulse control disorder, a ticket to anger management therapy.

An incident from 1950 illustrates the change. President Harry Truman had seen an unkind review in the *Washington Post* of a performance by his daughter, Margaret, an aspiring singer. Truman wrote to the critic on White House stationery: "Some day I hope to meet you. When that happens you'll need a new nose, a lot of beefsteak for black eyes, and perhaps a supporter below." Though every writer can sympathize with the impulse, today a public threat to commit aggravated assault against a critic would seem buffoonish, indeed sinister, if it came from a person in power. But at the time Truman was widely admired for his paternal chivalry.

And if you recognize the expressions "ninety-seven-pound weakling" and "get sand kicked in your face," you are probably familiar with the iconic ads for the Charles Atlas bodybuilding program, which ran in magazines and comic books starting in the 1940s. In the typical storyline, an ectomorph is assaulted on the beach in front of his girlfriend. He skulks home, kicks a chair, gambles a ten-cent stamp, receives instructions for an exercise program, and returns to the beach to wreak revenge on his assailant, restoring his standing with the beaming young woman (figure 1–1).

When it came to the product, Atlas was ahead of his time: the popularity of bodybuilding soared in the 1980s. But when it came to marketing, he belonged to a different era. Today the ads for gyms and exercise paraphernalia don't feature the use of fisticuffs to restore manly honor. The imagery is narcissistic, almost homoerotic. Bulging pectorals and rippling abdominals are shown in arty close-up for both sexes to admire. The advantage they promise is in beauty, not might.

FIGURE 1–1. Everyday violence in a bodybuilding ad, 1940s

Even more revolutionary than the scorn for violence between men is the scorn for violence against women. Many baby boomers are nostalgic for *The Honeymooners*, a 1950s sitcom featuring Jackie Gleason as a burly bus driver whose get-rich-quick schemes are ridiculed by his sensible wife, Alice. In one of the show's recurring laugh lines, an enraged Ralph shakes his fist at her and bellows, "One of these days, Alice, one of these days . . . POW, right in the kisser!" (Or sometimes "Bang, zoom, straight to the moon!") Alice always laughs it off, not because she has contempt for a wife-beater but because she knows that Ralph is not man enough to do it. Nowadays our sensitivity to violence against women makes this kind of comedy in a mainstream television program unthinkable. Or consider the *Life* magazine ad from 1952 in figure 1–2.

Today this ad's playful, eroticized treatment of domestic violence would put it beyond the pale of the printable. It was by no means unique. A wife is also spanked in a 1950s ad for Van Heusen shirts, and a 1953 ad for Pitney-Bowes postage meters shows an exasperated boss screaming at a stubborn secretary with the caption "Is it always illegal to kill a woman?" 53

FIGURE 1–2. Domestic violence in a coffee ad, 1952

And then there's the longest-running musical, *The Fantasticks*, with its Gilbert-and-Sullivan-like ditty "It Depends on What You Pay" (whose lyrics were based on a 1905 translation of Edmond Rostand's play *Les Romanesques*). Two men plot a kidnapping in which the son of one will rescue the daughter of the other:

You can get the rape emphatic.

You can get the rape polite.

You can get the rape with Indians:

A very charming sight.

You can get the rape on horseback;

They'll all say it's new and gay.

So you see the sort of rape

Depends on what you pay.

Though the word *rape* referred to abduction rather than sexual assault, between the opening of the play in 1960 and the end of its run in 2002 sensibilities about rape changed. As the librettist Tom Jones (no relation to the Welsh singer) explained to me:

As time went on, I began to feel anxious about the word. Slowly, ever so slowly, things began to register on me. Headlines in the papers. Accounts of brutal gang rapes. And of "date rapes" too. I began to think: "this isn't funny." True, we weren't talking about "real rape," but there is no doubt that part of the laughter came from the shock value of using the word in this comic manner.

In the early 1970s, the producer of the play refused Jones's request to rewrite the lyrics but allowed him to add an introduction to the song explaining the intended meaning of the word and to reduce the number of repetitions of it. After the play closed in 2002 Jones rewrote the lyrics from scratch for a 2006 restaging, and he has legally ensured that only the new version may be performed in any production of *The Fantasticks* anywhere in the world.54

Until recently, children too were legitimate targets of violence. Parents not only spanked their children—a punishment that today has been outlawed in many countries—but commonly used a weapon like a hairbrush or paddle, or exposed the child's buttocks to increase the pain and humiliation. In a sequence that was common in children's stories through the 1950s, a mother warned a naughty child, "Wait till your father gets home," whereupon the stronger parent would remove his belt and use it to flog the child. Other commonly depicted ways of punishing children with physical pain included sending them to bed without dinner and washing their mouths out with soap. Children who were left to the mercy of unrelated adults were treated even more brutally. Within recent memory, many schoolchildren were disciplined in ways that today would be classified as "torture" and that would put their teachers in jail.55

People today think of the world as a uniquely dangerous place. It's hard to follow the news without a mounting dread of terrorist attacks, a clash of civilizations, and the use of weapons of mass destruction. But we are apt to forget the dangers that filled the news a few decades ago, and to be blasé about the good fortune that so many of them have fizzled out. In later chapters I will present numbers that show that the 1960s and 1970s were a vastly more brutal and menacing time than the one in which we live. But for now, in keeping with the spirit of this chapter, I will make the case impressionistically.

I graduated from university in 1976. Like most college alumni, I have no memory of the commencement speech that sent me into the world of adulthood. This gives me license to invent one today. Imagine the following forecast from an expert on the state of the world in the mid-1970s.

Mr. Principal, members of the faculty, family, friends, and Class of 1976. Now is a time of great challenges. But it is also a time of great opportunities. As you embark on your lives as educated men and women, I call on you to give something back to your community, to work for a brighter future, and to try to make the world a better place.

Now that we have that out of the way, I have something more interesting to say to you. I want to share my vision of what the world will be like at the time of your thirty-fifth reunion. The calendar will have rolled over into a new millennium, bringing you a world that is beyond your imagination. I am not referring to the advance of technology, though it will have effects you can barely conceive. I am referring to the advance of peace and human security, which you will find even harder to conceive.

To be sure, the world of 2011 will still be a dangerous place. During the next thirty-five years there will be wars, as there are today, and there will be genocides, as there are today, some of them in places no one would have predicted. Nuclear weapons will still be a threat. Some of the violent regions of the world will continue to be violent. But superimposed on these constants will be unfathomable changes.

First and foremost, the nightmare that has darkened your lives since your early memories of cowering in fallout shelters, a nuclear doomsday in a third world war, will come to an end. In a decade the Soviet Union will declare peace with the West, and the Cold War will be over without a shot being fired. China will also fall off the radar as a military threat; indeed, it will become our major trading partner. During the next thirty-five years no nuclear weapon will be used against an enemy. In fact, there will be no wars between major

nations at all. The peace in Western Europe will continue indefinitely, and within five years the incessant warring in East Asia will give way to a long peace there as well.

There is more good news. East Germany will open its border, and joyful students will sledgehammer the Berlin Wall to smithereens. The Iron Curtain will vanish, and the nations of Central and Eastern Europe will become liberal democracies free of Soviet domination. The Soviet Union will not only abandon totalitarian communism but will voluntarily go out of existence. The republics that Russia has occupied for decades and centuries will become independent states, many of them democratic. In most of the countries this will happen with not a drop of blood being spilled.

Fascism too will vanish from Europe, then from much of the rest of the world. Portugal, Spain, and Greece will become liberal democracies. So will Taiwan, South Korea, and most of South and Central America. The generalissimos, the colonels, the juntas, the banana republics, and the annual military coups will depart the stage in most of the developed world.

The Middle East also has surprises in store. You have just lived through the fifth war between Israel and Arab states in twenty-five years. These wars have killed fifty thousand people and recently threatened to drag the superpowers into a nuclear confrontation. But within three years the president of Egypt will hug the prime minister of Israel in the Knesset, and they will sign a peace treaty that will last into the indefinite future. Jordan too will make a lasting peace with Israel. Syria will engage in sporadic peace talks with Israel, and the two countries will not go to war.

In South Africa, the apartheid regime will be dismantled, and the white minority will cede power to the black majority. This will happen with no civil war, no bloodbath, no violent recriminations against the former oppressors.

Many of these developments will be the results of long and courageous struggles. But some of them will just happen, catching everyone by surprise. Perhaps some of you will try to figure out how it all happened. I congratulate you on your accomplishments and wish you success and satisfaction in the years ahead.

How would the audience have reacted to this outburst of optimism? Those who were listening would have broken out in snickers and shared a suspicion that the speaker was still tripping on the brown acid from Woodstock. Yet in every case the optimist would have been right.

No sightseer can understand a country from a city-a-day tour, and I don't expect this skitter across the centuries to have convinced you that the past was more violent than the present. Now that you're back home, you are surely filled with questions. Don't we still torture people? Wasn't the 20th century the bloodiest in history? Haven't new forms of war replaced the old ones? Aren't we living in the Age of Terror? Didn't they say that war was obsolete in 1910? What about all the chickens in factory farms? And couldn't nuclear terrorists start a major war tomorrow?

These are excellent questions, and I will try to answer them in the rest of the book with the help of historical studies and quantitative datasets. But I hope that these sanity checks have prepared the ground. They remind us that for all the dangers we face today, the dangers of yesterday were even worse. Readers of this book (and as we shall see, people in most of the rest of the world) no longer have to worry about abduction into sexual slavery, divinely commanded genocide, lethal circuses and tournaments, punishment on the cross, rack, wheel, stake, or strappado for holding unpopular beliefs, decapitation for not bearing a son, disembowelment for having dated a royal, pistol duels to defend their honor, beachside fisticuffs to impress

their girlfriends, and the prospect of a nuclear world war that would put an end to civilization or to human life itself.

2

THE PACIFICATION PROCESS

Look, life is nasty, brutish, and short, but you knew that when you became a caveman.

—*New Yorker* cartoon1

Thomas Hobbes and Charles Darwin were nice men whose names became nasty adjectives. No one wants to live in a world that is Hobbesian or Darwinian (not to mention Malthusian, Machiavellian, or Orwellian). The two men were immortalized in the lexicon for their cynical synopses of life in a state of nature, Darwin for "survival of the fittest" (a phrase he used but did not coin), Hobbes for "the life of man, solitary, poor, nasty, brutish, and short." Yet both men gave us insights about violence that are deeper, subtler, and ultimately more humane than their eponymous adjectives imply. Today any understanding of human violence must begin with their analyses.

This chapter is about the origins of violence, in both the logical and the chronological sense. With the help of Darwin and Hobbes, we will look at the adaptive logic of violence and its predictions for the kinds of violent impulses that might have evolved as a part of human nature. We will then turn to the prehistory of violence, examining when violence appeared in our evolutionary lineage, how common it was in the millennia before history was written down, and what kinds of historical developments first reduced it.

THE LOGIC OF VIOLENCE

Darwin gave us a theory of why living things have the traits they have, not just their bodily traits but the basic mindsets and motives that drive their behavior. A hundred and fifty years after the *Origin of Species* was published, the theory of natural selection has been amply verified in the lab and field, and has been augmented with ideas from new fields of science and mathematics to yield a coherent understanding of the living world. These fields include genetics, which explains the replicators that make natural selection possible, and game theory, which illuminates the fates of goal-seeking agents in a world that contains other goal-seeking agents.2

Why should organisms ever evolve to seek to harm other organisms? The answer is not as straightforward as the phrase "survival of the fittest" would suggest. In his book *The Selfish Gene*, which explained the modern synthesis of evolutionary biology with genetics and game theory, Richard Dawkins tried to pull his readers out of their unreflective familiarity with the living world. He asked them to imagine animals as "survival machines" designed by their genes (the only entities that are faithfully propagated over the course of evolution), and then to consider how those survival machines would evolve.

To a survival machine, another survival machine (which is not its own child or another close relative) is part of its environment, like a rock or a river or a lump of food. It is something that gets in the way, or something that can be exploited. It differs from a rock or a river in one important respect: it is inclined to hit back. This

is because it too is a machine that holds its immortal genes in trust for the future, and it too will stop at nothing to preserve them. Natural selection favors genes that control their survival machines in such a way that they make the best use of their environment. This includes making the best use of other survival machines, both of the same and of different species.3

Anyone who has ever seen a hawk tear apart a starling, a swarm of biting insects torment a horse, or the AIDS virus slowly kill a man has firsthand acquaintance with the ways that survival machines callously exploit other survival machines. In much of the living world, violence is simply the default, something that needs no further explanation. When the victims are members of other species, we call the aggressors predators or parasites. But the victims can also be members of the same species. Infanticide, siblicide, cannibalism, rape, and lethal combat have been documented in many kinds of animals.4

Dawkins's carefully worded passage also explains why nature does not consist of one big bloody melee. For one thing, animals are less inclined to harm their close relatives, because any gene that would nudge an animal to harm a relative would have a good chance of harming a copy of *itself* sitting inside that relative, and natural selection would tend to weed it out. More important, Dawkins points out that another organism differs from a rock or a river because *it is inclined to hit back*. Any organism that has evolved to be violent is a member of a species whose other members, on average, have evolved to be just as violent. If you attack one of your own kind, your adversary may be as strong and pugnacious as you are, and armed with the same weapons and defenses. The likelihood that, in attacking a member of your own species, you will get hurt is a powerful selection pressure that disfavors indiscriminate pouncing or lashing out. It also rules out the hydraulic metaphor and most folk theories of violence, such as a thirst for blood, a death wish, a killer instinct, and other destructive itches, urges, and impulses. When a tendency toward violence evolves, it is always *strategic*. Organisms are selected to deploy violence only in circumstances where the expected benefits outweigh the expected costs. That discernment is especially true of intelligent species, whose large brains make them sensitive to the expected benefits and costs in a particular situation, rather than just to the odds averaged over evolutionary time.

The logic of violence as it applies to members of an intelligent species facing other members of that species brings us to Hobbes. In a remarkable passage in *Leviathan* (1651), he used fewer than a hundred words to lay out an analysis of the incentives for violence that is as good as any today:

So that in the nature of man, we find three principal causes of quarrel. First, competition; secondly, diffidence; thirdly, glory. The first maketh men invade for gain; the second, for safety; and the third, for reputation. The first use violence, to make themselves masters of other men's persons, wives, children, and cattle; the second, to defend them; the third, for trifles, as a word, a smile, a different opinion, and any other sign of undervalue, either direct in their persons or by reflection in their kindred, their friends, their nation, their profession, or their name.5

Hobbes considered competition to be an unavoidable consequence of agents' pursuing their interests. Today we see that it is built into the evolutionary process. Survival machines that can elbow their competitors away from finite resources like food, water, and desirable territory will out-reproduce those competitors, leaving the world with the survival machines that are best suited for such competition.

We also know today why "wives" would be one of the resources over which men should compete. In most animal species, the female makes a greater investment in offspring than the male. This is especially true of mammals, where the mother gestates her offspring inside her body and nurses them after they are born. A male can multiply the number of his offspring by mating with several females—which will leave other males

childless—while a female cannot multiply the number of her offspring by mating with several males. This makes female reproductive capacity a scarce resource over which the males of many species, including humans, compete.6 None of this, by the way, implies that men are robots controlled by their genes, that they may be morally excused for raping or fighting, that women are passive sexual prizes, that people try to have as many babies as possible, or that people are impervious to influences from their culture, to take some of the common misunderstandings of the theory of sexual selection.7

The second cause of quarrel is diffidence, a word that in Hobbes's time meant "fear" rather than "shyness." The second cause is a consequence of the first: competition breeds fear. If you have reason to suspect that your neighbor is inclined to eliminate you from the competition by, say, killing you, then you will be inclined to protect yourself by eliminating him first in a preemptive strike. You might have this temptation even if you otherwise wouldn't hurt a fly, as long as you are not willing to lie down and be killed. The tragedy is that your competitor has every reason to crank through the same calculation, even if *he* is the kind of person who wouldn't hurt a fly. In fact, even if he *knew* that you started out with no aggressive designs on him, he might legitimately worry that you are tempted to neutralize him out of fear that he will neutralize you first, which gives you an incentive to neutralize him before that, ad infinitum. The political scientist Thomas Schelling offers the analogy of an armed homeowner who surprises an armed burglar, each being tempted to shoot the other to avoid being shot first. This paradox is sometimes called the Hobbesian trap or, in the arena of international relations, the security dilemma.8

How can intelligent agents extricate themselves from a Hobbesian trap? The most obvious way is through a policy of deterrence: Don't strike first; be strong enough to survive a first strike; and retaliate against any aggressor in kind. A credible deterrence policy can remove a competitor's incentive to invade for gain, since the cost imposed on him by retaliation would cancel out the anticipated spoils. And it removes his incentive to invade from fear, because of your commitment not to strike first and, more importantly, because of your reduced incentive to strike first, since deterrence reduces the need for preemption. The key to the deterrence policy, though, is the credibility of the threat that you will retaliate. If your adversary thinks that you're vulnerable to being wiped out in a first strike, he has no reason to fear retaliation. And if he thinks that once attacked you may rationally hold back from retaliation, because at that point it's too late to do any good, he might exploit that rationality and attack you with impunity. Only if you are committed to disprove any suspicion of weakness, to avenge all trespasses and settle all scores, will your policy of deterrence be credible. Thus we have an explanation of the incentive to invade for trifles: a word, a smile, and any other sign of undervalue. Hobbes called it "glory"; more commonly it is called "honor"; the most accurate descriptor is "credibility."

The policy of deterrence is also known as the balance of terror and, during the Cold War, was called mutual assured destruction (MAD). Whatever peace a policy of deterrence may promise is fragile, because deterrence reduces violence only by a threat of violence. Each side must react to any nonviolent sign of disrespect with a violent demonstration of mettle, whereupon one act of violence can lead to another in an endless cycle of retaliation. As we shall see in chapter 8, a major design feature in human nature, self-serving biases, can make each side believe that its own violence was an act of justified retaliation while the other's was an act of unprovoked aggression.

Hobbes's analysis pertains to life in a state of anarchy. The title of his masterwork identified a way to escape it: the Leviathan, a monarchy or other government authority that embodies the will of the people and has a monopoly on the use of force. By inflicting penalties on aggressors, the Leviathan can eliminate their incentive for aggression, in turn defusing general anxieties about preemptive attack and obviating everyone's need to maintain a hair trigger for retaliation to prove their resolve. And because the Leviathan is a disinterested third party, it is not biased by the chauvinism that makes each side think its opponent has a heart of darkness while it is as pure as the driven snow.

The logic of the Leviathan can be summed up in a triangle (figure 2–1). In every act of violence, there are three interested parties: the aggressor, the victim, and a bystander. Each has a motive for violence: the aggressor to prey upon the victim, the victim to retaliate, the bystander to minimize collateral damage from their fight. Violence between the combatants may be called war; violence by the bystander against the combatants may be called law. The Leviathan theory, in a nutshell, is that law is better than war. Hobbes's theory makes a testable prediction about the history of violence. The Leviathan made its first appearance in a late act in the human pageant. Archaeologists tell us that humans lived in a state of anarchy until the emergence of civilization some five thousand years ago, when sedentary farmers first coalesced into cities and states and developed the first governments. If Hobbes's theory is right, this transition should also have ushered in the first major historical decline in violence. Before the advent of civilization, when men lived without "a common power to keep them all in awe," their lives should have been nastier, more brutish, and shorter than when peace was imposed on them by armed authorities, a development I will call the Pacification Process. Hobbes claimed that "savage people in many places in America" lived in a state of violent anarchy, but he gave no specifics as to whom he had in mind.

In this data vacuum, anyone could have a go at speculating about primitive people, and it did not take long for a contrary theory to turn up. Hobbes's opposite number was the Swiss-born philosopher Jean-Jacques Rousseau (1712–78), who opined that "nothing can be more gentle than [man] in his primitive state.... The example of the savages . . . seems to confirm that mankind was formed ever to remain in it, . . . and that all ulterior improvements have been so many steps . . . towards the decrepitness of the species."9

FIGURE 2–1. The violence triangle

Though the philosophies of Hobbes and Rousseau were far more sophisticated than "nasty brutish and short" versus "the noble savage," their competing stereotypes of life in a state of nature fueled a controversy that remains with us today. In *The Blank Slate,* I discussed how the issue has accumulated a heavy burden of emotional, moral, and political baggage. In the second half of the 20th century, Rousseau's romantic theory became the politically correct doctrine of human nature, both in reaction to earlier, racist doctrines about "primitive" people and out of a conviction that it was a more uplifting view of the human condition. Many anthropologists believe that if Hobbes was right, war would be inevitable or even desirable; therefore anyone who favors peace must insist that Hobbes was wrong. These "anthropologists of peace" (who in fact are rather aggressive academics—the ethologist Johan van der Dennen calls them the Peace and Harmony Mafia) have maintained that humans and other animals are strongly inhibited from killing their own kind, that war is a recent invention, and that fighting among native peoples was ritualistic and harmless until they encountered European colonists.10

As I mentioned in the preface, I think the idea that biological theories of violence are fatalistic and romantic theories optimistic gets everything backwards, but that isn't the point of this chapter. When it came to violence in pre-state peoples, Hobbes and Rousseau were talking through their hats: neither knew a thing about life before civilization. Today we can do better. This chapter reviews the facts about violence in the earliest stages of the human career. The story begins before we were human, and we will look at aggression in our primate cousins to see what it reveals about the emergence of violence in our evolutionary lineage. When we reach our own species, I will zero in on the contrast between foraging bands and tribes who live in a state of anarchy and peoples who live in settled states with some form of governance. We will also look at how foragers fight and what they fight over. This leads to the pivotal question: Is the warring of anarchic tribes more or less destructive than that of people living in settled states? The answer requires a switch from narratives to numbers: the per capita rates of violent death, to the best we can estimate them, in societies that live under a Leviathan and in those that live in anarchy. Finally we will take a look at the upsides and

downsides of civilized life.

VIOLENCE IN HUMAN ANCESTORS

How far back can we trace the history of violence? Though the primate ancestors of the human lineage have long been extinct, they left us with at least one kind of evidence about what they might have been like: their other descendants, chimpanzees. We did not, of course, evolve from chimps, and as we shall see it's an open question whether chimpanzees preserved the traits of our common ancestor or veered off in a uniquely chimp direction. But either way, chimpanzee aggression holds a lesson for us, because it shows how violence can evolve in a primate species with certain traits we share. And it tests the evolutionary prediction that violent tendencies are not hydraulic but strategic, deployed only in circumstances in which the potential gains are high and the risks are low.[11]

Common chimpanzees live in communities of up to 150 individuals who occupy a distinct territory. As chimpanzees forage for the fruit and nuts that are unevenly distributed through the forest, they frequently split and coalesce into smaller groups ranging in size from one to fifteen. If one group encounters another group from a different community at the border between their territories, the interaction is always hostile. When the groups are evenly matched, they dispute the boundary in a noisy battle. The two sides bark, hoot, shake branches, throw objects, and charge at each other for half an hour or more, until one side, usually the smaller one, skulks away.

These battles are examples of the aggressive displays that are common among animals. Once thought to be rituals that settle disputes without bloodshed for the good of the species, they are now understood as displays of strength and resolve that allow the weaker side to concede when the outcome of a fight is a foregone conclusion and going through with it would only risk injury to both. When two animals are evenly matched, the show of force may escalate to serious fighting, and one or both can get injured or killed.[12] Battles between groups of chimpanzees, however, do not escalate into serious fighting, and anthropologists once believed that the species was essentially peaceful.

Jane Goodall, the primatologist who first observed chimpanzees in the wild for extended periods of time, eventually made a shocking discovery.[13] When a group of male chimpanzees encounters a smaller group or a solitary individual from another community, they don't hoot and bristle, but take advantage of their numbers. If the stranger is a sexually receptive adolescent female, they may groom her and try to mate. If she is carrying an infant, they will often attack her and kill and eat the baby. And if they encounter a solitary male, or isolate one from a small group, they will go after him with murderous savagery. Two attackers will hold down the victim, and the others will beat him, bite off his toes and genitals, tear flesh from his body, twist his limbs, drink his blood, or rip out his trachea. In one community, the chimpanzees picked off every male in a neighboring one, an event that if it occurred among humans we would call genocide. Many of the attacks aren't triggered by chance encounters but are the outcome of border patrols in which a group of males quietly seek out and target any solitary male they spot. Killings can also occur within a community. A gang of males may kill a rival, and a strong female, aided by a male or another female, may kill a weaker one's offspring.

When Goodall first wrote about these killings, other scientists wondered whether they might be freak outbursts, symptoms of pathology, or artifacts of the primatologists' provisioning the chimps with food to make them easier to observe. Three decades later little doubt remains that lethal aggression is a part of chimpanzees' normal behavioral repertoire. Primatologists have observed or inferred the killings of almost fifty individuals in attacks between communities, and more than twenty-five in attacks within them. The reports have come from at least nine communities, including ones that have never been provisioned. In some communities, more than a third of the males die from violence.[14]

Does chimpicide have a Darwinian rationale? The primatologist Richard Wrangham, a former student of Goodall's, has tested various hypotheses with the extensive data that have been amassed on the demography and ecology of chimpanzees.15 He was able to document one large Darwinian advantage and one smaller one. When chimpanzees eliminate rival males and their offspring, they expand their territory, either by moving into it immediately or by winning subsequent battles with the help of their enhanced numerical advantage. This allows them to monopolize access to the territory's food for themselves, their offspring, and the females they mate with, which in turn results in a greater rate of births among the females. The community will also sometimes absorb the females of the vanquished community, bringing the males a second reproductive advantage. It's not that the chimps fight directly over food or females. All they care about is dominating their territory and eliminating rivals if they can do so at minimal risk to themselves. The evolutionary benefits happen indirectly and over the long run.

As for the risks, the chimpanzees minimize them by picking unfair fights, those in which they outnumber their victim by at least three to one. The foraging pattern of chimpanzees often delivers an unlucky victim into their clutches because fruiting trees are distributed patchily in the forest. Hungry chimps may have to forage in small groups or on their own and may sometimes venture into no-chimp's-land in pursuit of their dinner.

What does this have to do with violence in humans? It raises the possibility that the human lineage has been engaged in lethal raiding since the time of its common root with chimpanzees around six million years ago. There is, however, an alternative possibility. The shared ancestor of humans and common chimpanzees (*Pan troglodytes*) bequeathed the world a third species, bonobos or pygmy chimps (*Pan paniscus*), which split from their common cousins around two million years ago. We are as closely related to bonobos as we are to common chimps, and bonobos never engage in lethal raiding. Indeed, the difference between bonobos and common chimpanzees is one of the best-known facts in popular primatology. Bonobos have become famous as the peaceable, matriarchal, concupiscent, herbivorous "hippie chimps." They are the namesake of a vegetarian restaurant in New York, the inspiration for the sexologist Dr. Suzy's "Bonobo Way of Peace Through Pleasure," and if the *New York Times* columnist Maureen Dowd had her way, a role model for men today.16

The primatologist Frans de Waal points out that in theory the common ancestor of humans, common chimpanzees, and bonobos could have been similar to bonobos rather than to common chimps.17 If so, violence between coalitions of males would have shallower roots in human evolutionary history. Common chimpanzees and humans would have developed their lethal raiding independently, and human raiding may have developed historically in particular cultures rather than evolutionarily in the species. If so, humans would have no innate proclivities toward coalitional violence and would not need a Leviathan, or any other institution, to keep them away from it.

The idea that humans evolved from a peaceful, bonobolike ancestor has two problems. One is that it is easy to get carried away with the hippie-chimp story. Bonobos are an endangered species that lives in inaccessible forests in dangerous parts of the Congo, and much of what we know about them comes from observations of small groups of well-fed juveniles or young adults in captivity. Many primatologists suspect that systematic studies of older, hungrier, more populous, and freer groups of bonobos would paint a darker picture.18 Bonobos in the wild, it turns out, engage in hunting, confront each other belligerently, and injure one another in fights, perhaps sometimes fatally. So while bonobos are unquestionably less aggressive than common chimpanzees—they never raid one another, and communities can mingle peacefully—they are certainly not peaceful across the board.

The second and more important problem is that the common ancestor of the two chimpanzee species and humans is far more likely to have been like a common chimpanzee than like a bonobo.19 Bonobos are very

strange primates, not just in their behavior but in their anatomy. Their small, childlike heads, lighter bodies, reduced sex differences, and other juvenile traits make them different not only from common chimpanzees but from the other great apes (gorillas and orangutans) and different as well from fossil australopithecines, who were ancestral to humans. Their distinctive anatomy, when placed on the great ape family tree, suggests that bonobos were pulled away from the generic ape plan by neoteny, a process that retunes an animal's growth program to preserve certain juvenile features in adulthood (in the case of bonobos, features of the cranium and brain). Neoteny often occurs in species that have undergone domestication, as when dogs diverged from wolves, and it is a pathway by which selection can make animals less aggressive. Wrangham argues that the primary mover in bonobo evolution was selection for reduced aggression in males, perhaps because bonobos forage in large groups without vulnerable loners, so there are no opportunities for coalitional aggression to pay off. These considerations suggest that bonobos are the odd-ape-out, and we are descended from an animal that was closer to common chimpanzees.

Even if common chimps and humans discovered coalitional violence independently, the coincidence would be informative. It would suggest that lethal raiding can be evolutionarily advantageous in an intelligent species that fissions into groups of various sizes, and in which related males form coalitions and can assess each other's relative strength. When we look at violence in humans later in the chapter, we will see that some of the parallels are a bit close for comfort.

It would be nice if the gap between the common ancestor and modern humans could be filled in by the fossil record. But chimpanzees' ancestors have left no fossils, and hominid fossils and artifacts are too scarce to provide direct evidence of aggression, such as preserved weapons or wounds. Some paleoanthropologists test for signs of a violent temperament in fossil species by measuring the size of the canine teeth in males (since daggerlike canines are found in aggressive species) and by looking for differences in the size of the males and the females (since males tend to be larger in polygynous species, the better to fight with other males).[20] Unfortunately the small jaws of hominids, unlike the muzzles of other primates, don't open wide enough for large canines to be practical, regardless of how aggressive or peaceful these creatures were. And unless a species was considerate enough to have left behind a large number of complete skeletons, it's hard to sex them reliably and compare the size of the males and the females. (For these reasons many anthropologists are skeptical of the recent claim that *Ardipithecus ramidus*, a 4.4-million-year-old species that is probably ancestral to *Homo*, was unisex and small-canined and hence monogamous and peaceable.)[21] The more recent and abundant *Homo* fossils show that the males have been larger than the females for at least two million years, by at least as great a ratio as in modern humans. This reinforces the suspicion that violent competition among men has a long history in our evolutionary lineage.[22]

KINDS OF HUMAN SOCIETIES

The species we belong to, "anatomically modern *Homo sapiens*," is said to be 200,000 years old. But "behaviorally modern" humans, with art, ritual, clothing, complex tools, and the ability to live in different ecosystems, probably evolved closer to 75,000 years ago in Africa before setting out to people the rest of the world. When the species emerged, people lived in small, nomadic, egalitarian bands of kinsmen, subsisted by hunting and gathering, and had no written language or government. Today the vast majority of humans are settled in stratified societies numbering in the millions, eat foods cultivated by agriculture, and are governed by states. The transition, sometimes called the Neolithic (new stone age) Revolution, began around 10,000 years ago with the emergence of agriculture in the Fertile Crescent, China, India, West Africa, Mesoamerica, and the Andes.[23]

It's tempting, then, to use the 10,000-year horizon as a boundary between two major eras of human existence: a hunter-gatherer era, in which we did most of our biological evolving and which may still be glimpsed in extant hunter-gatherers, and the era of civilization thereafter. That is the dividing line that

figures in theories of the ecological niche to which humans are biologically adapted, which evolutionary psychologists call "the environment of evolutionary adaptedness." But that is not the cut that is most relevant to the Leviathan hypothesis.

For one thing, the 10,000-year milestone applies only to the *first* societies that farmed. Agriculture developed in other parts of the world later and spread outward from those cradles only gradually. Ireland, for example, was not lapped by the wave of farming that emanated from the Near East until around 6,000 years ago.24 Many parts of the Americas, Australia, Asia, and Africa were populated by hunter-gatherers until a few centuries ago, and of course a few still are.

Also, societies cannot be dichotomized into hunter-gatherer bands and agricultural civilizations.25 The nonstate peoples we are most familiar with are the hunters and gatherers living in small bands like the !Kung San of the Kalahari Desert and the Inuit of the Arctic. But these people have survived as hunter-gatherers only because they inhabit remote parts of the globe that no one else wants. As such they are not a representative sample of our anarchic ancestors, who may have enjoyed flusher environments. Until recently other foragers parked themselves in valleys and rivers that were teeming with fish and game and that supported a more affluent, complex, and sedentary lifestyle. The Indians of the Pacific Northwest, known for their totem poles and potlatches, are a familiar example. Also beyond the reach of states are hunter-horticulturalists, such as peoples in Amazonia and New Guinea who supplement their hunting and gathering by slashing and burning patches of forest and growing bananas or sweet potatoes in small gardens. Their lives are not as austere as those of pure hunter-gatherers, but they are far closer to them than they are to sedentary, full-time farmers.

When the first farmers settled down to grow grains and legumes and keep domesticated animals, their numbers exploded and they began to divide their labors, so that some of them lived off the food grown by others. But they didn't develop complex states and governments right away. They first coalesced into tribes connected by kinship and culture, and the tribes sometimes merged into chiefdoms, which had a centralized leader and a permanent entourage supporting him. Some of the tribes took up pastoralism, wandering with their livestock and trading animal products with sedentary farmers. The Israelites of the Hebrew Bible were tribal pastoralists who developed into chiefdoms around the time of the judges.

It took around five thousand years after the origin of agriculture for true states to appear on the scene.26 That happened when the more powerful chiefdoms used their armed retinues to bring other chiefdoms and tribes under their control, further centralizing their power and supporting niches for specialized classes of artisans and soldiers. The emerging states built strongholds, cities, and other defensible settlements, and they developed writing systems that allowed them to keep records, exact taxes and tributes from their subjects, and codify laws to keep them in line. Petty states with designs on their neighbors' assets sometimes forced them to become states in defense, and bigger states often swallowed smaller states.

Anthropologists have proposed many subtypes and intermediate cases among these kinds of societies, and have noted that there is no cultural escalator that inevitably turns simpler societies into more complex ones. Tribes and chiefdoms can maintain their ways indefinitely, such as the Montenegrin tribes in Europe that lasted into the 20th century. And when a state breaks down, it can be taken over by tribes, as in the Greek dark ages (which followed the collapse of the Mycenaean civilization and in which the Homeric epics were set) and the European dark ages (which came after the fall of the Roman Empire). Even today, many parts of failed states, such as Somalia, Sudan, Afghanistan, and the Democratic Republic of the Congo, are essentially chiefdoms; we call the chiefs warlords.27

For all these reasons, it makes no sense to test for historical changes in violence by plotting deaths against a time line from the calendar. If we discover that violence has declined in a given people, it is because their

mode of social organization has changed, not because the historical clock has struck a certain hour, and that change can happen at different times, if it happens at all. Nor should we expect a smooth reduction in violence along the continuum from simple, nomadic hunter-gatherers to complex, sedentary hunter-gatherers to farming tribes and chiefdoms to petty states to large states. The major transition we should expect is at the appearance of the first form of social organization that shows signs of design for reducing violence within its borders. That would be the centralized state, the Leviathan.

It's not that any early state was (as Hobbes theorized) a commonwealth vested with power by a social contract that had been negotiated by its citizens. Early states were more like protection rackets, in which powerful Mafiosi extorted resources from the locals and offered them safety from hostile neighbors and from each other.28 Any ensuing reduction in violence benefited the overlords as much as the protectees. Just as a farmer tries to prevent his animals from killing one another, so a ruler will try to keep his subjects from cycles of raiding and feuding that just shuffle resources or settle scores among them but from his point of view are a dead loss.

The topic of violence in nonstate societies has a long and politicized history. For centuries it was conventional wisdom that native peoples were ferocious barbarians. The Declaration of Independence, for instance, complained that the king of England "endeavoured to bring on the inhabitants of our frontiers, the merciless Indian Savages whose known rule of warfare, is an undistinguished destruction of all ages, sexes and conditions."

Today the passage seems archaic, indeed offensive. Dictionaries warn against using the word *savage* (related to *sylvan*, "of the forest") to refer to native peoples, and our awareness of the genocides of Native Americans perpetrated by European colonists makes the signatories seem like a black pot in a glass house casting the first stone. A modern concern with the dignity and rights of all peoples inhibits us from speaking too frankly about rates of violence in preliterate peoples, and the "anthropologists of peace" have worked to give them a Rousseauian image makeover. Margaret Mead, for example, described the Chambri of New Guinea as a sex-reversed culture because the men were adorned with makeup and curls, omitting the fact that they had to earn the right to these supposedly effeminate decorations by killing a member of an enemy tribe.29 Anthropologists who did not get with the program found themselves barred from the territories in which they had worked, denounced in manifestoes by their professional societies, slapped with libel lawsuits, and even accused of genocide.30

To be sure, it is easy to come away from tribal battles with the impression that they are fairly harmless in comparison with modern warfare. Men with a grievance against a neighboring village challenge its men to appear at a given time and place. The two sides face off at a distance at which their missiles can barely reach each other. They talk trash, cursing and insulting and boasting, and fire arrows or chuck spears while dodging those from the other side. When a warrior or two are injured or killed, they call it a day. These noisy spectacles led observers to conclude that warfare among primitive peoples was ritualistic and symbolic, very different from the glorious carnage of more advanced peoples.31 The historian William Eckhardt, who is often cited for his claim that violence has vastly increased over the course of history, wrote, "Bands of gathering-hunters, numbering about 25 to 50 people each, could hardly have made much of a war. There would not have been enough people to fight, few weapons with which to fight, little to fight about, and no surplus to pay for the fighting."32

Only in the past fifteen years have scholars with no political ax to grind, such as Lawrence Keeley, Steven LeBlanc, Azar Gat, and Johan van der Dennen, begun to compile systematic reviews of the frequency and damage of fighting in large samples of nonstate peoples.33 The actual death counts from primitive warfare

show that the apparent harmlessness of a single battle is deceptive. For one thing, a skirmish may escalate into all-out combat that leaves the battlefield strewn with bodies. Also, when bands of a few dozen men confront each other on a regular basis, even one or two deaths per battle can add up to a *rate* of casualties that is high by any standard.

But the main distortion comes from a failure to distinguish the two kinds of violence that turned out to be so important in studies of chimpanzees: battles and raids. It is the sneaky raids, not the noisy battles, that kill in large numbers.34 A party of men will slink into an enemy village before dawn, fire arrows into the first men who emerge from their huts in the morning to pee, and then shoot the others as they rush out of their huts to see what the commotion is about. They may thrust their spears through walls, shoot arrows through doorways or chimneys, and set the huts on fire. They can kill a lot of drowsy people before the villagers organize themselves in defense, by which time the attackers have melted back into the forest.

Sometimes enough attackers show up to massacre every last member of the village, or to kill all the men and abduct the women. Another stealthy but effective way to decimate an enemy is by ambuscade: a war party can hide in the forest along a hunting route and dispatch enemy men as they walk by. Still another tactic is treachery: the men can pretend to make peace with an enemy, invite them to a feast, and at a prearranged signal stab the unsuspecting guests. As for any solitary man who blunders into their territory, the policy is the same as it is with chimpanzees: shoot on sight.

Men in nonstate societies (and they are almost always men) are deadly serious about war, not just in their tactics but in their armaments, which include chemical, biological, and antipersonnel weapons.35 Arrowheads may be coated with toxins extracted from venomous animals, or with putrefied tissue that causes the wound to fester. The arrowhead may be designed to break away from its shaft, making it difficult for the victim to pull it out. Warriors often reward themselves with trophies, especially heads, scalps, and genitals. They literally take no prisoners, though occasionally they will drag one back to the village to be tortured to death. William Bradford of the *Mayflower* pilgrims observed of the natives of Massachusetts, "Not being content only to kill and take away life, [they] delight to torment men in the most bloody manner that may be, flaying some alive with the shells of fishes, cutting off members and joints of others by piecemeal and broiling on the coals, eat collops of their flesh in their sight while they live." 36

Though we bristle when we read of European colonists calling native people savages, and justly fault them for their hypocrisy and racism, it's not as if they were making the atrocities up. Many eyewitnesses have brought back tales of horrific violence in tribal warfare. Helena Valero, a woman who had been abducted by the Yanomamö in the Venezuelan rain forest in the 1930s, recounted one of their raids:

Meanwhile from all sides the women continued to arrive with their children, whom the other Karawetari had captured.... Then the men began to kill the children; little ones, bigger ones, they killed many of them. They tried to run away, but they caught them, and threw them on the ground, and stuck them with bows, which went through their bodies and rooted them to the ground. Taking the smallest by the feet, they beat them against the trees and rocks. . . . All the women wept.37

In the early 19th century an English convict named William Buckley escaped from a penal colony in Australia and for three decades lived happily with the Wathaurung aborigines. He provided firsthand accounts of their way of life, including their ways of war:

On approaching the enemy's quarters, they laid themselves down in ambush until all was quiet, and finding most of them asleep, laying about in groups, our party rushed upon them, killing three on the spot and

wounding several others. The enemy fled precipitately, leaving their war implements in the hands of their assailants and their wounded to be beaten to death by boomerangs, three loud shouts closing the victors' triumph. The bodies of the dead they mutilated in a shocking manner, cutting the arms and legs off, with flints, and shells, and tomahawks.

When the women saw them returning, they also raised great shouts, dancing about in savage ecstasy. The bodies were thrown upon the ground, and beaten about with sticks—in fact, they all seemed to be perfectly mad with excitement.38

It was not just Europeans gone native who recounted such episodes but the natives themselves. Robert Nasruk Cleveland, an Iñupiaq Inuit, provided this reminiscence in 1965:

The next morning the raiders attacked the camp and killed all the women and children remaining there.... After shoving sheefish into the vaginas of all the Indian women they had killed, the Noatakers took Kititigaagvaat and her baby, and retreated toward the upper Noatak River.... Finally, when they had almost reached home, the Noatakers gang-raped Kititigaagvaat and left her with her baby to die. . . .

Some weeks later, the Kobuk caribou hunters returned home to find the rotting remains of their wives and children and vowed revenge. A year or two after that, they headed north to the upper Noatak to seek it. They soon located a large body of Nuataagmiut and secretly followed them. One morning the men in the Nuataagmiut camp spotted a large band of caribou and went off in pursuit. While they were gone, the Kobuk raiders killed every woman in the camp. Then they cut off their vulvas, strung them on a line, and headed quickly toward home.39

Cannibalism has long been treated as the quintessence of primitive savagery, and in reaction many anthropologists used to dismiss reports of cannibalism as blood libels by neighboring tribes. But forensic archaeology has recently shown that cannibalism was widespread in human prehistory. The evidence includes human bones that bear human teethmarks or that had been cracked and cooked like those of animals and thrown out in the kitchen trash.40

Some of the butchered bones date back 800,000 years, to the time when *Homo heidelbergensis*, a common ancestor of modern humans and Neanderthals, first appears on the evolutionary stage. Traces of human blood proteins have also been found in cooking pots and in ancient human excrement. Cannibalism may have been so common in prehistory as to have affected our evolution: our genomes contain genes that appear to be defenses against the prion diseases transmitted by cannibalism.41 All this is consistent with eyewitness accounts, such as this transcription by a missionary of a Maori warrior taunting the preserved head of an enemy chief:

You wanted to run away, did you? But my war club overtook you. And after you were cooked, you made food for my mouth. And where is your father? He is cooked. And where is your brother? He is eaten. And where is your wife? There she sits, a wife for me. And where are your children? There they are, with loads on their backs, carrying food, as my slaves.42

Many scholars have found the image of harmless foragers to be plausible because they had trouble imagining the means and motives that could drive them to war. Recall, for example, Eckhardt's claim that hunter-gatherers had "little to fight about." But organisms that have evolved by natural selection always have

something to fight about (which doesn't, of course, mean that they will always fight). Hobbes noted that humans in particular have three reasons for quarrel: gain, safety, and credible deterrence. People in nonstate societies fight about all three.43

Foraging peoples can invade to gain territory, such as hunting grounds, watering holes, the banks or mouths of rivers, and sources of valued minerals like flint, obsidian, salt, or ochre. They may raid livestock or caches of stored food. And very often they fight over women. Men may raid a neighboring village for the express purpose of kidnapping women, whom they gang-rape and distribute as wives. They may raid for some other reason and take the women as a bonus. Or they may raid to claim women who had been promised to them in marriage but were not delivered at the agreed-upon time. And sometimes young men attack for trophies, coups, and other signs of aggressive prowess, especially in societies where they are a prerequisite to attaining adult status.

People in nonstate societies also invade for safety. The security dilemma or Hobbesian trap is very much on their minds, and they may form an alliance with nearby villages if they fear they are too small, or launch a preemptive strike if they fear that an enemy alliance is getting too big. One Yanomamö man in Amazonia told an anthropologist, "We are tired of fighting. We don't want to kill anymore. But the others are treacherous and cannot be trusted."44

But in most surveys the most commonly cited motive for warfare is vengeance, which serves as a crude deterrent to potential enemies by raising the anticipated long-term costs of an attack. In the *Iliad,* Achilles describes a feature of human psychology that can be found in cultures throughout the world: revenge "far sweeter than flowing honey wells up like smoke in the breasts of man." Foraging and tribal people avenge theft, adultery, vandalism, poaching, abduction of women, soured deals, alleged sorcery, and previous acts of violence. One cross-cultural survey found that in 95 percent of societies, people explicitly endorse the idea of taking a life for a life.45 Tribal people not only feel the smoke welling up in their breasts but know that their enemies feel it too. That is why they sometimes massacre every last member of a village they raid: they anticipate that any survivors would seek revenge for their slain kinsmen.

RATES OF VIOLENCE IN STATE AND NONSTATE SOCIETIES

Though descriptions of violence in nonstate societies demolish the stereotype that foraging peoples are inherently peaceful, they don't tell us whether the level of violence is higher or lower than in so-called civilized societies. The annals of modern states have no shortage of gruesome massacres and atrocities, not least against native peoples of every continent, and their wars have death tolls that reach eight digits. Only by looking at numbers can we get a sense as to whether civilization has increased violence or decreased it.

In absolute numbers, of course, civilized societies are matchless in the destruction they have wreaked. But should we look at absolute numbers, or at *relative* numbers, calculated as a proportion of the populations? The choice confronts us with the moral imponderable of whether it is worse for 50 percent of a population of one hundred to be killed or 1 percent of a population of one billion. In one frame of mind, one could say that a person who is tortured or killed suffers to the same degree regardless of how many other people meet such a fate, so it is the sum of these sufferings that should engage our sympathy and our analytic attention. But in another frame of mind, one could reason that part of the bargain of being alive is that one takes a chance at dying a premature or painful death, be it from violence, accident, or disease. So the number of people in a given time and place who enjoy full lives has to be counted as a moral good, against which we calibrate the moral bad of the number who are victims of violence. Another way of expressing this frame of mind is to ask, "If *I* were one of the people who were alive in a particular era, what would be the chances that I would be a victim of violence?" The reasoning in this second frame of mind, whether it appeals to the proportion of a population or the risk to an individual, ends in the conclusion that in comparing the harmfulness of

violence across societies, we should focus on the rate, rather than the number, of violent acts.

What happens, then, when we use the emergence of states as the dividing line and put hunter-gatherers, hunter-horticulturalists, and other tribal peoples (from any era) on one side, and settled states (also from any era) on the other? Several scholars have recently scoured the anthropological and historical literature for every good body count from nonstate societies that they could find. Two kinds of estimates are available. One comes from ethnographers who record demographic data, including deaths, in the people they study over long stretches of time.46 The other comes from forensic archaeologists, who sift through burial sites or museum collections with an eye for signs of foul play.47

How can one establish the cause of death when the victim perished hundreds or thousands of years ago? Some prehistoric skeletons are accompanied by the stone-age equivalent of a smoking gun: a spearhead or arrowhead embedded in a bone, like the ones found in Kennewick Man and Ötzi. But circumstantial evidence can be almost as damning. Archaeologists can check prehistoric skeletons for the kinds of damage known to be left by assaults in humans today. The stigmata include bashed-in skulls, cut marks from stone tools on skulls or limbs, and parry fractures on ulnar bones (the injury that a person gets when he defends himself against an assailant by holding up his arm). Injuries sustained by a skeleton when it was inside a living body can be distinguished in several ways from the damage it sustained when it was exposed to the world. Living bones fracture like glass, with sharp, angled edges, whereas dead bones fracture like chalk, at clean right angles. And if a bone has a different pattern of weathering on its fractured surface than on its intact surface, it was probably broken after the surrounding flesh had rotted away. Other incriminating signs from nearby surroundings include fortifications, shields, shock weapons such as tomahawks (which are useless in hunting), and depictions of human combat on the walls of caves (some of them more than six thousand years old). Even with all this evidence, archaeological death counts are usually underestimates, because some causes of death—a poisoned arrow, a septic wound, or a ruptured organ or artery—leave no trace on the victim's bones.

Once researchers have tallied a raw count of violent deaths, they can convert it to a rate in either of two ways. The first is to calculate the percentage of all deaths that are caused by violence. This rate is an answer to the question, "What are the chances that a person died at the hands of another person rather than passing away of natural causes?" The graph in figure 2–2 presents this statistic for three samples of nonstate people—skeletons from prehistoric sites, hunter-gatherers, and hunter-horticulturalists—and for a variety of state societies. Let's walk through it.

The topmost cluster shows the rate of violent death for skeletons dug out of archaeological sites.48 They are the remains of hunter-gatherers and hunter-horticulturalists from Asia, Africa, Europe, and the Americas and date from 14,000 BCE to 1770 CE, in every case well before the emergence of state societies or the first sustained contact with them. The death rates range from 0 to 60 percent, with an average of 15 percent.

FIGURE 2–2. Percentage of deaths in warfare in nonstate and state societies *Sources:* Prehistoric archaeological sites: Bowles, 2009; Keeley, 1996. Hunter-gatherers: Bowles, 2009. Hunter-horticulturalists and other tribal groups: Gat, 2006; Keeley, 1996. Ancient Mexico: Keeley, 1996. World, 20th-century wars & genocides (includes man-made famines): White, 2011. Europe, 1900–60: Keeley, 1996, from Wright, 1942, 1942/1964, 1942/ 1965; see note 52. Europe, 17th-century: Keeley, 1996. Europe and United States, 20th century: Keeley, 1996, from Harris, 1975. World, 20th-century battle deaths: Lacina & Gleditsch, 2005; Sarkees, 2000; see note 54. United States, 2005 war deaths: see text and note 57. World, 2005 battle deaths: see text and note 58.

Next are figures from eight contemporary or recent societies that make their living primarily from hunting and gathering.49 They come from the Americas, the Philippines, and Australia. The average of the rates of

death by warfare is within a whisker of the average estimated from the bones: 14 percent, with a range from 4 percent to 30 percent.

In the next cluster I've lumped pre-state societies that engage in some mixture of hunting, gathering, and horticulture. All are from New Guinea or the Amazon rain forest, except Europe's last tribal society, the Montenegrins, whose rate of violent death is close to the average for the group as a whole, 24.5 percent.50

Finally we get to some figures for states.51 The earliest are from the cities and empires of pre-Columbian Mexico, in which 5 percent of the dead were killed by other people. That was undoubtedly a dangerous place, but it was a third to a fifth as violent as an average pre-state society. When it comes to modern states, we are faced with hundreds of political units, dozens of centuries, and many subcategories of violence to choose from (wars, homicides, genocides, and so on), so there is no single "correct" estimate. But we can make the comparison as fair as possible by choosing the *most* violent countries and centuries, together with some estimates of violence in the world today. As we shall see in chapter 5, the two most violent centuries in the past half millennium of European history were the 17th, with its bloody Wars of Religion, and the 20th, with its two world wars. The historian Quincy Wright has estimated the rate of death in the wars of the 17th century at 2 percent, and the rate of death in war for the first half of the 20th at 3 percent.52 If one were to include the last four decades of the 20th century, the percentage would be even lower. One estimate, which includes American war deaths as well, comes in at less than 1 percent.53

Recently the study of war has been made more precise by the release of two quantitative datasets, which I will explain in chapter 5. They conservatively list about 40 million battle deaths during the 20th century.54("Battle deaths" refer to soldiers and civilians who were directly killed in combat.) If we consider that a bit more than 6 billion people died during the 20th century, and put aside some demographic subtleties, we may estimate that around 0.7 percent of the world's population died in battles during that century.55Even if we tripled or quadrupled the estimate to include indirect deaths from war-caused famine and disease, it would barely narrow the gap between state and nonstate societies. What if we added the deaths from genocides, purges, and other man-made disasters? Matthew White, the atrocitologist we met in chapter 1, estimates that around 180 million deaths can be blamed on all of these human causes put together. That still amounts to only 3 percent of the deaths in the 20th century.56

Now let's turn to the present. According to the most recent edition of the *Statistical Abstract of the United States*, 2,448,017 Americans died in 2005. It was one of the country's worst years for war deaths in decades, with the armed forces embroiled in conflicts in Iraq and Afghanistan. Together the two wars killed 945 Americans, amounting to 0.0004 (four-hundredths of a percent) of American deaths that year.57 Even if we throw in the 18,124 domestic homicides, the total rate of violent death adds up to 0.008, or eight-tenths of a percentage point. In other Western countries, the rates were even lower. And in the world as a whole, the Human Security Report Project counted 17,400 deaths that year that were directly caused by political violence (war, terrorism, genocide, and killings by warlords and militias), for a rate of 0.0003 (three-hundredths of a percent).58 It's a conservative estimate, comprising only identifiable deaths, but even if we generously multiplied it by twenty to estimate undocumented battle deaths and indirect deaths from famine and disease, it would not reach the 1 percent mark.

The major cleft in the graph, then, separates the anarchical bands and tribes from the governed states. But we have been comparing a motley collection of archaeological digs, ethnographic tallies, and modern estimates, some of them calculated on the proverbial back of an envelope. Is there some way to juxtapose two datasets directly, one from hunter-gatherers, the other from settled civilizations, matching the people, era, and methods as closely as possible? The economists Richard Steckel and John Wallis recently looked at data on nine hundred skeletons of Native Americans, distributed from southern Canada to South America, all of whom died before the arrival of Columbus.59 They divided the skeletons into hunter-gatherers and city

dwellers, the latter from the civilizations in the Andes and Mesoamerica such as the Incas, Aztecs, and Mayans. The proportion of hunter-gatherers that showed signs of violent trauma was 13.4 percent, which is close to the average for the hunter-gatherers in figure 2–2. The proportion of city dwellers that showed signs of violent trauma was 2.7 percent, which is close to the figures for state societies before the present century. So holding many factors constant, we find that living in a civilization reduces one's chances of being a victim of violence fivefold.

Let's turn to the second way of quantifying violence, in which the rate of killing is calculated as a proportion of living people rather than dead ones. This statistic is harder to compute from boneyards but easier to compute from most other sources, because it requires only a body count and a population size, not an inventory of deaths from other sources. The number of deaths per 100,000 people per year is the standard measure of homicide rates, and I will use it as the yardstick of violence throughout the book. To get a feel for what these numbers mean, keep in mind that the safest place in human history, Western Europe at the turn of the 21st century, has a homicide rate in the neighborhood of 1 per 100,000 per year.60 Even the gentlest society will have the occasional young man who gets carried away in a barroom brawl or an old woman who puts arsenic in her husband's tea, so that is pretty much as low as homicide rates ever go. Among modern Western countries, the United States lies at the dangerous end of the range. In the worst years of the 1970s and 1980s, it had a homicide rate of around 10 per 100,000, and its notoriously violent cities, like Detroit, had a rate of around 45 per 100,000.61 If you were living in a society with a homicide rate in that range, you would notice the danger in everyday life, and as the rate climbed to 100 per 100,000, the violence would start to affect you personally: assuming you have a hundred relatives, friends, and close acquaintances, then over the course of a decade one of them would probably be killed. If the rate soared to 1,000 per 100,000 (1 percent), you'd lose about one acquaintance a year, and would have a better-than-even lifetime chance of being murdered yourself.

Figure 2–3 shows war death rates for twenty-seven nonstate societies (combining hunter-gatherers and hunter-horticulturalists) and nine that are ruled by states. The average annual rate of death in warfare for the nonstate societies is 524 per 100,000, about half of 1 percent. Among states, the Aztec empire of central Mexico, which was often at war, had a rate about half that.62 Below that bar we find the rates for four state societies during the centuries in which they waged their most destructive wars. Nineteenth-century France fought the Revolutionary, Napoleonic, and Franco-Prussian Wars and lost an average of 70 people per 100,000 per year. The 20th century was blackened by two world wars that inflicted most of their military damage on Germany, Japan, and Russia/USSR, which also had a civil war and other military adventures. Their annual rates of death work out to 144, 27, and 135 per 100,000, respectively.63 During the 20th century the United States acquired a reputation as a warmonger, fighting in two world wars and in the Philippines, Korea, Vietnam, and Iraq. But the annual cost in American lives was even smaller than those of the other great powers of the century, about 3.7 per 100,000.64 Even if we add up all the deaths from organized violence for the entire world for the entire century—wars, genocides, purges, and man-made famines—we get an annual rate of around 60 per 100,000.65 For the year 2005, the bars representing the United States and the entire world are paint-thin and invisible in the graph.66

So by this measure too, states are far less violent than traditional bands and tribes. Modern Western countries, even in their most war-torn centuries, suffered no more than around a quarter of the average death rate of nonstate societies, and less than a tenth of that for the most violent one.

Though war is common among foraging groups, it is certainly not universal. Nor should we expect it to be if the violent inclinations in human nature are a strategic response to the circumstances rather than a hydraulic response to an inner urge. According to two ethnographic surveys, 65 to 70 percent of hunter-gatherer groups are at war at least every two years, 90 percent engage in war at least once a generation, and virtually all the rest report a cultural memory of war in the past.67 That means that hunter-gatherers often fight, but they can

avoid war for long stretches of time. Figure 2–3 reveals two tribes, the Andamanese and the Semai, with low rates of death in warfare. But even they have interesting stories.

FIGURE 2–3. Rate of death in warfare in nonstate and state societies

Sources: Nonstate: Hewa and Goilala from Gat, 2006; others from Keeley, 1996. Central Mexico, Germany, Russia, France, Japan: Keeley, 1996; see notes 62 and 63. United States in the 20th century: Leland & Oboroceanu, 2010; see note 64. World in 20th century: White, 2011; see note 65. World in 2005: Human Security Report Project, 2008; see notes 57 and 58.

The Andaman Islanders of the Indian Ocean are recorded as having an annual death rate of 20 per 100,000, well below the average for nonstate peoples (which exceeds 500 per 100,000). But they are known to be among the fiercest hunter-gatherer groups left on earth. Following the 2004 Indian Ocean earthquake and tsunami, a worried humanitarian group flew over to the islands in a helicopter and were relieved to be met with a fusillade of arrows and spears, signs that the Andamanese had not been wiped out. Two years later a pair of Indian fishers fell into a drunken sleep, and their boat drifted ashore on one of the islands. They were immediately slain, and the helicopter sent to retrieve their bodies was also met with a shower of arrows.68

There are, to be sure, hunter-gatherers and hunter-horticulturalists such as the Semai who have *never* been known to engage in the protracted, collective killings that can be called warfare. Anthropologists of peace have made much of these groups, suggesting that they could have been the norm in human evolutionary history, and that it is only the newer and wealthier horticulturalists and pastoralists who engage in systematic violence. The hypothesis is not directly relevant to this chapter, which compares people living in anarchy with those living under states rather than hunter-gatherers with everyone else. But there are reasons to doubt the hypothesis of hunter-gatherer innocence anyway. Figure 2–3 shows that the rates of death in warfare in these societies, though lower than those of horticulturalists and tribesmen, overlap with them considerably. And as I have mentioned, the hunter-gatherer groups we observe today may be historically unrepresentative. We find them in parched deserts or frozen wastelands where no one else wants to live, and they may have ended up there because they can keep a low profile and vote with their feet whenever they get on each other's nerves. As Van der Dennen comments, "Most contemporary 'peaceful' foragers . . . have solved the perennial problem of being left in peace by splendid isolation, by severing all contacts with other peoples, by fleeing and hiding, or else by being beaten into submission, by being tamed by defeat, by being pacified by force." 69 For example, the !Kung San of the Kalahari Desert, who in the 1960s were extolled as a paradigm of hunter-gatherer harmony, in earlier centuries had engaged in frequent warfare with European colonists, their Bantu neighbors, and one another, including several all-out massacres.70

The low rates of death in warfare in selected small-scale societies can be misleading in another way. Though they may avoid war, they do commit the occasional murder, and their homicide rates can be compared to those of modern state societies. I've plotted them in figure 2–4 on a scale that is fifteen times larger than that of figure 2–3. Let's begin with the right-most gray bar in the nonstate cluster. The Semai are a hunting and horticulturalist tribe who were described in a book called *The Semai: A Nonviolent People of Malaya* and who go out of their way to avoid the use of force. While there aren't many Semai homicides, there aren't many Semai. When the anthropologist Bruce Knauft did the arithmetic, he found that their homicide rate was 30 per 100,000 per year, which puts it in the range of the infamously dangerous American cities in their most violent years and at three times the rate of the United States as a whole in its most violent decade.71 The same kind of long division has deflated the peaceful reputation of the !Kung, the subject of a book called *The Harmless People*, and of the Central Arctic Inuit (Eskimos), who inspired a book called *Never in Anger*.72 Not only do these harmless, nonviolent, anger-free people murder each other at rates far greater than

Americans or Europeans do, but the murder rate among the !Kung went down by a third after their territory had been brought under the control of the Botswana government, as the Leviathan theory would predict.73

The reduction of homicide by government control is so obvious to anthropologists that they seldom document it with numbers. The various "paxes" that one reads about in history books—the Pax Romana, Islamica, Mongolica, Hispanica, Ottomana, Sinica, Britannica, Australiana (in New Guinea), Canadiana (in the Pacific Northwest), and Praetoriana (in South Africa)—refer to the reduction in raiding, feuding, and warfare in the territories brought under the control of an effective government.74 Though imperial conquest and rule can themselves be brutal, they do reduce endemic violence among the conquered. The Pacification Process is so pervasive that anthropologists often treat it as a methodological nuisance. It goes without saying that peoples that have been brought under the jurisdiction of a government will not fight as much, so they are simply excluded from studies of violence in indigenous societies. The effect is also noticeable to the people themselves. As an Auyana man living in New Guinea under the Pax Australiana put it, "Life was better since the government came" because "a man could now eat without looking over his shoulder and could leave his house in the morning to urinate without fear of being shot."75

FIGURE 2–4. Homicide rates in the least violent nonstate societies compared to state societies

Sources: !Kung and Central Arctic Inuit: Gat, 2006; Lee, 1982. Semai: Knauft, 1987. Ten largest U.S. cities: Zimring, 2007, p. 140. United States: FBI Uniform Crime Reports; see note 73. Western Europe (approximation): World Health Organization; see note 66 to chap. 3, p. 701.

The anthropologists Karen Ericksen and Heather Horton have quantified the way that the presence of government can move a society away from lethal vengeance. In a survey of 192 traditional studies, they found that one-on-one revenge was common in foraging societies, and kin-against-kin blood feuds were common in tribal societies that had not been pacified by a colonial or national government, particularly if they had an exaggerated culture of manly honor.76 Adjudication by tribunals and courts, in contrast, was common in societies that had fallen under the control of a centralized government, or that had resource bases and inheritance patterns that gave people more of a stake in social stability.

One of the tragic ironies of the second half of the 20th century is that when colonies in the developing world freed themselves from European rule, they often slid back into warfare, this time intensified by modern weaponry, organized militias, and the freedom of young men to defy tribal elders.77 As we shall see in the next chapter, this development is a countercurrent to the historical decline of violence, but it is also a demonstration of the role of Leviathans in propelling the decline.

CIVILIZATION AND ITS DISCONTENTS

So did Hobbes get it right? In part, he did. In the nature of man we find three principal causes of quarrel: gain (predatory raids), safety (preemptive raids), and reputation (retaliatory raids). And the numbers confirm that relatively speaking, "during the time men live without a common power to keep them all in awe, they are in that condition which is called war," and that in such condition they live in "continual fear, and danger of violent death."

But from his armchair in 17th-century England, Hobbes could not help but get a lot of it wrong. People in nonstate societies cooperate extensively with their kin and allies, so life for them is far from "solitary," and only intermittently is it nasty and brutish. Even if they are drawn into raids and battles every few years, that leaves a lot of time for foraging, feasting, singing, storytelling, childrearing, tending to the sick, and the other necessities and pleasures of life. In a draft of a previous book, I casually referred to the Yanomamö as "the

fierce people," alluding to the title of the famous book by the anthropologist Napoleon Chagnon. An anthropologist colleague wrote in the margin: "Are the babies fierce? Are the old women fierce? Do they eat fiercely?"

As for their lives being "poor," the story is mixed. Certainly societies without an organized state enjoy "no commodious building; no instruments of moving and removing such things as require much force; no knowledge of the face of the earth; no account of time, [and] no letters," since it's hard to develop these things if the warriors from the next village keep waking you up with poisoned arrows, abducting the women, and burning your huts. But the first peoples who gave up hunting and gathering for settled agriculture struck a hard bargain for themselves. Spending your days behind a plow, subsisting on starchy cereal grains, and living cheek by jowl with livestock and thousands of other people can be hazardous to your health. Studies of skeletons by Steckel and his colleagues show that compared to hunter-gatherers, the first city dwellers were anemic, infected, tooth-decayed, and almost two and a half inches shorter.78 Some biblical scholars believe that the story of the fall from the Garden of Eden was a cultural memory of the transition from foraging to agriculture: "In the sweat of thy face shalt thou eat bread." 79

So why did our foraging ancestors leave Eden? For many, it was never an explicit choice: they had multiplied themselves into a Malthusian trap in which the fat of the land could no longer support them, and they had to grow their food themselves. The states emerged only later, and the foragers who lived at their frontiers could either be absorbed into them or hold out in their old way of life. For those who had the choice, Eden may have been just too dangerous. A few cavities, the odd abscess, and a couple of inches in height were a small price to pay for a fivefold better chance of not getting speared.80

The improved odds of a natural death came with another price, captured by the Roman historian Tacitus: "Formerly we suffered from crimes; now we suffer from laws." The Bible stories we examined in chapter 1 suggest that the first kings kept their subjects in awe with totalistic ideologies and brutal punishments. Just think of the wrathful deity watching people's every move, the regulation of daily life by arbitrary laws, the stonings for blasphemy and nonconformity, the kings with the power to expropriate a woman into their harem or cut a baby in half, the crucifixions of thieves and cult leaders. In these respects the Bible was accurate. Social scientists who study the emergence of states have noted that they began as stratified theocracies in which elites secured their economic privileges by enforcing a brutal peace on their underlings. 81

Three scholars have analyzed large samples of cultures to quantify the correlation between the political complexity of early societies and their reliance on absolutism and cruelty.82 The archaeologist Keith Otterbein has shown that societies with more centralized leadership were more likely to kill women in battles (as opposed to abducting them), to keep slaves, and to engage in human sacrifice. The sociologist Steven Spitzer has shown that complex societies are more likely to criminalize victimless activities like sacrilege, sexual deviance, disloyalty, and witchcraft, and to punish offenders by torture, mutilation, enslavement, and execution. And the historian and anthropologist Laura Betzig has shown that complex societies tend to fall under the control of despots: leaders who are guaranteed to get their way in conflicts, who can kill with impunity, and who have large harems of women at their disposal. She found that despotism in this sense emerged among the Babylonians, Israelites, Romans, Samoans, Fijians, Khmer, Aztecs, Incas, Natchez (of the lower Mississippi), Ashanti, and other kingdoms throughout Africa.

When it came to violence, then, the first Leviathans solved one problem but created another. People were less likely to become victims of homicide or casualties of war, but they were now under the thumbs of tyrants, clerics, and kleptocrats. This gives us the more sinister sense of the word *pacification:* not just the bringing about of peace but the imposition of absolute control by a coercive government. Solving this second problem would have to wait another few millennia, and in much of the world it remains unsolved to this day.

3

THE CIVILIZING PROCESS

It is impossible to overlook the extent to which civilization is built upon a renunciation of instinct.

—Sigmund Freud

For as long as I have known how to eat with utensils, I have struggled with the rule of table manners that says that you may not guide food onto your fork with your knife. To be sure, I have the dexterity to capture chunks of food that have enough mass to stay put as I scoot my fork under them. But my feeble cerebellum is no match for finely diced cubes or slippery little spheres that ricochet and roll at the touch of the tines. I chase them around the plate, desperately seeking a ridge or a slope that will give me the needed purchase, hoping they will not reach escape velocity and come to rest on the tablecloth. On occasion I have seized the moment when my dining companion glances away and have placed my knife to block their getaway before she turns back to catch me in this faux pas. Anything to avoid the ignominy, the boorishness, the intolerable uncouthness of using a knife for some purpose other than cutting. Give me a lever long enough, said Archimedes, and a fulcrum on which to place it, and I shall move the world. But if he knew his table manners, *he could not have moved some peas onto his fork with his knife!*

I remember, as a child, questioning this pointless prohibition. What is so terrible, I asked, about using your silverware in an efficient and perfectly sanitary way? It's not as if I were asking to eat mashed potatoes with my hands. I lost the argument, as all children do, when faced with the rejoinder "Because I said so," and for decades I silently grumbled about the unintelligibility of the rules of etiquette. Then one day, while doing research for this book, the scales fell from my eyes, the enigma evaporated, and I forever put aside my resentment of the no-knife rule. I owe this epiphany to the most important thinker you have never heard of, Norbert Elias (1897–1990).

Elias was born in Breslau, Germany (now Wroctaw, Poland), and studied sociology and the history of science.1 He fled Germany in 1933 because he was Jewish, was detained in a British camp in 1940 because he was German, and lost both parents to the Holocaust. On top of these tragedies, Nazism brought one more into his life: his magnum opus, *The Civilizing Process*, was published in Germany in 1939, a time when the very idea seemed like a bad joke. Elias vagabonded from one university to another, mostly teaching night school, and retrained as a psychotherapist before settling down at the University of Leicester, where he taught until his retirement in 1962. He emerged from obscurity in 1969 when *The Civilizing Process* was published in English translation, and he was recognized as a major figure only in the last decade of his life, when an astonishing fact came to light. The discovery was not about the rationale behind table manners but about the history of homicide.

In 1981 the political scientist Ted Robert Gurr, using old court and county records, calculated thirty estimates of homicide rates at various times in English history, combined them with modern records from London, and plotted them on a graph.2 I've reproduced it in figure 3–1, using a logarithmic scale in which the same vertical distance separates 1 from 10, 10 from 100, and 100 from 1000. The rate is calculated in the same way as in the preceding chapter, namely the number of killings per 100,000 people per year. The log scale is necessary because the homicide rate declined so precipitously. The graph shows that from the 13th century to the 20th, homicide in various parts of England plummeted by a factor of ten, fifty, and in some cases a hundred—for example, from 110 homicides per 100,000 people per year in 14th-century Oxford to

less than 1 homicide per 100,000 in mid-20th-century London.

The graph stunned almost everyone who saw it (including me—as I mentioned in the preface, it was the seed that grew into this book). The discovery confounds every stereotype about the idyllic past and the degenerate present. When I surveyed perceptions of violence in an Internet questionnaire, people guessed that 20th-century England was about 14 percent more violent than 14th-century England. In fact it was 95 percent less violent.[3]

FIGURE 3–1. Homicide rates in England, 1200–2000: Gurr's 1981 estimates

Source: Data from Gurr, 1981, pp. 303–4, 313.

This chapter is about the decline of homicide in Europe from the Middle Ages to the present, and its counterparts and counterexamples in other times and places. I have borrowed the title of the chapter from Elias because he was the only major social thinker with a theory that could explain it.

THE EUROPEAN HOMICIDE DECLINE

Before we try to explain this remarkable development, let's be sure it is real. Following the publication of Gurr's graph, several historical criminologists dug more deeply into the history of homicide.[4] The criminologist Manuel Eisner assembled a much larger set of estimates on homicide in England across the centuries, drawing on coroners' inquests, court cases, and local records.[5] Each dot on the graph in figure 3–2 is an estimate from some town or jurisdiction, plotted once again on a logarithmic scale. By the 19th century the British government was keeping annual records of homicide for the entire country, which are plotted on the graph as a gray line. Another historian, J. S. Cockburn, compiled continuous data from the county of Kent between 1560 and 1985, which Eisner superimposed on his own data as the black line.[6]

FIGURE 3–2. Homicide rates in England, 1200–2000

Source: Graph from Eisner, 2003.

Once again we see a decline in annual homicide rates, and it is not small: from between 4 and 100 homicides per 100,000 people in the Middle Ages to around 0.8 (eight-tenths of a homicide) per 100,000 in the 1950s. The timing shows that the high medieval murder rates cannot be blamed on the social upheavals that followed the Black Death around 1350, because many of the estimates predated that epidemic.

Eisner has given a lot of thought to how much we should trust these numbers. Homicide is the crime of choice for measurers of violence because regardless of how the people of a distant culture conceptualize crime, a dead body is hard to define away, and it always arouses curiosity about who or what produced it. Records of homicide are therefore a more reliable index of violence than records of robbery, rape, or assault, and they usually (though not always) correlate with them.[7]

Still, it's reasonable to wonder how the people of different eras reacted to these killings. Were they as likely as we are to judge a killing as intentional or accidental, or to prosecute the killing as opposed to letting it pass? Did people in earlier times always kill at the same percentage of the rate that they raped, robbed, and assaulted? How successful were they in saving the lives of victims of assault and thereby preventing them from becoming victims of homicide?

Fortunately, these questions can be addressed. Eisner cites studies showing that when people today are

presented with the circumstances of a centuriesold murder and asked whether they think it was intentional, they usually come to the same conclusion as did the people at the time. He has shown that in most periods, the rates of homicide do correlate with the rates of other violent crimes. He notes that any historical advance in forensics or in the reach of the criminal justice system is bound to *underestimate* the decline in homicide, because a greater proportion of killers are caught, prosecuted, and convicted today than they were centuries ago. As for lifesaving medical care, doctors before the 20th century were quacks who killed as many patients as they saved; yet most of the decline took place between 1300 and 1900.8 In any case, the sampling noise that gives social scientists such a headache when they are estimating a change of a quarter or a half is not as much of a problem when they are dealing with a change of tenfold or fiftyfold.

Were the English unusual among Europeans in gradually refraining from murder? Eisner looked at other Western European countries for which criminologists had compiled homicide data. Figure 3–3 shows that the results were similar. Scandinavians needed a couple of additional centuries before they thought the better of killing each other, and Italians didn't get serious about it until the 19th century. But by the 20th century the annual homicide rate of every Western European country had fallen into a narrow band centered on 1 per 100,000.

FIGURE 3–3. Homicide rates in five Western European regions, 1300–2000

Source: Data from Eisner, 2003, table 1.

To put the European decline in perspective, let's compare it to the rates for nonstate societies that we encountered in chapter 2. In figure 3–4 I have extended the vertical axis up to 1,000 on the log scale to accommodate the additional order of magnitude required by the nonstate societies. Even in the late Middle Ages, Western Europe was far less violent than the unpacified nonstate societies and the Inuit, and it was comparable to the thinly settled foragers such as the Semai and the !Kung. And from the 14th century on, the European homicide rate sank steadily, with a tiny bounce in the last third of the 20th century.

While Europe was becoming less murderous overall, certain patterns in homicide remained constant.9 Men were responsible for about 92 percent of the killings (other than infanticide), and they were most likely to kill when they were in their twenties. Until the 1960s uptick, cities were generally safer than the countryside. But other patterns changed. In the earlier centuries the upper and lower social classes engaged in homicide at comparable rates. But as the homicide rate fell, it dropped far more precipitously among the upper classes than among the lower ones, an important social change to which we will return.10

Another historical change was that homicides in which one man kills another man who is unrelated to him declined far more rapidly than did the killing of children, parents, spouses, and siblings. This is a common pattern in homicide statistics, sometimes called Verkko's Law: rates of male-on-male violence fluctuate more across different times and places than rates of domestic violence involving women or kin.11 Martin Daly and Margo Wilson's explanation is that family members get on each other's nerves at similar rates in all times and places because of deeply rooted conflicts of interest that are inherent to the patterns of genetic overlap among kin. Macho violence among male acquaintances, in contrast, is fueled by contests of dominance that are more sensitive to circumstances. How violent a man must be to keep his rank in the pecking order in a given milieu depends on his assessment of how violent the *other* men are, leading to vicious or virtuous circles that can spiral up or down precipitously. I'll explore the psychology of kinship in more detail in chapter 7, and of dominance in chapter 8.

FIGURE 3–4. Homicide rates in Western Europe, 1300–2000, and in nonstate societies

EXPLAINING THE EUROPEAN HOMICIDE DECLINE

Now let's consider the implications of the centuries-long decline in homicide in Europe. Do you think that city living, with its anonymity, crowding, immigrants, and jumble of cultures and classes, is a breeding ground for violence? What about the wrenching social changes brought on by capitalism and the Industrial Revolution? Is it your conviction that small-town life, centered on church, tradition, and fear of God, is our best bulwark against murder and mayhem? Well, think again. As Europe became more urban, cosmopolitan, commercial, industrialized, and secular, it got safer and safer. And that brings us back to the ideas of Norbert Elias, the only theory left standing.

Elias developed the theory of the Civilizing Process not by poring over numbers, which weren't available in his day, but by examining the texture of everyday life in medieval Europe. He examined, for instance, a series of drawings from the 15th-century German manuscript *The Medieval Housebook*, a depiction of daily life as seen through the eyes of a knight.12

In the detail shown in figure 3–5, a peasant disembowels a horse as a pig sniffs his exposed buttocks. In a nearby cave a man and a woman sit in the stocks. Above them a man is being led to the gallows, where a corpse is already hanging, and next to it is a man who has been broken on the wheel, his shattered body pecked by a crow. The wheel and gibbet are not the focal point of the drawing, but a part of the landscape, like the trees and hills.

FIGURE 3–5. Detail from "Saturn," *Das Mittelalterliche Hausbuch* (*The Medieval Housebook,* 1475–80)

Sources: Reproduced in Elias, 1939/2000, appendix 2; see Graf zu Waldburg Wolfegg, 1988.

Figure 3–6 contains a detail from a second drawing, in which knights are attacking a village. In the lower left a peasant is stabbed by a soldier; above him, another peasant is restrained by his shirttail while a woman, hands in the air, cries out. At the lower right, a peasant is being stabbed in a chapel while his possessions are plundered, and nearby another peasant in fetters is cudgeled by a knight. Above them a group of horsemen are setting fire to a farmhouse, while one of them drives off the farmer's cattle and strikes at his wife.

The knights of feudal Europe were what today we would call warlords.

FIGURE 3–6. Detail from "Mars," *Das Mittelalterliche Hausbuch* (*The Medieval Housebook,* 1475–80)

Sources: Reproduced in Elias, 1939/2000, appendix 2; see Graf zu Waldburg Wolfegg, 1988.

States were ineffectual, and the king was merely the most prominent of the noblemen, with no permanent army and little control over the country. Governance was outsourced to the barons, knights, and other noblemen who controlled fiefs of various sizes, exacting crops and military service from the peasants who lived in them. The knights raided one another's territories in a Hobbesian dynamic of conquest, preemptive attack, and vengeance, and as the *Housebook* illustrations suggest, they did not restrict their killing to other knights. In *A Distant Mirror: The Calamitous 14th Century*, the historian Barbara Tuchman describes the way they made a living:

These private wars were fought by the knights with furious gusto and a single strategy, which consisted in trying to ruin the enemy by killing and maiming as many of his peasants and destroying as many crops, vineyards, tools, barns, and other possessions as possible, thereby reducing his sources of revenue. As a result, the chief victim of the belligerents was their respective peasantry.13

As we saw in chapter 1, to maintain the credibility of their deterrent threat, knights engaged in bloody tournaments and other demonstrations of macho prowess, gussied up with words like *honor, valor, chivalry, glory,* and *gallantry*, which made later generations forget they were bloodthirsty marauders.

The private wars and tournaments were the backdrop to a life that was violent in other ways. As we saw, religious values were imparted with bloody crucifixes, threats of eternal torture, and prurient depictions of mutilated saints. Craftsmen applied their ingenuity to sadistic machines of punishment and execution. Brigands made travel a threat to life and limb, and ransoming captives was big business. As Elias noted, "the little people, too—the hatters, the tailors, the shepherds—were all quick to draw their knives."14 Even clergymen got into the act. The historian Barbara Hanawalt quotes an account from 14th-century England:

It happened at Ylvertoft on Saturday next before Martinmass in the fifth year of King Edward that a certain William of Wellington, parish chaplain of Ylvertoft, sent John, his clerk, to John Cobbler's house to buy a candle for him for a penny. But John would not send it to him without the money wherefore William became enraged, and, knocking in the door upon him, he struck John in the front part of the head so that his brains flowed forth and he died forthwith.15

Violence pervaded their entertainment as well. Tuchman describes two of the popular sports of the time: "Players with hands tied behind them competed to kill a cat nailed to a post by battering it to death with their heads, at the risk of cheeks ripped open or eyes scratched out by the frantic animal's claws.... Or a pig enclosed in a wide pen was chased by men with clubs to the laughter of spectators as he ran squealing from the blows until beaten lifeless."16

During my decades in academia I have read thousands of scholarly papers on a vast range of topics, from the grammar of irregular verbs to the physics of multiple universes. But the oddest journal article I have ever read is "Losing Face, Saving Face: Noses and Honour in the Late Medieval Town." 17 Here the historian Valentin Groebner documents dozens of accounts from medieval Europe in which one person cut off the nose of another. Sometimes it was an official punishment for heresy, treason, prostitution, or sodomy, but more often it was an act of private vengeance. In one case in Nuremberg in 1520, Hanns Rigel had an affair with the wife of Hanns von Eyb. A jealous von Eyb cut off the nose of Rigel's innocent wife, a supreme injustice multiplied by the fact that Rigel was sentenced to four weeks of imprisonment for adultery while von Eyb walked away scot-free. These mutilations were so common that, according to Groebner,

the authors of late-medieval surgical textbooks also devote particular attention to nasal injuries, discussing whether a nose once cut off can grow back, a controversial question that the French royal physician Henri de Mondeville answered in his famous *Chirurgia* with a categorical "No." Other fifteenth-century medical authorities were more optimistic: Heinrich von Pforspundt's 1460 pharmacoepia promised, among other things, a prescription for "making a new nose" for those who had lost theirs.18

The practice was the source of our strange idiom *to cut off your nose to spite your face.* In late medieval times, cutting off someone's nose was the prototypical act of spite.

Like other scholars who have peered into medieval life, Elias was taken aback by accounts of the temperament of medieval people, who by our lights seem impetuous, uninhibited, almost childlike:

Not that people were always going around with fierce looks, drawn brows and martial countenances.... On the contrary, a moment ago they were joking, now they mock each other, one word leads to another, and suddenly from the midst of laughter they find themselves in the fiercest feud. Much of what appears contradictory to us—the intensity of their piety, the violence of their fear of hell, their guilt feelings, their penitence, the immense outbursts of joy and gaiety, the sudden flaring and the uncontrollable force of their hatred and belligerence—all these, like the rapid changes of mood, are in reality symptoms of one and the same structuring of the emotional life. The drives, the emotions were vented more freely, more directly, more openly than later. It is only to us, in whom everything is more subdued, moderate, and calculated, and in whom social taboos are built much more deeply into the fabric of our drive-economy as self-restraints, that the unveiled intensity of this piety, belligerence, or cruelty appears to be contradictory. 19

Tuchman too writes of the "childishness noticeable in medieval behavior, with its marked inability to restrain any kind of impulse."20 Dorothy Sayers, in the introduction to her translation of *The Song of Roland*, adds, "The idea that a strong man should react to great personal and national calamities by a slight compression of the lips and by silently throwing his cigarette into the fireplace is of very recent origin."21

Though the childishness of the medievals was surely exaggerated, there may indeed be differences in degree in the mores of emotional expression in different eras. Elias spends much of *The Civilizing Process* documenting this transition with an unusual database: manuals of etiquette. Today we think of these books, like *Amy Vanderbilt's Everyday Etiquette* and *Miss Manners' Guide to Excruciatingly Correct Behavior*, as sources of handy tips for avoiding embarrassing peccadilloes. But at one time they were serious guides to moral conduct, written by the leading thinkers of the day. In 1530 the great scholar Desiderius Erasmus, one of the founders of modernity, wrote an etiquette manual called *On Civility in Boys* which was a bestseller throughout Europe for two centuries. By laying down rules for what people ought not to do, these manuals give us a snapshot of what they must have been doing.

The people of the Middle Ages were, in a word, gross. A number of the advisories in the etiquette books deal with eliminating bodily effluvia:

• Don't foul the staircases, corridors, closets, or wall hangings with urine or other filth. • Don't relieve yourself in front of ladies, or before doors or windows of court chambers. • Don't slide back and forth on your chair as if you're trying to pass gas. • Don't touch your private parts under your clothes with your bare hands. • Don't greet someone while they are urinating or defecating. • Don't make noise when you pass gas. • Don't undo your clothes in front of other people in preparation for defecating, or do them up afterwards. • When you share a bed with someone in an inn, don't lie so close to him that you touch him, and don't put your legs between his. • If you come across something disgusting in the sheet, don't turn to your companion and point it out to him, or hold up the stinking thing for the other to smell and say "I should like to know how much that stinks."

Others deal with blowing one's nose:

• Don't blow your nose onto the tablecloth, or into your fingers, sleeve, or hat. • Don't offer your used handkerchief to someone else. • Don't carry your handkerchief in your mouth. • "Nor is it seemly, after

wiping your nose, to spread out your handkerchief and peer into it as if pearls and rubies might have fallen out of your head."22

Then there are fine points of spitting:

• Don't spit into the bowl when you are washing your hands. • Do not spit so far that you have to look for the saliva to put your foot on it. • Turn away when spitting, lest your saliva fall on someone. • "If anything purulent falls to the ground, it should be trodden upon, lest it nauseate someone."23 • If you notice saliva on someone's coat, it is not polite to make it known.

And there are many, many pieces of advice on table manners:

• Don't be the first to take from the dish. • Don't fall on the food like a pig, snorting and smacking your lips. • Don't turn the serving dish around so the biggest piece of meat is near you. • "Don't wolf your food like you're about to be carried off to prison, nor push so much food into your mouth that your cheeks bulge like bellows, nor pull your lips apart so that they make a noise like pigs." • Don't dip your fingers into the sauce in the serving dish. • Don't put a spoon into your mouth and then use it to take food from the serving dish. • Don't gnaw on a bone and put it back in the serving dish. • Don't wipe your utensils on the tablecloth. • Don't put back on your plate what has been in your mouth. • Do not offer anyone a piece of food you have bitten into. • Don't lick your greasy fingers, wipe them on the bread, or wipe them on your coat. • Don't lean over to drink from your soup bowl. • Don't spit bones, pits, eggshells, or rinds into your hand, or throw them on the floor. • Don't pick your nose while eating. • Don't drink from your dish; use a spoon. • Don't slurp from your spoon. • Don't loosen your belt at the table. • Don't clean a dirty plate with your fingers. • Don't stir sauce with your fingers. • Don't lift meat to your nose to smell it. • Don't drink coffee from your saucer.

In the mind of a modern reader, these advisories set off a train of reactions. How inconsiderate, how boorish, how animalistic, how immature those people must have been! These are the kinds of directives you'd expect a parent to give to a three-year-old, not a great philosopher to a literate readership. Yet as Elias points out, the habits of refinement, self-control, and consideration that are second nature to us had to be acquired—that's why we call them *second* nature—and they developed in Europe over the course of its modern history.

The sheer quantity of the advice tells a story. The three-dozen-odd rules are not independent of one another but exemplify a few themes. It's unlikely that each of us today had to be instructed in every rule individually, so that if some mother had been remiss in teaching one of them, her adult son would still be blowing his nose into the tablecloth. The rules in the list (and many more that are not) are deducible from a few principles: Control your appetites; Delay gratification; Consider the sensibilities of others; Don't act like a peasant; Distance yourself from your animal nature. And the penalty for these infractions was assumed to be internal: a sense of shame. Elias notes that the etiquette books rarely mention health and hygiene. Today we recognize that the emotion of disgust evolved as an unconscious defense against biological contamination.24 But an understanding of microbes and infection did not arrive until well into the 19th century. The only explicit rationales stated in the etiquette books are to avoid acting like a peasant or an animal and to avoid offending others.

In the European Middle Ages, sexual activity too was less discreet. People were publicly naked more often, and couples took only perfunctory measures to keep their coitus private. Prostitutes offered their services

openly; in many English towns, the red-light district was called Gropecunt Lane. Men would discuss their sexual exploits with their children, and a man's illegitimate offspring would mix with his legitimate ones. During the transition to modernity, this openness came to be frowned upon as uncouth and then as unacceptable.

The change left its mark in the language. Words for peasantry took on a second meaning as words for turpitude: *boor* (which originally just meant "farmer," as in the German *Bauer* and Dutch *boer*); *villain* (from the French *vilein*, a serf or villager); *churlish* (from English *churl*, a commoner); *vulgar* (common, as in the term *vulgate*); and *ignoble*, not an aristocrat. Many of the words for the fraught actions and substances became taboo. Englishmen used to swear by invoking supernatural beings, as in *My God!* and *Jesus Christ!* At the start of the modern era they began to invoke sexuality and excretion, and the "Anglo-Saxon four-letter words," as we call them today, could no longer be used in polite company.25 As the historian Geoffrey Hughes has noted, "The days when the dandelion could be called the *pissabed*, a heron could be called a *shitecrow* and the windhover could be called the *windfucker* have passed away with the exuberant phallic advertisement of the codpiece."26 *Bastard*, *cunt*, *arse,* and *whore* also passed from ordinary to taboo.

As the new etiquette took hold, it also applied to the accoutrements of violence, particularly knives. In the Middle Ages, most people carried a knife and would use it at the dinner table to carve a chunk of meat off the roasted carcass, spear it, and bring it to their mouths. But the menace of a lethal weapon within reach at a communal gathering, and the horrific image of a knife pointed at a face, became increasingly repellent. Elias cites a number of points of etiquette that center on the use of knives:

• Don't pick your teeth with your knife. • Don't hold your knife the entire time you are eating, but only when you are using it. • Don't use the tip of your knife to put food into your mouth. • Don't cut bread; break it. • If you pass someone a knife, take the point in your hand and offer him the handle. • Don't clutch your knife with your whole hand like a stick, but hold it in your fingers. • Don't use your knife to point at someone.

It was during this transition that the fork came into common use as a table utensil, so that people no longer had to bring their knives to their mouths. Special knives were set at the table so people would not have to unsheathe their own, and they were designed with rounded rather than pointed ends. Certain foods were never to be cut with a knife, such as fish, round objects, and bread—hence the expression *to break bread together*.

Some of the medieval knife taboos remain with us today. Many people will not give a knife as a present unless it is accompanied by a coin, which the recipient gives back, to make the transaction a sale rather than a gift. The ostensible reason is to avoid the symbolism of "severing the friendship," but a more likely reason is to avoid the symbolism of directing an unsolicited knife in the friend's direction. A similar superstition makes it bad luck to hand someone a knife: one is supposed to lay it down on the table and allow the recipient to pick it up. Knives in table settings are rounded at the end and no sharper than needed: steak knives are brought out for tough meat, and blunter knives substituted for fish. And knives may be used only when they are absolutely necessary. It's rude to use a knife to eat a piece of cake, to bring food to your mouth, to mix ingredients ("Stir with a knife, stir up strife"), or to push food onto your fork.

Aha!

Elias's theory, then, attributes the decline in European violence to a larger psychological change (the subtitle of his book is *Sociogenetic and Psychogenetic Investigations*). He proposed that over a span of several

centuries, beginning in the 11th or 12th and maturing in the 17th and 18th, Europeans increasingly inhibited their impulses, anticipated the long-term consequences of their actions, and took other people's thoughts and feelings into consideration. A culture of honor—the readiness to take revenge—gave way to a culture of dignity—the readiness to control one's emotions. These ideals originated in explicit instructions that cultural arbiters gave to aristocrats and noblemen, allowing them to differentiate themselves from the villains and boors. But they were then absorbed into the socialization of younger and younger children until they became second nature. The standards also trickled down from the upper classes to the bourgeoisie that strove to emulate them, and from them to the lower classes, eventually becoming a part of the culture as a whole.

Elias helped himself to Freud's structural model of the psyche, in which children acquire a conscience (the superego) by internalizing the injunctions of their parents when they are too young to understand them. At that point the child's ego can apply these injunctions to keep their biological impulses (the id) in check. Elias stayed away from Freud's more exotic claims (such as the primeval parricide, the death instinct, and the oedipal complex), and his psychology is thoroughly modern. In chapter 9 we will look at a faculty of the mind that psychologists call self-control, delay of gratification, and shallow temporal discounting and that laypeople call counting to ten, holding your horses, biting your tongue, saving for a rainy day, and keeping your pecker in your pocket.27 We will also look at a faculty that psychologists call empathy, intuitive psychology, perspective-taking, and theory of mind and that laypeople call getting into other people's heads, seeing the world from their point of view, walking a mile in their moccasins, and feeling their pain. Elias anticipated the scientific study of both of these better angels.

Critics of Elias have pointed out that all societies have standards of propriety about sexuality and excretion which presumably grow out of innate emotions surrounding purity, disgust, and shame.28 As we will see, the degree to which societies moralize these emotions is a major dimension of variation across cultures. Though medieval Europe certainly did not lack norms of propriety altogether, it seems to have lain at the far end of the envelope of cultural possibilities.

To his credit, Elias leapfrogged academic fashion in not claiming that early modern Europeans "invented" or "constructed" self-control. He claimed only that they toned up a mental faculty that had always been a part of human nature but which the medievals had underused. He repeatedly drove the point home with the pronouncement "There is no zero point."29 As we shall see in chapter 9, exactly how people dial their capacity for self-control up or down is an interesting topic in psychology. One possibility is that self-control is like a muscle, so that if you exercise it with table manners it will be stronger across the board and more effective when you have to stop yourself from killing the person who just insulted you. Another possibility is that a particular setting of the self-control dial is a social norm, like how close you can stand to another person or how much of your body has to be covered in public. A third is that self-control can be adjusted adaptively according to its costs and benefits in the local environment. Self-control, after all, is not an unmitigated good. The problem with having too much self-control is that an aggressor can use it to his advantage, anticipating that you may hold back from retaliating because it's too late to do any good. But if he had reason to believe that you would lash out reflexively, consequences be damned, he might treat you with more respect in the first place. In that case people might adjust a self-control slider according to the dangerousness of those around them.

At this point in the story, the theory of the Civilizing Process is incomplete, because it appeals to a process that is endogenous to the phenomenon it is trying to explain. A decline in violent behavior, it says, coincided with a decline in impulsiveness, honor, sexual license, incivility, and boorishness at the dinner table. But this just entangles us in a web of psychological processes. It hardly counts as an explanation to say that people behaved less violently because they learned to inhibit their violent impulses. Nor can we feel confident that

people's impulsiveness changed first and that a reduction in violence was the result, rather than the other way around.

But Elias did propose an exogenous trigger to get the whole thing started, indeed, two triggers. The first was the consolidation of a genuine Leviathan after centuries of anarchy in Europe's feudal patchwork of baronies and fiefs. Centralized monarchies gained in strength, brought the warring knights under their control, and extended their tentacles into the outer reaches of their kingdoms. According to the military historian Quincy Wright, Europe had five thousand independent political units (mainly baronies and principalities) in the 15th century, five hundred at the time of the Thirty Years' War in the early 17th, two hundred at the time of Napoleon in the early 19th, and fewer than thirty in 1953.30

The consolidation of political units was in part a natural process of agglomeration in which a moderately powerful warlord swallowed his neighbors and became a still more powerful warlord. But the process was accelerated by what historians call the military revolution: the appearance of gunpowder weapons, standing armies, and other expensive technologies of war that could only be supported by a large bureaucracy and revenue base.31 A guy on a horse with a sword and a ragtag band of peasants was no match for the massed infantry and artillery that a genuine state could put on the battlefield. As the sociologist Charles Tilly put it, "States make war and vice-versa." 32

Turf battles among knights were a nuisance to the increasingly powerful kings, because regardless of which side prevailed, peasants were killed and productive capacity was destroyed that from the kings' point of view would be better off stoking their revenues and armies. And once they got into the peace business—"the king's peace," as it was called—they had an incentive to do it right. For a knight to lay down his arms and let the state deter his enemies was a risky move, because his enemies could see it as a sign of weakness. The state had to keep up its end of the bargain, lest everyone lose faith in its peacekeeping powers and resume their raids and vendettas.33

Feuding among knights and peasants was not just a nuisance but a lost opportunity. During Norman rule in England, some genius recognized the lucrative possibilities in nationalizing justice. For centuries the legal system had treated homicide as a tort: in lieu of vengeance, the victim's family would demand a payment from the killer's family, known as blood money or *wergild* ("man-payment"; the *wer* is the same prefix as in *werewolf,* "man-wolf"). King Henry I redefined homicide as an offense against the state and its metonym, the crown. Murder cases were no longer *John Doe vs. Richard Roe,* but *The Crown vs. John Doe* (or later, in the United States, *The People vs. John Doe* or *The State of Michigan vs. John Doe*). The brilliance of the plan was that the wergild (often the offender's entire assets, together with additional money rounded up from his family) went to the king instead of to the family of the victim. Justice was administered by roving courts that would periodically visit a locale and hear the accumulated cases. To ensure that all homicides were presented to the courts, each death was investigated by a local agent of the crown: the coroner. 34

Once Leviathan was in charge, the rules of the game changed. A man's ticket to fortune was no longer being the baddest knight in the area but making a pilgrimage to the king's court and currying favor with him and his entourage. The court, basically a government bureaucracy, had no use for hotheads and loose cannons, but sought responsible custodians to run its provinces. The nobles had to change their marketing. They had to cultivate their manners, so as not to offend the king's minions, and their empathy, to understand what they wanted. The manners appropriate for the court came to be called "courtly" manners or "courtesy." The etiquette guides, with their advice on where to place one's nasal mucus, originated as manuals for how to behave in the king's court. Elias traces the centuries-long sequence in which courtesy percolated down from aristocrats dealing with the court to the elite bourgeoisie dealing with the aristocrats, and from them to the rest of the middle class. He summed up his theory, which linked the centralization of state power to a psychological change in the populace, with a slogan: Warriors to courtiers.

The second exogenous change during the later Middle Ages was an economic revolution. The economic base of the feudal system was land and the peasants who worked it. As real estate agents like to say, land is the one thing they can't make more of. In an economy based on land, if someone wants to improve his standard of living, or for that matter maintain it during a Malthusian population expansion, his primary option is to conquer the neighboring lot. In the language of game theory, competition for land is zero-sum: one player's gain is another player's loss.

The zero-sum nature of the medieval economy was reinforced by a Christian ideology that was hostile to any commercial practice or technological innovation that might eke more wealth out of a given stock of physical resources. As Tuchman explains:

The Christian attitude toward commerce . . . held that money was evil, that according to St. Augustine "Business is in itself an evil," that profit beyond a minimum necessary to support the dealer was avarice, that to make money out of money by charging interest on a loan was the sin of usury, that buying goods wholesale and selling them unchanged at a higher retail price was immoral and condemned by canon law, that, in short, St. Jerome's dictum was final: "A man who is a merchant can seldom if ever please God." 35

As my grandfather would have put it, "Goyische kopp!"—gentile head. Jews were brought in as moneylenders and middlemen but were just as often persecuted and expelled. The era's economic backwardness was enforced by laws which decreed that prices should be fixed at a "just" level reflecting the cost of the raw material and the value of the labor added to it. "To ensure that no one gained an advantage over anyone else," Tuchman explains, "commercial law prohibited innovation in tools or techniques, underselling below a fixed price, working late by artificial light, employing extra apprentices or wife and under-age children, and advertising of wares or praising them to the detriment of others."36 This is a recipe for a zero-sum game, and leaves predation as the only way people could add to their wealth.

A *positive*-sum game is a scenario in which agents have choices that can improve the lots of both of them at the same time. A classic positive-sum game in everyday life is the exchange of favors, where each person can confer a large benefit to another at a small cost to himself or herself. Examples include primates who remove ticks from each other's backs, hunters who share meat whenever one of them has felled an animal that is too big for him to consume on the spot, and parents who take turns keeping each other's children out of trouble. As we shall see in chapter 8, a key insight of evolutionary psychology is that human cooperation and the social emotions that support it, such as sympathy, trust, gratitude, guilt, and anger, were selected because they allow people to flourish in positive-sum games. 37

A classic positive-sum game in economic life is the trading of surpluses. If a farmer has more grain than he can eat, and a herder has more milk than he can drink, both of them come out ahead if they trade some wheat for some milk. As they say, everybody wins. Of course, an exchange at a single moment in time only pays when there is a division of labor. There would be no point in one farmer giving a bushel of wheat to another farmer and receiving a bushel of wheat in return. A fundamental insight of modern economics is that the key to the creation of wealth is a division of labor, in which specialists learn to produce a commodity with increasing cost-effectiveness and have the means to exchange their specialized products efficiently. One infrastructure that allows efficient exchange is transportation, which makes it possible for producers to trade their surpluses even when they are separated by distance. Another is money, interest, and middlemen, which allow producers to exchange many kinds of surpluses with many other producers at many points in time.

Positive-sum games also change the incentives for violence. If you're trading favors or surpluses with

someone, your trading partner suddenly becomes more valuable to you alive than dead. You have an incentive, moreover, to anticipate what he wants, the better to supply it to him in exchange for what you want. Though many intellectuals, following in the footsteps of Saints Augustine and Jerome, hold businesspeople in contempt for their selfishness and greed, in fact a free market puts a premium on empathy. 38 A good businessperson has to keep the customers satisfied or a competitor will woo them away, and the more customers he attracts, the richer he will be. This idea, which came to be called *doux commerce* (gentle commerce), was expressed by the economist Samuel Ricard in 1704:

Commerce attaches [people] to one another through mutual utility.... Through commerce, man learns to deliberate, to be honest, to acquire manners, to be prudent and reserved in both talk and action. Sensing the necessity to be wise and honest in order to succeed, he flees vice, or at least his demeanor exhibits decency and seriousness so as not to arouse any adverse judgment on the part of present and future acquaintances.39

And this brings us to the second exogenous change. Elias noted that in the late Middle Ages people began to unmire themselves from technological and economic stagnation. Money increasingly replaced barter, aided by the larger national territories in which a currency could be recognized. The building of roads, neglected since Roman times, resumed, allowing the transport of goods to the hinterlands of the country and not just along its coasts and navigable rivers. Horse transport became more efficient with the use of horseshoes that protected hooves from paving stones and yokes that didn't choke the poor horse when it pulled a heavy load. Wheeled carts, compasses, clocks, spinning wheels, treadle looms, windmills, and water mills were also perfected in the later Middle Ages. And the specialized expertise needed to implement these technologies was cultivated in an expanding stratum of craftsmen. The advances encouraged the division of labor, increased surpluses, and lubricated the machinery of exchange. Life presented people with more positive-sum games and reduced the attractiveness of zero-sum plunder. To take advantage of the opportunities, people had to plan for the future, control their impulses, take other people's perspectives, and exercise the other social and cognitive skills needed to prosper in social networks.

The two triggers of the Civilizing Process—the Leviathan and gentle commerce—are related. The positive-sum cooperation of commerce flourishes best inside a big tent presided over by a Leviathan. Not only is a state well suited to provide the public goods that serve as infrastructure for economic cooperation, such as money and roads, but it can put a thumb on the scale on which players weigh the relative payoffs of raiding and trading. Suppose a knight can either plunder ten bushels of grain from his neighbor or, by expending the same amount of time and energy, raise the money to buy five bushels from him. The theft option looks pretty good. But if the knight anticipates that the state will fine him six bushels for the theft, he'd be left with only four, so he's better off with honest toil. Not only do the Leviathan's incentives make commerce more attractive, but commerce makes the job of the Leviathan easier. If the honest alternative of buying the grain hadn't been available, the state would have had to threaten to squeeze ten bushels out of the knight to deter him from plundering, which is harder to enforce than squeezing five bushels out of him. Of course, in reality the state's sanctions may be the threat of physical punishment rather than a fine, but the principle is the same: it's easier to deter people from crime if the lawful alternative is more appealing.

The two civilizing forces, then, reinforce each other, and Elias considered them to be part of a single process. The centralization of state control and its monopolization of violence, the growth of craft guilds and bureaucracies, the replacement of barter with money, the development of technology, the enhancement of trade, the growing webs of dependency among far-flung individuals, all fit into an organic whole. And to prosper within that whole, one had to cultivate faculties of empathy and self-control until they became, as he put it, second nature.

Indeed the "organic" analogy is not far-fetched. The biologists John Maynard Smith and Eörs Szathmáry have argued that an evolutionary dynamic similar to the Civilizing Process drove the major transitions in the history of life. These transitions were the successive emergence of genes, chromosomes, bacteria, cells with nuclei, organisms, sexually reproducing organisms, and animal societies.40 In each transition, entities with the capacity to be either selfish or cooperative tended toward cooperation when they could be subsumed into a larger whole. They specialized, exchanged benefits, and developed safeguards to prevent one of them from exploiting the rest to the detriment of the whole. The journalist Robert Wright sketches a similar arc in his book *Nonzero*, an allusion to positive-sum games, and extends it to the history of human societies.41 In the final chapter of this book I will take a closer look at overarching theories of the decline of violence.

The theory of the Civilizing Process passed a stringent test for a scientific hypothesis: it made a surprising prediction that turned out to be true. Back in 1939 Elias had no access to the statistics of homicide; he worked from narrative histories and old books of etiquette. When Gurr, Eisner, Cockburn, and others surprised the world of criminology with their graphs showing a decline in killings, Elias had the only theory that anticipated it. But with everything else we have learned about violence in recent decades, how well does the theory fare?

Elias himself was haunted by the not-so-civilized behavior of his native Germany during World War II, and he labored to explain that "decivilizing process" within the framework of his theory.42 He discussed the fitful history of German unification and the resulting lack of trust in a legitimate central authority. He documented the persistence of a militaristic culture of honor among its elites, the breakdown of a state monopoly on violence with the rise of communist and fascist militias, and a resulting contraction of empathy for groups perceived to be outsiders, particularly the Jews. It would be a stretch to say that he rescued his theory with these analyses, but perhaps he shouldn't have tried. The horrors of the Nazi era did not consist in an upsurge in feuding among warlords or of citizens stabbing each other over the dinner table, but in violence whose scale, nature, and causes are altogether different. In fact in Germany during the Nazi years the declining trend for one-on-one homicides continued (see, for example, figure3–19).43 In chapter 8 we will see how the compartmentalization of the moral sense, and the distribution of belief and enforcement among different sectors of a population, can lead to ideologically driven wars and genocides even in otherwise civilized societies.

Eisner pointed out another complication for the theory of the Civilizing Process: the decline of violence in Europe and the rise of centralized states did not always proceed in lockstep.44 Belgium and the Netherlands were at the forefront of the decline, yet they lacked strong centralized governments. When Sweden joined the trend, it wasn't on the heels of an expansion in state power either. Conversely, the Italian states were in the rearguard of the decline in violence, yet their governments wielded an enormous bureaucracy and police force. Nor did cruel punishments, the enforcement method of choice among early modern monarchs, reduce violence in the areas where they were carried out with the most relish.

Many criminologists believe that the source of the state's pacifying effect isn't just its brute coercive power but the trust it commands among the populace. After all, no state can post an informant in every pub and farmhouse to monitor breaches of the law, and those that try are totalitarian dictatorships that rule by fear, not civilized societies where people coexist through self-control and empathy. A Leviathan can civilize a society only when the citizens feel that its laws, law enforcement, and other social arrangements are legitimate, so that they don't fall back on their worst impulses as soon as Leviathan's back is turned.45 This doesn't refute Elias's theory, but it adds a twist. An imposition of the rule of law may end the bloody mayhem of feuding warlords, but reducing rates of violence further, to the levels enjoyed by modern European societies, involves a more nebulous process in which certain populations accede to the rule of law

that has been imposed on them.

Libertarians, anarchists, and other skeptics of the Leviathan point out that when communities are left to their own devices, they often develop norms of cooperation that allow them to settle their disputes nonviolently, without laws, police, courts, or the other trappings of government. In *Moby-Dick*, Ishmael explains how American whalers thousands of miles from the reach of the law dealt with disputes over whales that had been injured or killed by one ship and then claimed by another:

Thus the most vexatious and violent disputes would often arise between the fishermen, were there not some written or unwritten, universal, undisputed law applicable to all cases.

. . . Though no other nation [but Holland] has ever had any written whaling law, yet the American fishermen have been their own legislators and lawyers in this matter.... These laws might be engraven on a Queen Anne's farthing, or the barb of a harpoon, and worn round the neck, so small are they.

I. A Fast-Fish belongs to the party fast to it.

II. A Loose-Fish is fair game for anybody who can soonest catch it.

Informal norms of this kind have emerged among fishers, farmers, and herders in many parts of the world.46 In *Order Without Law*: *How Neighbors Settle Disputes*, the legal scholar Robert Ellickson studied a modern American version of the ancient (and frequently violent) confrontation between pastoralists and farmers. In northern California's Shasta County, traditional ranchers are essentially cowboys, grazing their cattle in open country, while modern ranchers raise cattle in irrigated, fenced ranches. Both kinds of ranchers coexist with farmers who grow hay, alfalfa, and other crops. Straying cattle occasionally knock down fences, eat crops, foul streams, and wander onto roads where vehicles can hit them. The county is carved into "open ranges," in which an owner is not legally liable for most kinds of accidental damage his cattle may cause, and "closed ranges," in which he is strictly liable, whether he was negligent or not. Ellickson discovered that victims of harm by cattle were loath to invoke the legal system to settle the damages. In fact, most of the residents—ranchers, farmers, insurance adjustors, even lawyers and judges—held beliefs about the applicable laws that were flat wrong. But the residents got along by adhering to a few tacit norms. Cattle owners were always responsible for the damage their animals caused, whether a range was open or closed; but if the damage was minor and sporadic, property owners were expected to "lump it." People kept rough long-term mental accounts of who owed what, and the debts were settled in kind rather than in cash. (For example, a cattleman whose cow damaged a rancher's fence might at a later time board one of the rancher's stray cattle at no charge.) Deadbeats and violators were punished with gossip and with occasional veiled threats or minor vandalism. In chapter 9 we'll take a closer look at the moral psychology behind such norms, which fall into a category called equality matching.47

As important as tacit norms are, it would be a mistake to think that they obviate a role for government. The Shasta County ranchers may not have called in Leviathan when a cow knocked over a fence, but they were living in its shadow and knew it would step in if their informal sanctions escalated or if something bigger were at stake, such as a fight, a killing, or a dispute over women. And as we shall see, their current level of peaceful coexistence is itself the legacy of a local version of the Civilizing Process. In the 1850s, the annual homicide rate of northern California ranchers was around 45 per 100,000, comparable to those of medieval Europe.48

I think the theory of the Civilizing Process provides a large part of the explanation for the modern decline of violence not only because it predicted the remarkable plunge in European homicide but because it makes

correct predictions about the times and places in the modern era that do not enjoy the blessed 1-per-100,000-per-year rate of modern Europe. Two of these rule-proving exceptions are zones that the Civilizing Process never fully penetrated : the lower strata of the socioeconomic scale, and the inaccessible or inhospitable territories of the globe. And two are zones in which the Civilizing Process went into reverse: the developing world, and the 1960s. Let's visit them in turn.

VIOLENCE AND CLASS

Other than the drop in numbers, the most striking feature of the decline in European homicide is the change in the socioeconomic profile of killing. Centuries ago rich people were as violent as poor people, if not more so.49 Gentlemen would carry swords and would not hesitate to use them to avenge insults. They often traveled with retainers who doubled as bodyguards, so an affront or a retaliation for an affront could escalate into a bloody street fight between gangs of aristocrats (as in the opening scene of *Romeo and Juliet*). The economist Gregory Clark examined records of deaths of English aristocrats from late medieval times to the Industrial Revolution. I've plotted his data in figure 3–7, which shows that in the 14th and 15th centuries an astonishing 26 percent of male aristocrats died from violence—about the same rate that we saw in figure 2–2 as the average for preliterate tribes. The rate fell into the single digits by the turn of the 18th century, and of course today it is essentially zero.

FIGURE 3–7. Percentage of deaths of English male aristocrats from violence, 1330–1829

Users Review

From reader reviews:

Crystal Freeman:

The experience that you get from The Better Angels of Our Nature: Why Violence Has Declined will be the more deep you rooting the information that hide inside the words the more you get thinking about reading it. It does not mean that this book is hard to be aware of but The Better Angels of Our Nature: Why Violence Has Declined giving you joy feeling of reading. The article writer conveys their point in certain way that can be understood by means of anyone who read that because the author of this e-book is well-known enough. That book also makes your vocabulary increase well. Therefore it is easy to understand then can go along with you, both in printed or e-book style are available. We propose you for having this particular The Better Angels of Our Nature: Why Violence Has Declined instantly.

Gloria Eller:

Hey guys, do you wants to finds a new book to learn? May be the book with the subject The Better Angels of Our Nature: Why Violence Has Declined suitable to you? The book was written by well known writer in this era. Typically the book untitled The Better Angels of Our Nature: Why Violence Has Declinedis the main of several books which everyone read now. This specific book was inspired lots of people in the world. When you read this e-book you will enter the new shape that you ever know ahead of. The author explained their idea in the simple way, consequently all of people can easily to recognise the core of this guide. This book will give you a lots of information about this world now. To help you see the represented of the world within this book.

James Dickens:

In this particular era which is the greater particular person or who has ability in doing something more are more special than other. Do you want to become considered one of it? It is just simple solution to have that. What you should do is just spending your time almost no but quite enough to have a look at some books. Among the books in the top listing in your reading list is definitely The Better Angels of Our Nature: Why Violence Has Declined. This book which is qualified as The Hungry Hillsides can get you closer in turning out to be precious person. By looking way up and review this e-book you can get many advantages.

Johanna Bassett:

That reserve can make you to feel relax. That book The Better Angels of Our Nature: Why Violence Has Declined was vibrant and of course has pictures around. As we know that book The Better Angels of Our Nature: Why Violence Has Declined has many kinds or type. Start from kids until teens. For example Naruto or Investigator Conan you can read and think you are the character on there. So , not at all of book are generally make you bored, any it makes you feel happy, fun and chill out. Try to choose the best book for you personally and try to like reading that will.

Download and Read Online The Better Angels of Our Nature: Why Violence Has Declined By Steven Pinker #P83F2HL6EO5

Read The Better Angels of Our Nature: Why Violence Has Declined By Steven Pinker for online ebook

The Better Angels of Our Nature: Why Violence Has Declined By Steven Pinker Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read The Better Angels of Our Nature: Why Violence Has Declined By Steven Pinker books to read online.

Online The Better Angels of Our Nature: Why Violence Has Declined By Steven Pinker ebook PDF download

The Better Angels of Our Nature: Why Violence Has Declined By Steven Pinker Doc

The Better Angels of Our Nature: Why Violence Has Declined By Steven Pinker Mobipocket

The Better Angels of Our Nature: Why Violence Has Declined By Steven Pinker EPub

P83F2HL6EO5: The Better Angels of Our Nature: Why Violence Has Declined By Steven Pinker