THE PACIFIST'S DILEMMA

What we seek is an understanding of why violence has always been so tempting, why people have always yearned to reduce it, why it has been so hard to reduce, and why certain kinds of changes eventually did reduce it. To be genuine explanations, these changes should be exogenous: they should not be a part of the very decline we are trying to explain, but independent developments that preceded and caused it.

A good way to make sense of the changing dynamics of violence is to think back to the paradigmatic model of the benefits of cooperation (in this case, refraining from aggression), namely the Prisoner's Dilemma (chapter 8). Let's change the labels and call it the Pacifist's Dilemma. A person or coalition may be tempted by the gains of a victory in predatory aggression (the equivalent of defecting against a cooperator), and certainly wants to avoid the sucker's payoff of being defeated by an adversary who acts on the same temptation. But if they both opt for aggression, they will fall into a punishing war (mutual defection), which will leave them both worse off than if they had opted for the rewards of peace (mutual cooperation). Figure 10–1 is a depiction of the Pacifist's Dilemma; the numbers for the gains and losses are arbitrary, but they capture the dilemma's tragic structure.

		Pacifist	Aggressor
Own choices	Pacifist	Peace (5) Peace (5)	Defeat (-100) Victory (10)
	Aggressor	Victory (10) Defeat (-100)	War (-50) War (-50)

Other's choices

FIGURE 10–1. The Pacifist's Dilemma

The Pacifist's Dilemma is by no stretch of the imagination a mathematical model, but I will keep pointing to it to offer a second way of conveying the ideas I will try to explain in words. The numbers capture the twofold tragedy of violence. The first part of the tragedy is that when the world

has these payoffs, it is irrational to be a pacifist. If your adversary is a pacifist, you are tempted to exploit his vulnerability (the 10 points of victory are better than the 5 points of peace), whereas if he is an aggressor, you are better off enduring the punishment of a war (a loss of 50 points) than being a sucker and letting him exploit you (a devastating loss of 100). Either way, aggression is the rational choice.

The second part of the tragedy is that the costs to a victim (-100, in this case) are vastly disproportionate to the benefits to the aggressor (10). Unless two adversaries are locked in a fight to the death, aggression is not zero-sum but negative-sum; they are collectively better off not doing it, despite the advantage to the victor. The advantage to a conqueror in gaining a bit more land is swamped by the disadvantage to the family he kills in stealing it, and the few moments of drive reduction experienced by a rapist are obscenely out of proportion to the suffering he causes his victim. The asymmetry is ultimately a consequence of the law of entropy: an infinitesimal fraction of the states of the universe are orderly enough to support life and happiness, so it's easier to destroy and cause misery than to cultivate and cause happiness. All of this means that even the most steely-eyed utilitarian calculus, in which a disinterested observer tots up the total happiness and unhappiness, will deem violence undesirable, because it creates more unhappiness in its victims than happiness in its perpetrators, and lowers the aggregate amount of happiness in the world.

But when we descend from the lofty vantage point of the disinterested observer to the earthly one of the players, we can see why violence is so hard to eliminate. Each side would be crazy to be the only one to opt for pacifism, because if his adversary was tempted by aggression, he would pay a terrible cost. The other-guy problem explains why pacifism, turning the other cheek, beating swords into plowshares, and other moralistic sentiments have not been a consistent reducer of violence: they only work if one's adversary is overcome by the same sentiments at the same time. It also, I think, helps us to understand why violence can spiral upward or downward so unpredictably at various times in history. Each side has to be aggressive enough not to be a sitting duck for its adversary, and often the best defense is a good offense. The resulting mutual fear of attack—the Hobbesian trap or security dilemma—can escalate everyone's belligerence (chapter 2). Even when the game is played repeatedly and the threat of reprisals can (in theory) deter both sides, the strategic advantage of overconfidence and other self-serving biases can lead instead to cycles of feuding. By the same logic, a credible goodwill gesture can occasionally be reciprocated, unwinding the cycle and sending violence downward when everyone least expects it.

And here is the key to identifying a common thread that might tie together the historical reducers of violence. Each should change the payoff structure of the Pacifist's Dilemma—the numbers in the checkerboard—in a way that attracts the two sides into the upper left cell, the one that gives them the mutual benefits of peace.

In light of the history and psychology we have reviewed, I believe we can identify five developments that have pushed the world in a peaceful direction. Each shows up, to varying degrees, in a number of historical sequences, quantitative datasets, and experimental studies. And each can be shown to move around the numbers in the Pacifist's Dilemma in a way that entices people into the precious cell of peace. Let's go through them in the order in which they were introduced in the preceding chapters.

THE LEVIATHAN

A state that uses a monopoly on force to protect its citizens from one another may be the most consistent violence-reducer that we have encountered in this book. Its simple logic was depicted in the aggressor-victim-bystander triangle in figure 2–1 and may be restated in terms of the Pacifist's Dilemma. If a government imposes a cost on an aggressor that is large enough to cancel out his gains—say, a penalty that is three times the advantage of aggressing over being peaceful—it

flips the appeal of the two choices of the potential aggressor, making peace more attractive than war (figure 10–2).

In addition to changing the rational-actor arithmetic, a Leviathan—or his female counterpart Justitia, the goddess of justice—is a disinterested third party whose penalties are not inflated by the self-serving biases of the participants, and who is not a deserving target of revenge. A referee hovering over the game gives one's opponent less of an incentive to strike preemptively or self-defensively, reducing one's own desire to maintain an aggressive stance, putting the adversary at ease, and so on, and thus can ramp down the cycle of belligerence. And thanks to the generalized effects of self-control that have been demonstrated in the psychology lab, refraining from aggression can become a habit, so the civilized parties will inhibit their temptation to aggress even when Leviathan's back is turned.

		Other's choices		
		Pacifist	Aggressor	
Own choices	Pacifist	Peace (5) Peace (5)	Defeat (-100) Victory - Penalty (10 - 15 = -5)	
	Aggressor	Victory – Penalty (10 – 15 = –5) Defeat (–100)	War - Penalty (-50 -150 = -200) War - Penalty (-50 -150 = -200)	

FIGURE 10-2. How a Leviathan resolves the Pacifist's Dilemma

Leviathan effects lay behind the Pacification and Civilizing Processes that gave chapters 2 and 3 their names. When bands, tribes, and chiefdoms came under the control of the first states, the suppression of raiding and feuding reduced their rates of violent death fivefold (chapter 2). And when the fiefs of Europe coalesced into kingdoms and sovereign states, the consolidation of law enforcement eventually brought down the homicide rate another thirtyfold (chapter 3). Pockets of anarchy that lay beyond the reach of government retained their violent cultures of honor, such as the peripheral and mountainous backwaters of Europe, and the frontiers of the American South and West (chapter 3). The same is true of the pockets of anarchy in the socioeconomic landscape, such as the lower classes who are deprived of consistent law enforcement and the purveyors of contraband who cannot avail themselves of it (chapter 3). When law enforcement retreats, such as in instant decolonization, failed states, anocracies, police strikes, and the 1960s, violence can come roaring back (chapters 3 and 6). Inept governance turns out to be among the biggest risk factors for civil war, and is perhaps the principal asset that distinguishes the violence-torn developing world from the more peaceful developed world (chapter 6). And when the citizens of a country with a weak rule of law are invited into the lab, they indulge in gratuitous spiteful punishment that leaves everyone worse off (chapter 8).

Leviathan, in the depiction that Hobbes commissioned, and Justitia, as represented in courthouse statuary, are both armed with swords. But sometimes the blindfold and the scales are enough. People avoid hits to their reputations as well as to their bodies and bank accounts, and occasionally the soft power of influential third parties or the threat of shaming and ostracism can have the same effect as police or armies that threaten them with force. This soft power is crucial in the international arena, where world government has always been a fantasy, but in which judgments

by third parties, intermittently backed by sanctions or symbolic displays of force, can go a long way. The lowered risk of war when countries belong to international organizations or host international peacekeepers are two quantifiable examples of the pacifying effects of unarmed or lightly armed third parties (chapters 5 and 6).

When Leviathan does brandish a sword, the benefit depends on its applying the force judiciously, adding penalties only to the "aggression" cells in its subjects' decision matrix. When the Leviathan adds penalties indiscriminately to all four cells, brutalizing its subjects to stay in power, it can cause as much harm as it prevents (chapters 2 and 4). The benefits of democracies over autocracies and anocracies come when a government carefully eyedrops just enough force into the right cells of the decision matrix to switch the pacifist option from an agonizingly unattainable ideal to the irresistible choice.

GENTLE COMMERCE

The idea that an exchange of benefits can turn zero-sum warfare into positive-sum mutual profit was one of the key ideas of the Enlightenment, and it was revived in modern biology as an explanation of how cooperation among nonrelatives evolved. It changes the Pacifist's Dilemma by sweetening the outcome of mutual pacifism with the mutual gains of exchange (figure 10–3).

Though gentle commerce does not eliminate the disaster of being defeated in an attack, it eliminates the adversary's incentive to attack (since he benefits from peaceful exchange too) and so takes that worry off the table. The profitability of mutual cooperation is at least partly exogenous because it depends on more than the agents' willingness to trade: it depends as well on whether each one specializes in producing something the other one wants, and on the presence of an infrastructure that lubricates their exchange, such as transportation, finance, record-keeping, and the enforcement of contracts. And once people are enticed into voluntary exchange, they are encouraged to take each other's perspectives to clinch the best deal ("the customer is always right"), which in turn may lead them to respectful consideration of each other's interests, if not necessarily to warmth.

		Others	s choices
		Pacifist	Aggressor
Own choices	Pacifist	Peace + Profit (5 + 100 = 105) Peace + Profit (5 + 100 = 105)	Defeat (-100) Victory (10)
	Aggressor	Victory (10) Defeat (-100)	War (-50) War (-50)

Other's choices

FIGURE 10–3. How commerce resolves the Pacifist's Dilemma

In the theory of Norbert Elias, the Leviathan and gentle commerce were the two drivers of the European Civilizing Process (chapter 3). Beginning in the late Middle Ages, expanding kingdoms not only penalized plunder and nationalized justice, but supported an infrastructure of exchange, including money and the enforcement of contracts. This infrastructure, together with technological advances such as in roads and clocks, and the removal of taboos on interest, innovation, and competition, made commerce more attractive, and as a result merchants, craftsmen,

and bureaucrats displaced knightly warriors. The theory has been supported by historical data showing that commerce did start to expand in the late Middle Ages, and by criminological data showing that rates of violent death really did plunge (chapters 9 and 3).

Among larger entities such as cities and states, commerce was enhanced by oceangoing ships, new financial institutions, and a decline in mercantilist policies. These developments have been credited in part with the 18th-century domestication of warring imperial powers such as Sweden, Denmark, the Netherlands, and Spain into commercial states that made less trouble (chapter 5). Two centuries later the transformation of China and Vietnam from authoritarian communism to authoritarian capitalism was accompanied by a decreased willingness to indulge in the all-out ideological wars that in the preceding decades had made both countries the deadliest places on earth (chapter 6). In other parts of the world as well, the tilting of values away from national glory and toward making money may have taken the wind out of the sails of cantankerous revanchist movements (chapters 5 and 6). Part of the tilt may have come from a relaxation of the grip of ideologies that came to be seen as morally bankrupt, but another part may have come from a seduction by the lucrative rewards of the globalized economy.

These narratives have been supported by quantitative studies. During the postwar decades that saw the Long Peace and the New Peace, international trade skyrocketed, and we saw that countries that trade with each other are less likely to cross swords, holding all else constant (chapter 5). Recall as well that countries that are more open to the world economy are less likely to host genocides and civil wars (chapter 6). Pulling in the other direction, governments that base their nation's wealth on digging oil, minerals, and diamonds out of the ground rather than adding value to it via commerce and trade are more likely to fall into civil wars (chapter 6).

The theory of gentle commerce is not only supported by numbers from international datasets but is consistent with a phenomenon long known to anthropologists: that many cultures maintain active networks of exchange, even when the goods exchanged are useless gifts, because they know it helps keep the peace among them.⁵ This is one of the phenomena in the ethnographic record that led Alan Fiske and his collaborators to suggest that people in a relationship of Equality Matching or Market Pricing feel that they are bound by mutual obligations and are less likely to dehumanize each other than when they are in a null or associal relationship (chapter 9).

The mindset behind gentle commerce, unlike that of the other pacifying forces I review in this chapter, has not been directly tested in the psychology lab. We do know that when people (and for that matter, monkeys) are joined in a positive-sum game requiring them to collaborate in order to achieve a goal that benefits them both, hostile tensions can dissolve (chapter 8). We also know that exchange in the real world can be a lucrative positive-sum game. But we don't know whether exchange itself reduces hostile tensions. As far as I know, in the vast literature on empathy and cooperation and aggression, no one has tested whether people who have consummated a mutually profitable exchange are less likely to shock each other or to spike each other's food with three-alarm hot sauce. I suspect that among researchers, gentle commerce is just not a sexy idea. Cultural and intellectual elites have always felt superior to businesspeople, and it doesn't occur to them to credit mere merchants with something as noble as peace.⁶

FEMINIZATION

Depending on how you look at it, the late Tsutomu Yamaguchi is either the world's luckiest man or the world's unluckiest man. Yamaguchi survived the atomic blast at Hiroshima, but then made an unfortunate choice as to where to go to flee the devastation: Nagasaki. He survived that blast as well and lived another sixty-five years, passing away in 2010 at the age of ninety-three. A man who survived the only two nuclear strikes in history deserves our respectful attention, and before he died he offered a prescription for peace in the nuclear age: "The only people who should

be allowed to govern countries with nuclear weapons are mothers, those who are still breast-feeding their babies."⁷

Yamaguchi was invoking the most fundamental empirical generalization about violence, that it is mainly committed by men. From the time they are boys, males play more violently than females, fantasize more about violence, consume more violent entertainment, commit the lion's share of violent crimes, take more delight in punishment and revenge, take more foolish risks in aggressive attacks, vote for more warlike policies and leaders, and plan and carry out almost all the wars and genocides (chapters 2, 3, 7, and 8). Even when the sexes overlap and the difference between their averages is small, the difference can decide a close election, or set off a spiral of belligerence in which each side has to be a bit more bellicose than the other. Historically, women have taken the leadership in pacifist and humanitarian movements out of proportion to their influence in other political institutions of the time, and recent decades, in which women and their interests have had an unprecedented influence in all walks of life, are also the decades in which wars between developed states became increasingly unthinkable (chapters 5 and 7). James Sheehan's characterization of the postwar transformation of the mission of the European state, from military prowess to cradle-to-grave nurturance, is almost a caricature of traditional gender roles.

Yamaguchi's exact prescription, of course, can be debated. George Shultz recalls that when he told Margaret Thatcher in 1986 that he had stood by as Ronald Reagan suggested to Mikhail Gorbachev that they abolish nuclear weapons, she clobbered him with her handbag. But, Yamaguchi might reply, Thatcher's own children were already grown up, and in any case her views were tuned to a world that was run by men. Since the world's nuclear states will not all be governed by women anytime soon, let alone by nursing mothers, we will never know whether Yamaguchi's prescription is right. But he had a point when he speculated that a more feminized world is a more peaceful world.

Female-friendly values may be expected to reduce violence because of the psychological legacy of the basic biological difference between the sexes, namely that males have more of an incentive to compete for sexual access to females, while females have more of an incentive to stay away from risks that would make their children orphans. Zero-sum competition, whether it takes the form of the contests for women in tribal and knightly societies or the contests for honor, status, dominance, and glory in modern ones, is more a man's obsession than a woman's. Suppose that in the Pacifist's Dilemma, some portion of the rewards of victory and the costs of defeat—say, 80 percent—consists of the swelling and bruising of the male ego. And suppose that the choices are now made by female actors, so these psychic payoffs are reduced accordingly (figure 10–4; I have omitted the symmetrical Other's Choices for clarity). Now peace is more tempting than victory, and war more costly than defeat. The pacifist option wins hands-down. The reversal would be even more dramatic if we adjusted the war cell to reflect a greater cost of violent conflict to women than to men.

To be sure, a shift from male to female influence in decision-making may not be completely exogenous. In a society in which rapacious invaders may swoop in at any moment, the costs of defeat to both sexes can be catastrophic, and anything short of the most truculent martial values may be suicidal. A female-tilted value system may be a luxury enjoyed by a society that is already safe from predatory invasion. But a relative tilt in power toward women's interests can also be caused by exogenous forces that have nothing to do with violence. In traditional societies, one of these forces is living arrangements: women are better off in societies in which they stay with their birth family under the wing of their fathers and brothers, and their husbands are visitors, than in societies in which they move in with their husband's clan and are dominated by their husbands and his kin (chapter 7). In modern societies, the exogenous forces include technological and economic advances that freed women from chronic child-rearing and domestic duties, such as store-bought food, laborsaving devices, contraception, longer life spans, and the shift to an information economy.

Other's choices

FIGURE 10-4. How feminization can resolve the Pacifist's Dilemma

Societies in which women get a better deal, both traditional and modern, tend to be societies that have less organized violence (chapter 8). This is obvious enough in the tribes and chiefdoms that literally go to war to abduct women or avenge past abductions, such as the Yanomamö and the Homeric Greeks (chapters 1 and 2). But it may also be seen among contemporary countries in the contrast between the low levels of political and judicial violence in the über-feminist democracies of Western Europe and the high levels in the genital-cutting, adulteress-stoning, burqa-cladding Sharia states of Islamic Africa and Asia (chapter 6).

Feminization need not consist of women literally wielding more power in decisions on whether to go to war. It can also consist in a society moving away from a culture of manly honor, with its approval of violent retaliation for insults, toughening of boys through physical punishment, and veneration of martial glory (chapter 8). This has been the trend in the democracies of Europe and the developed world and in the bluer states of America (chapters 3 and 7). Several conservative scholars have ruefully suggested to me that the modern West has been diminished by the loss of virtues like bravery and valor and the ascendancy of materialism, frivolity, decadence, and effeminacy. Now, I have been assuming that violence is always a bad thing except when it prevents greater violence, but these men are correct that this is a value judgment, and that no logical argument inherently favors peace over honor and glory. But I would think that the potential victims of all this manliness deserve a say in this discussion, and they may not agree that their lives and limbs are a price worth paying for the glorification of masculine virtues.

Feminization is a pacifying development for yet another reason. Social and sexual arrangements that favor the interests of women tend to drain the swamps where violent male-male competition proliferates. One of these arrangements is marriage, in which men commit themselves to investing in the children they sire rather than competing with each other for sexual opportunities. Getting married reduces men's testosterone and their likelihood of living a life of crime, and we saw that American homicide rates plunged in the marriage-happy 1940s and 1950s, rose in the marriage-delaying 1960s and 1970s, and remain high in African American communities that have particularly low rates of marriage (chapter 3).

Another swamp-drainer is equality in numbers. Unpoliced all-male social milieus, such as the cowboy and mining camps of the American frontier, are almost always violent (chapter 3). The West was wild because it was young men who went there while the young women stayed behind in the East. But societies can become stacked with males for a more sinister reason, namely that their female counterparts were aborted or killed at birth. In an article called "A Surplus of Men, a Deficit of Peace," the political scientists Valerie Hudson and Andrea den Boer show that the traditional

killing of baby girls in China has long resulted in large numbers of unattached men. They are always poor men, because the richer ones attract the scarce women. These "bare branches," as they are called in China, congregate in gangs of drifters who brawl and duel among themselves and rob and terrorize settled populations. They can even grow into armies that menace local or national governments. A leader can clamp down on the gangs by violent repression, or he can try to co-opt them, which usually requires adopting a macho ruling philosophy that is congenial to their mores. Best of all, he can export their destructive energy by sending them to other territories as migrant workers, colonists, or soldiers. When the leaders of rival countries all try to dispose of their excess men, the result can be a grinding war of attrition. As Hudson and den Boer put it, "Each society has plenty of bare branches to spare in such a conflict—and the respective governments might be happy to spare them."

Traditional gynecide, joined in the 1980s by the female-abortion industry, injected a bolus of excess males into the population structures of Afghanistan, Bangladesh, China, Pakistan, and parts of India (chapter 7). These surpluses of men bode poorly for the immediate prospects of peace and democracy in those regions. Over the longer term, the sex ratio may eventually be rebalanced by the feminist and humanitarian concern with the right of female fetuses to take their first breath, together with political leaders' finally grasping the demographic arithmetic and enhancing the incentives to raise daughters. The resulting boon for baby girls would translate into less violent societies. But until the first fifty-fifty cohorts are born and grow up, those societies may be in for a bumpy ride.

A society's respect for the interests of women has one more connection to its rate of violence. Violence is a problem not just of too many males but of too many *young* males. At least two large studies have suggested that countries with a larger proportion of young men are more likely to fight interstate and civil wars (chapter 6). A population pyramid with a thick base of young people is dangerous not just because young men like to raise hell, and in bottom-heavy societies will outnumber their more prudent elders. It's also dangerous because these young men are likely to be deprived of status and mates. The sclerotic economies of countries in the developing world cannot nimbly put a youth bulge to work, leaving many of the men unemployed or underemployed. And if the society has a degree of official or de facto polygyny, with many young women being usurped by older or richer men, the surfeit of marginalized young people will turn into a surfeit of marginalized young men. These men have nothing to lose, and may find work and meaning in militias, warlord gangs, and terrorist cells (chapter 6).

The title *Sex and War* sounds like the ultimate guy bait, but this recent book is a manifesto for the empowerment of women. The reproductive biologist Malcolm Potts, writing with the political scientist Martha Campbell and the journalist Thomas Hayden, has amassed evidence that when women are given access to contraception and the freedom to marry on their own terms, they have fewer offspring than when the men of their societies force them to be baby factories. And that, in turn, means that their countries' populations will be less distended by a thick slab of young people at the bottom. (Contrary to an earlier understanding, a country does not have to become affluent before its rate of population growth comes down.) Potts and his coauthors argue that giving women more control over their reproductive capacity (always the contested territory in the biological battle of the sexes) may be the single most effective way of reducing violence in the dangerous parts of the world today. But this empowerment often must proceed in the teeth of opposition from traditional men who want to preserve their control over female reproduction, and from religious institutions that oppose contraception and abortion.

Several varieties of feminization, then—direct political empowerment, the deflation of manly honor, the promotion of marriage on women's terms, the right of girls to be born, and women's control over their own reproduction—have been forces in the decline of violence. The parts of the world that lag in this historical march are the parts that lag in the decline of violence. But worldwide polling data show that even in the most benighted countries there is considerable

pent-up demand for female empowerment, and many international organizations are committed to hurrying it along (chapters 6 and 7). These are hopeful signs in the long term, if not the immediate term, for further reductions in violent conflict in the world.

THE EXPANDING CIRCLE

The last two pacifying forces scramble the psychological payoffs of violence. The first is the expansion of the circle of sympathy. Suppose that living in a more cosmopolitan society, one that puts us in contact with a diverse sample of other people and invites us to take their points of view, changes our emotional response to their well-being. Imagine taking this change to its logical conclusion: our own well-being and theirs have become so intermingled that we literally love our enemies and feel their pain. Our potential adversary's payoffs would simply be summed with our own (and vice versa), and pacifism would become overwhelmingly preferable to aggression (figure 10–5).

Of course, a perfect fusion of the interests of every living human is an unattainable nirvana. But smaller increments in the valuation of other people's interests—say, a susceptibility to pangs of guilt when thinking about enslaving, torturing, or annihilating others—could shift the likelihood of aggressing against them.

We have seen evidence for both links in this causal chain: exogenous events that expanded opportunities for perspective-taking, and a psychological response that turns perspective-taking into sympathy (chapters 4 and 9). Beginning in the 17th century, technological advances in publishing and transportation created a Republic of Letters and a Reading Revolution in which the seeds of the Humanitarian Revolution took root (chapter 4). More people read books, including fiction that led them to inhabit the minds of other people, and satire that led them to question their society's norms. Vivid depictions of the suffering wrought by slavery, sadistic punishments, war, and cruelty to children and animals preceded the reforms that outlawed or reduced those practices. Though chronology does not prove causation, the laboratory studies showing that hearing or reading a first-person narrative can enhance people's sympathy for the narrator at least make it plausible (chapter 9).

	Other's choices	
,	Pacifist	Aggressor
Pacifist	Peace $(5 + 5 = 10)$ Peace $(5 + 5 = 10)$	Defeat $(-100 + 10 = -90)$ Victory $(10 + -100 = -90)$
Aggressor	Victory $(10 + -100 = -90)$ Defeat $(-100 + 10 = -90)$	War (-50 + -50 = -100) War (-50 + -50 = -100)

FIGURE 10–5. How empathy and reason resolve the Pacifist's Dilemma

Literacy, urbanization, mobility, and access to mass media continued their rise in the 19th and 20th centuries, and in the second half of the 20th a Global Village began to emerge that made people even more aware of others unlike themselves (chapters 5 and 7). Just as the Republic of Letters and the Reading Revolution helped to kindle the Humanitarian Revolution of the 18th

century, the Global Village and the electronics revolution may have helped along the Long Peace, New Peace, and Rights Revolutions of the 20th. Though we cannot prove the common observation that media coverage accelerated the civil rights movement, antiwar sentiment, and the fall of communism, the perspective-sympathy studies are suggestive, and we saw several statistical links between the cosmopolitan mixing of peoples and the endorsement of humanistic values (chapters 7 and 9). ¹⁴

THE ESCALATOR OF REASON

The expanding circle and the escalator of reason are powered by some of the same exogenous causes, particularly literacy, cosmopolitanism, and education. ¹⁵ And their pacifying effect may be depicted by the same fusion of interests in the Pacifist's Dilemma. But the expanding circle (as I have been using the term) and the escalator of reason are conceptually distinct (chapter 9). The first involves occupying another person's vantage point and imagining his or her emotions as if they were one's own. The second involves ascending to an Olympian, superrational vantage point—the perspective of eternity, the view from nowhere—and considering one's own interests and another person's as equivalent.

The escalator of reason has an additional exogenous source: the nature of reality, with its logical relationships and empirical facts that are independent of the psychological makeup of the thinkers who attempt to grasp them. As humans have honed the institutions of knowledge and reason, and purged superstitions and inconsistencies from their systems of belief, certain conclusions were bound to follow, just as when one masters the laws of arithmetic certain sums and products are bound to follow (chapters 4 and 9). And in many cases the conclusions are ones that led people to commit fewer acts of violence.

Throughout the book we have seen the beneficial consequences of an application of reason to human affairs. At various times in history superstitious killings, such as in human sacrifice, witch hunts, blood libels, inquisitions, and ethnic scapegoating, fell away as the factual assumptions on which they rested crumbled under the scrutiny of a more intellectually sophisticated populace (chapter 4). Carefully reasoned briefs against slavery, despotism, torture, religious persecution, cruelty to animals, harshness to children, violence against women, frivolous wars, and the persecution of homosexuals were not just hot air but entered into the decisions of the people and institutions who attended to the arguments and implemented reforms (chapters 4 and 7).

Of course it's not always easy to distinguish empathy from reason, the heart from the head. But the limited reach of empathy, with its affinity for people like us and people close to us, suggests that empathy needs the universalizing boost of reason to bring about changes in policies and norms that actually reduce violence in the world (chapter 9). These changes include not just legal prohibitions against acts of violence but institutions that are engineered to reduce the temptations of violence. Among these wonkish contraptions are democratic government, the Kantian safeguards against war, reconciliation movements in the developing world, nonviolent resistance movements, international peacekeeping operations, the crime prevention reforms and civilizing offensives of the 1990s, and tactics of containment, sanctions, and wary engagement designed to give national leaders more options than just the game of chicken that led to the First World War or the appearement that led to the Second (chapters 3 to 8).

A broader effect of the escalator of reason, albeit one with many stalls, reversals, and holdouts, is the movement away from tribalism, authority, and purity in moral systems and toward humanism, classical liberalism, autonomy, and human rights (chapter 9). A humanistic value system, which privileges human flourishing as the ultimate good, is a product of reason because it can be *justified*: it can be mutually agreed upon by any community of thinkers who value their own interests and are engaged in reasoned negotiation, whereas communal and authoritarian values are

parochial to a tribe or hierarchy (chapters 4 and 9).

When cosmopolitan currents bring diverse people into discussion, when freedom of speech allows the discussion to go where it pleases, and when history's failed experiments are held up to the light, the evidence suggests that value systems evolve in the direction of liberal humanism (chapters 4 to 9). We saw this in the recent decline of totalitarian ideologies and the genocides and wars they ignited, and we saw it in the contagion of the Rights Revolutions, when the indefensibility of oppressing racial minorities was generalized to the oppression of women, children, homosexuals, and animals (chapter 7). We saw it as well in the way that these revolutions eventually swept up the conservatives who first opposed them. The exception that proves the rule is the insular societies that are starved of ideas from the rest of the world and muzzled by governmental and clerical repression of the press: these are also the societies that most stubbornly resist humanism and cling to their tribal, authoritarian, and religious ideologies (chapter 6). But even these societies may not be able to withstand the liberalizing currents of the new electronic Republic of Letters forever.

The metaphor of an escalator, with its implication of directionality superimposed on the random walk of ideological fashion, may seem Whiggish and presentist and historically naïve. Yet it is a kind of Whig history that is supported by the facts. We saw that many liberalizing reforms that originated in Western Europe or on the American coasts have been emulated, after a time lag, by the more conservative parts of the world (chapters 4, 6, and 7). And we saw correlations, and even a causal relation or two, between a well-developed ability to reason and a receptiveness to cooperation, democracy, classical liberalism, and nonviolence (chapter 9).

REFLECTIONS

The decline of violence may be the most significant and least appreciated development in the history of our species. Its implications touch the core of our beliefs and values—for what could be more fundamental than an understanding of whether the human condition, over the course of its history, has gotten steadily better, steadily worse, or has not changed? Hanging in the balance are conceptions of a fall from innocence, of the moral authority of religious scripture and hierarchy, of the innate wickedness or benevolence of human nature, of the forces that drive history, and of the moral valuation of nature, community, tradition, emotion, reason, and science. My attempt to document and explain declines of violence has filled many pages, and this is not the place to fill many more in exploring their implications. But I will end with two reflections on what one might take away from the historical decline of violence.

The first concerns the way we should view modernity—the transformation of human life by science, technology, and reason, with the attendant diminishment of custom, faith, community, traditional authority, and embeddedness in nature.

A loathing of modernity is one of the great constants of contemporary social criticism. Whether the nostalgia is for small-town intimacy, ecological sustainability, communitarian solidarity, family values, religious faith, primitive communism, or harmony with the rhythms of nature, everyone longs to turn back the clock. What has technology given us, they say, but alienation, despoliation, social pathology, the loss of meaning, and a consumer culture that is destroying the planet to give us McMansions, SUVs, and reality television?

Lamentations of a fall from Eden have a long history in intellectual life, as the historian Arthur Herman has shown in *The Idea of Decline in Western History*. ¹⁶ And ever since the 1970s, when romantic nostalgia became the conventional wisdom, statisticians and historians have marshaled facts against it. The titles of their books tell the story: *The Good News Is the Bad News Is Wrong, It's Getting Better All the Time, The Good Old Days—They Were Terrible!*, *The Case for Rational Optimism, The Improving State of the World, The Progress Paradox*, and most recently, Matt Ridley's *The Rational Optimist* and Charles Kenny's *Getting Better*. ¹⁷

These defenses of modernity recount the trials of daily living before the advent of affluence and technology. Our ancestors, they remind us, were infested with lice and parasites and lived above cellars heaped with their own feces. Food was bland, monotonous, and intermittent. Health care consisted of the doctor's saw and the dentist's pliers. Both sexes labored from sunrise to sundown, whereupon they were plunged into darkness. Winter meant months of hunger, boredom, and gnawing loneliness in snowbound farmhouses.

But it was not just mundane physical comforts that our recent ancestors did without. It was also the higher and nobler things in life, such as knowledge, beauty, and human connection. Until recently most people never traveled more than a few miles from their place of birth. Everyone was ignorant of the vastness of the cosmos, the prehistory of civilization, the genealogy of living things, the genetic code, the microscopic world, and the constituents of matter and life. Musical recordings, affordable books, instant news of the world, reproductions of great art, and filmed dramas were inconceivable, let alone available in a tool that can fit in a shirt pocket. When children emigrated, their parents might never see them again, or hear their voices, or meet their grandchildren. And then there are modernity's gifts of life itself: the additional decades of existence, the mothers who live to see their newborns, the children who survive their first years on earth. When I stroll through old New England graveyards, I am always struck by the abundance of tiny plots and poignant epitaphs. "Elvina Maria, died July 12, 1845; aged 4 years, and 9 months. Forgive this tear, a parent weeps. "Tis here, the faded floweret sleeps."

Even with all these reasons why no romantic would really step into a time machine, the nostalgic have always been able to pull out one moral card: the profusion of modern violence. At least, they say, our ancestors did not have to worry about muggings, school shootings, terrorist attacks, holocausts, world wars, killing fields, napalm, gulags, and nuclear annihilation. Surely no Boeing 747, no antibiotic, no iPod is worth the suffering that modern societies and their technologies can wreak.

And here is where unsentimental history and statistical literacy can change our view of modernity. For they show that nostalgia for a peaceable past is the biggest delusion of all. We now know that native peoples, whose lives are so romanticized in today's children's books, had rates of death from warfare that were greater than those of our world wars. The romantic visions of medieval Europe omit the exquisitely crafted instruments of torture and are innocent of the thirtyfold greater risk of murder in those times. The centuries for which people are nostalgic were times in which the wife of an adulterer could have her nose cut off, a seven-year-old could be hanged for stealing a petticoat, a prisoner's family could be charged for easement of irons, a witch could be sawn in half, and a sailor could be flogged to a pulp. The moral commonplaces of our age, such as that slavery, war, and torture are wrong, would have been seen as saccharine sentimentality, and our notion of universal human rights almost incoherent. Genocide and war crimes were absent from the historical record only because no one at the time thought they were a big deal. From the vantage point of almost seven decades after the world wars and genocides of the first half of the 20th century, we see that they were not harbingers of worse to come, nor a new normal to which the world would grow inured, but a local high from which it would bumpily descend. And the ideologies behind them were not woven into modernity but atavisms that ended up in the dustbin of history.

The forces of modernity—reason, science, humanism, individual rights—have not, of course, pushed steadily in one direction; nor will they ever bring about a utopia or end the frictions and hurts that come with being human. But on top of all the benefits that modernity has brought us in health, experience, and knowledge, we can add its role in the reduction of violence.

To writers who *have* noticed declines of violence, the sheer abundance of them, operating on so many scales of time and magnitude, has an aura of mystery. James Payne wrote of a temptation to allude to "a higher power at work," of a process that seems "almost magical." Robert Wright nearly succumbs to the temptation, wondering whether the decline of zero-sum competition is "evidence of divinity," signs of a "divinely imparted meaning," or a story with a "cosmic author."

I can easily resist the temptation, but agree that the multiplicity of datasets in which violence meanders downward is a puzzle worth pondering. What do we make of the impression that human history contains an arrow? Where is this arrow, we are entitled to wonder, and who posted it? And if the alignment of so many historical forces in a beneficial direction does not imply a divine sign painter, might it vindicate some notion of moral realism—that moral truths are out there somewhere for us to discover, just as we discover the truths of science and mathematics?²⁰

My own view is that the Pacifist's Dilemma at least clarifies the mystery, and shows how the nonrandom direction of history is rooted in an aspect of reality that informs our conceptions of morality and purpose. Our species was born into the dilemma because our ultimate interests are distinct, because our vulnerable bodies make us sitting ducks for exploitation, and because the enticements to being the exploiter rather than the exploited will sentence all sides to punishing conflict. Unilateral pacifism is a losing strategy, and joint peace is out of everyone's reach. These maddening contingencies are inherent in the mathematical structure of the payoffs, and in that sense they are in the nature of reality. It is no wonder that the ancient Greeks blamed their wars on the caprice of the gods, or that the Hebrews and Christians appealed to a moralistic deity who might jigger the payoffs in the next world and thereby change the perceived incentive structure in this one.

Human nature, as evolution left it, is not up to the challenge of getting us into the blessedly peaceful cell in the upper left corner of the matrix. Motives like greed, fear, dominance, and lust keep drawing us toward aggression. And though a major work-around, the threat of tit-for-tat vengeance, has the potential to bring about cooperation if the game is repeated, in practice it is miscalibrated by self-serving biases and often results in cycles of feuding rather than stable deterrence.

But human nature also contains motives to climb into the peaceful cell, such as sympathy and self-control. It includes channels of communication such as language. And it is equipped with an open-ended system of combinatorial reasoning. When the system is refined in the crucible of debate, and its products are accumulated through literacy and other forms of cultural memory, it can think up ways of changing the payoff structure and make the peaceful cell increasingly attractive. Not least among those tactics is the superrational appeal to another abstract feature of reality: the interchangeability of perspectives, the nonspecialness of our parochial vantage points, which corrodes the dilemma by blending the payoffs of the two antagonists.

Only an inflated sense of our own importance could turn our desire to escape the Pacifist's Dilemma into a grand purpose of the cosmos. But the desire does seem to tap into contingencies of the world that are not exactly physical, and so it is different from the desires that were the mothers of other inventions such as refined sugar or central heating. The maddening structure of a Pacifist's Dilemma is an abstract feature of reality. So is its most comprehensive solution, the interchangeability of perspectives, which is the principle behind the Golden Rule and its equivalents that have been rediscovered in so many moral traditions. Our cognitive processes have been struggling with these aspects of reality over the course of our history, just as they have struggled with the laws of logic and geometry.

Though our escape from destructive contests is not a cosmic purpose, it *is* a human purpose. Defenders of religion have long claimed that in the absence of divine edicts, morality can never be grounded outside ourselves. People can pursue only selfish interests, perhaps tweaked by taste or fashion, and are sentenced to lives of relativism and nihilism. We can now appreciate why this line of argument is mistaken. Discovering earthly ways in which human beings can flourish, including

stratagems to overcome the tragedy of the inherent appeal of aggression, should be purpose enough for anyone. It is a goal that is nobler than joining a celestial choir, melting into a cosmic spirit, or being reincarnated into a higher life-form, because the goal can be justified to any fellow thinker rather than being inculcated to arbitrary factions by charisma, tradition, or force. And the data we have seen in this book show that it is a goal on which progress can be made—progress that is halting and incomplete, but unmistakable nonetheless.

A final reflection. In writing this book I have adopted a voice that is analytic, and at times irreverent, because I believe the topic has inspired too much piety and not enough understanding. But at no point have I been unaware of the reality behind the numbers. To review the history of violence is to be repeatedly astounded by the cruelty and waste of it all, and at times to be overcome with anger, disgust, and immeasurable sadness. I know that behind the graphs there is a young man who feels a stab of pain and watches the life drain slowly out of him, knowing he has been robbed of decades of existence. There is a victim of torture whose contents of consciousness have been replaced by unbearable agony, leaving room only for the desire that consciousness itself should cease. There is a woman who has learned that her husband, her father, and her brothers lie dead in a ditch, and who will soon "fall into the hand of hot and forcing violation." It would be terrible enough if these ordeals befell one person, or ten, or a hundred. But the numbers are not in the hundreds, or the thousands, or even the millions, but in the hundreds of millions—an order of magnitude that the mind staggers to comprehend, with deepening horror as it comes to realize just how much suffering has been inflicted by the naked ape upon its own kind.

Yet while this planet has gone cycling on according to the fixed law of gravity, that species has also found ways to bring the numbers down, and allow a greater and greater proportion of humanity to live in peace and die of natural causes.²³ For all the tribulations in our lives, for all the troubles that remain in the world, the decline of violence is an accomplishment we can savor, and an impetus to cherish the forces of civilization and enlightenment that made it possible.