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Reasons for Skepticism, Part II: Explanation

WHILE THE OBJECTIONS IN the previous chapter provide grounds for considerable skepticism on specific points, there are also three broader objections to consider regarding the explanations for a decline that have been offered. They are somewhat more amorphous than my objections to the data, but given how broadly they apply to the logic and evidence of the decline-of-war thesis, they are in many ways even more damning.

The first objection has to do with the fact that the international system is a *complex system*. It consists of many countries, which themselves consist of people, and the interactions of those people and those countries in the context of the international system produces behavior that can't be understood or predicted just by examining people or countries in isolation. For Professors Pinker and Mueller, human beings are the heroes of the decline-of-war story: Our increasing aversion to violence has, they claim, produced a more peaceful world. As appealing as that story is, it ignores the very significant role of the social, domestic, and international context with which those people act—contexts that scholars have repeatedly shown to have a big influence on behavior. Once we incorporate those contexts into the story, it becomes much harder to believe that human pacifism, even if it is on the rise, can really play a big role in influencing war at the international level.

The second objection is that the focus in Professor Pinker's work in particular on the spread of Renaissance humanism and empathy results in a story that's a bit too neat and clean to be true. The Enlightenment gave rise to a remarkable diversity of ideas, not all of which lend

themselves to peace. Only focusing on those that do runs the risk of circular reasoning—concluding that Enlightenment ideas caused peace because we only examine the ideas that are prevalent in peaceful communities. Moreover, the best-case examples for the argument that Enlightenment humanism causes peace, developed Western countries, have been shown to be very unrepresentative of the broader global community.

The third objection is that virtually none of the data analyses supporting the decline-of-war thesis takes into account the role of chance. Even if the baseline rate of something (like conflict initiations over time, or battle deaths in war) remains the same over time, there are still random fluctuations from one year to the next or from one war to the next. We need to know on average how big those random fluctuations should be if we want to know whether the baseline rate has really changed. Statisticians have provided us with an excellent and diverse array of tools to use in order to answer exactly this question, but for the most part those tools have not been brought to bear.

The Complexity of International Behavior

A complex system is a system that contains interacting agents whose behavior differs from that which one would expect solely based on their characteristics. To put it more succinctly (if less precisely), the behavior of the whole is more than just the sum of the behavior of the parts.¹

Humans exhibit complex behavior even in very small groups. A brief story will illustrate this point. Years ago, a company started putting out motivational posters—simple photographs with thick black borders, one big word (“Teamwork,” perhaps), and a one-line motivational saying underneath it, designed to be framed and put up in workplaces to inspire the people who work there. A website calling itself *Despair, Inc.* immediately started producing parodies of those posters, with funny lines designed to undermine motivation. If my social media feed is any indication, the parodies soon became vastly more popular than the originals.

My favorite parody poster is one that features a photo of a circle of business-attired people extending their hands inward to the center, one on top of the other. The wording at the bottom reads, “MEETINGS:

None of Us Is as Dumb as All of Us.” If you’ve spent much of your professional life in meetings or on committees, this probably resonates with you. I certainly have, and I think of this poster whenever I find myself wondering how groups that contain such smart individuals can arrive at some of the decisions that come out of them.

That’s complexity. Would any one of us have concluded that this is the best decision? Nope! Are we satisfied with it? Not entirely. Crucially, if you had asked each of us what decision we thought made sense prior to the meeting, could you have predicted the aggregate outcome? Most likely not, unless we were deciding a very simple matter.

Countries, of course, are much more complex than committees, and the international system is more complex than countries.² So even if it could be established that norms of peaceful behavior are spreading throughout the international system, the decline-of-war thesis makes a huge logical leap when it assumes that those attitudes will translate directly into a decrease in violence in the international system. The context of interaction matters a lot to the outcome, and there are a lot of contextual “layers” between individual human beings and international conflict that could overwhelm the impact of peaceful dispositions. I explore three of those contextual layers below—one at the level of the individual, one at the level of the country as a whole, and one at the level of the international system.

Dispositions and Situations

Most people overestimate the impact of dispositions and downplay or ignore the impact of situations in their explanations of human behavior. If we hear what sounds like a woman in an adjacent room falling down and crying out in pain, for example, our inclination is to believe that we’d get up and find out whether she needs help. More than that, we tend to believe that other people’s behavior—whether or not they get up to help—is a reflection of their character. Kind people (like us!) will get up to find out whether the woman in the next room needs any assistance, but only cold or indifferent people will ignore her.

In fact, as Bibb Latané and Judith Rodin (1969) demonstrated in a landmark study, whether or not people get up to help depends crucially on situational factors. Latané and Rodin recruited male undergraduates

at Columbia University to come into an office and fill out a detailed marketing questionnaire. Some filled out the survey alone; others did so in the presence of another student who was ostensibly doing the same thing but in reality was part of the experiment. While they were doing so, they were able to hear the female “market research representative” in the next room shuffling papers, opening and closing drawers, and so on. Four minutes into the experiment, they heard the representative climb up on a chair to reach for a stack of papers and then come crashing to the ground as the chair collapsed. They then heard the representative say, “Oh, my God, my foot... I... I... can’t move it. Oh... my ankle. I... can’t get this... thing... off me.” If the students didn’t intervene, they heard the representative’s cries of pain gradually subside until she got up and limped out of the room. If there was another student present as part of the experiment, he did not get up to help and responded only minimally to anything that the experimental subject said or did.

Most of the students who were left to fill out the survey alone—70%—got up and attempted to help the woman in the next room. When there was another student there and that student failed to react, however, that behavior changed drastically: only 7% of the subjects got up to help. A relatively minor change in the situation—the existence of a bystander who did nothing—was sufficient to produce a night-and-day difference in behavior.

Our human tendency to attribute behavior in such situations to the character of the individual in question rather than to the specifics of the situation is so profound that psychologists refer to it as the “Fundamental Attribution Error.”³ That it is an error is no longer in much doubt:

Consider the following scenario: While walking briskly to a meeting some distance across a college campus, John comes across a man slumped in a doorway, asking him for help. Will John help him, or will he continue on his way? Before answering such a question, most people would want to know more about John. . . . In fact, however, nothing one is likely to know or learn about John would be of much use in helping predict John’s behavior in the situation we’ve just described. . . . A half century of research has taught us that in this situation, and in most other novel situations, one cannot predict with

any accuracy how particular people will respond. At least one cannot do so using information about an individual's personal dispositions or even about that individual's past behavior. (Ross and Nisbett, 1991, 2).

American isolationism provides an excellent illustration of the way in which the fundamental attribution error can creep into scholars' explanations of a country's foreign policy behavior. The United States between World War I and World War II is often said to have pursued an isolationist foreign policy, due in large part to the noninterventionist "mood" of its citizens. Much of the historical scholarship on isolationism in that period and subsequently has focused on figuring out which kinds of people—the less educated? The poor? Recent immigrants? Republicans? People from the Midwest?—are more likely to express isolationist sentiments.⁴

More recent research has shown, however, that this apparent disposition toward nonintervention depends crucially on the situational context. In the case of the interwar period, Americans' inclinations not to become involved in the growing European war hinged crucially on a key situational factor: Very few Americans, even those at high levels, believed that Germany constituted a real threat to the Continental powers. The shockingly successful German invasion of France in May and June of 1940 proved conclusively that Germany was a genuine threat, and as a result American support for intervention skyrocketed. While only 20–30% of Americans were willing to risk war in order to aid England and France prior to the invasion, support for doing so had cleared 70% by March 1941.⁵ Dispositional explanations for isolationism cannot explain this change of heart: it's extremely unlikely, of course, that nearly half of the American population moved to the coasts, switched political parties, or went to college in the nine months following the fall of France.

It seems plausible, at least, that nonviolence is every bit as dependent on situation as isolationism is. Indeed, that is the premise of political theorist Hannah Arendt's brilliant and controversial book *Eichmann in Jerusalem: A Report on the Banality of Evil*. Arendt's horrifying conclusion was that the subject of her book, Nazi SS-*Obersturmbannführer* Adolf Eichmann, far from being incomprehensibly evil, was driven to commit atrocities by the circumstances of the time. While Arendt

stopped short of endorsing Eichmann's own explanation—that his orders compelled him to comply—she concluded that he was an ideologue who was easily swept up in the Nazi movement and able to justify actions that he otherwise would have found immoral because they furthered the movement. He was, in her words, a “joiner.” She writes that “May 8, 1945, the official date of Germany's defeat, was significant for him mainly because it then dawned upon him that thenceforward he would have to live without being a member of something or other.”⁶ Far from being unusual, Eichmann's susceptibility to influence struck Arendt as being terrifyingly common.

Stanley Milgram, a psychologist at Yale, was struck by Arendt's conclusions and set up a series of experiments to explore the limits of human obedience.⁷ The subjects of Milgram's experiments were told that a person in another room—supposedly another subject, but in reality a confederate—would answer a series of questions given to him by the subject. The actual subjects of the experiment, the “teachers,” were asked to push a button whenever the “learner” in the next room gave an incorrect answer. Pushing the button would administer an electric shock. The subjects were told to use a dial to make each electric shock stronger than the previous one, up to a maximum of 450 volts. The shocks, according to the experimenter, would cause no lasting damage. (This, at least, was true: the shocks were fictional. The button activated a tape recorder that had been loaded with a pre-recorded script.) At first, pushing the button produced the sort of sounds from the next room that one might expect from someone who had just been zapped unexpectedly with a minor shock. Before long, however, the subject could hear the person in the next room banging on the wall and demanding that the experiment be brought to an end. If the shocks continued, the reactions from the next room became more intense and the subject could hear pleading, as well as the mention of a heart condition. Beyond a certain point, pushing the button produced no sound from the next room at all. If the subject expressed discomfort at the noises coming from the other side of the wall (as each did, sooner or later), the experimenter simply urged the subject to continue.

Milgram and his colleagues expected that very few subjects would administer apparently murderous voltages of electricity to another human being simply because they were told to do so. In fact, 65% of

the participants did. They argued with the experimenter, who remained bizarrely impassive in the face of the cries from the next room. Some got up as if to leave but dutifully returned to their seats when told to do so. But in the end, 65% of the subjects continued to increase the voltage and push the button until no more sounds came from the next room.⁸

There is substantial evidence that context drives behavior outside of the laboratory as well. Author Karl Marlantes is a decorated veteran of the Marine Corps who served in the Vietnam War. His account of his time there, published under the title *What It Is Like to Go to War* (2011), is an extended meditation on the effects that war had on him.

Marlantes offers an account of an airstrike that is particularly relevant. In it, he helped protect a team of Marines that had taken a hill and were trying to defend it against their North Vietnamese pursuers until a helicopter could arrive to pick up one of their gravely wounded comrades. Marlantes called in air support in the form of some Marine A-4s, which came loaded with bombs and napalm. They used both, and the North Vietnamese soldiers were left scattered across the hill, charred from the napalm, either dead or dying.

At the time, Marlantes writes, he was elated at having saved his team. Looking back, he writes, “I now think of what was ‘the enemy’ as human beings, so I find it hard to crow about burning them to death.” He makes a point of noting that he now feels an empathy for his enemy that he did not feel at the time—the same empathy that, according to Pinker, has grown along with the spread of Renaissance humanism.⁹

The key question is, what differences does that empathy make? Looking back on his experience at the time, with the benefit of years and the empathy that they provide, would Marlantes do anything differently today? By his own account, he would not:

I'd still do the same thing, only I would be aware of a horrible dilemma. I would be much more reluctant to use napalm now, knowing I could get the job done a lot more humanely with bombs. But scrambled aircraft arrive on station loaded with what they're loaded with. Once I had decided to be in that situation, I couldn't then decide that the team should sacrifice itself for my misgivings about using napalm. . . . Ideally, I would hope that, in spite of the adrenaline, I'd at least stay conscious of a terrible sadness while I

burned these people. But burn them I would. (Marlantes, 2011, 41–42).

To his credit, Marlantes is ruthlessly honest. Looking back, he does feel empathy for the other human beings on the hill. He no longer sees them as the impersonal, inhuman enemy. But these other human beings are doing their best to kill *his* human beings, the soldiers on his side of the war. And in that situation, while empathy might produce a lingering sadness, it would not prevent him from using napalm to kill the North Vietnamese soldiers. The requirements of the situation, in other words, outweigh the dispositional compulsions of empathy.

It might seem that I've chosen an easy case to use to demonstrate the power of situations over dispositions because war is an unusually compelling environment. That's probably true. But it's also the environment that's most relevant to the decline-of-war argument. Ignoring the power of the situation is a bad idea in general when we're trying to explain human behavior, but it's *really* a bad idea when we're trying to explain how people behave when the lives of their comrades or their fellow citizens are on the line.

So, the first point to make (and I hope I have not made it in tedious detail, but I do think that it bears strong emphasis) is that dispositions alone rarely predict behavior. Even a soldier looking back at his actions in Vietnam with sadness and empathy recognizes the fact that he would have to do precisely the same thing today if he were to find himself in the same situation. A majority of ordinary Americans administered what they thought were lethal doses of electricity to their fellow human beings when someone in a position of authority asked them to do so. We don't like to think that we, ourselves, are so malleable as to be capable of these sorts of behavior, but decades of research point unambiguously to the conclusion that we are.

Strategic Interaction

Even if we entirely leave aside the power of the situation in determining human actions and assume, *contra* lots and lots of evidence, that individual dispositions translate unproblematically into actions, we immediately run into another problem: People and countries react strategically to one another's actions. A change in the behavior of

one actor may result in a change in the behavior of others, and the outcome of those changes may be the opposite of what we'd expect. For that reason, there's no guarantee that more peaceful preferences in the context of strategic interaction will actually lead to more peace. They may actually do the opposite.

One of the most well-known examples of this outcome is the onset of the First World War. When Austrian Archduke Franz Ferdinand was assassinated and the Austro-Hungarian Empire contemplated war against Serbia, Germany had to balance the merits of backing an ally in what they hoped would be a short Austro-Serbian war in the Balkans against the risk of a broader Continental war. The German decision to back Austria was based in large part on the mistaken belief that the other powers would not intervene: As the Saxon envoy in Berlin put it, "England is absolutely pacific and France as well as Russia likewise do not feel inclined towards war" (Clark, 2013, 515). Perversely, if the British or the Russians had been more aggressively interventionist early on in the crisis, Germany would almost certainly have tempered its support for Austria-Hungary, and the Continent might have remained at peace.¹⁰

Of course, one could also cite plenty of examples of cases in which a bellicose foreign policy also got a country into war: I don't mean to imply that an increase in pacifism *inevitably* increases the risk of conflict! Rather, when we take the context of strategic interaction into account, we can't simply draw a direct connection between an increase in pacifism, on the one hand, and less conflict on the other. We have to take the calculations of other actors into account, and those calculations could easily lead to more aggressive actions that would increase the probability of war.

Professors Andrew T. Little and Thomas Zeitzoff lay out a detailed theoretical model that nicely captures the logic of how countries' preferences and calculations can coevolve when war becomes more or less costly and countries become more or less pacifistic as a result. The logic is a bit more complex than what I've laid out above, but the upshot is similar: as countries become less willing to fight, they do more *actual fighting*. The authors argue specifically that the logic of their argument undermines the decline-of-war thesis: "[E]ven if we accept that conflict is declining over time as a result of an increasing relative

value of cooperation, we can not infer from this fact that people have become more peace loving” (Little and Zeitzoff, 2017, 17).

Structure and Anarchy

As important as the immediate situation and the logic of interaction can be in determining an individual’s behavior, there are other contexts that matter as well. To international relations theorists, perhaps the most important of these is international anarchy. The word “anarchy,” in this context, does not connote chaos or disorder; rather, it refers to the lack of any overarching political authority in the international system. While an experimenter’s office or a war zone may be the context within which people interact, anarchy is the context within which countries interact.

The importance of anarchy lies in the incentives that it produces for the countries that make up the international system. In the absence of a global police force capable of righting wrongs as serious as invasion and conquest, no country can be assured of its own survival. Each must prepare, to some degree, for the possibility of conflict with others, no matter how peaceful its intentions. Because those intentions can never be known with certainty and countries concerned about their own survival are often risk averse, that preparation in and of itself can be seen as threatening. This situation, in which actions taken to increase the security of one country prompt reactions that increase tensions and create conflict, is known in the international relations literature as the “security dilemma.”¹¹

Without a doubt, the classic modern work on the impact of anarchy on international politics remains Kenneth Waltz’s *Theory of International Politics*. While Waltz did not deny that human nature and domestic politics can play a role in determining a country’s foreign policy,¹² he argued that they were typically swamped by the logic of survival under anarchy.

The state among states, it is often said, conducts its affairs in the brooding shadow of violence. Because some states may at any time use force, all states must be prepared to do so—or live at the mercy of their militarily more vigorous neighbors. Among states, the state of nature is a state of war. This is meant not in the sense that war constantly occurs but in the sense that, with each state deciding for

itself whether or not to use force, war may at any time break out. . . . Among men as among states, anarchy, or the absence of government, is associated with the occurrence of violence. (Waltz, 1979, 102).

The idea that anarchy stood in the way of a reduction in international warfare was also endorsed by none other than Professor Norbert Elias, the German sociologist whose work on the “civilizing process” is one of the biggest influences on Professor Pinker’s book:

At the international level there is no overarching power to prevent a stronger state from invading a weaker state to demand taxes and obedience from its citizens and so de facto to annex the weaker state. Nobody can prevent a mighty state from doing this except another mighty state. And if such states exist they live in constant fear of each other, in the fear that their rivals could become stronger than themselves.¹³

Waltz’s book prompted countless counterarguments, modifications, clarifications, extensions, and heated debates. Robert Axelrod (1984) argued that cooperation among self-interested actors could easily evolve despite anarchy, thanks to the promise of future interactions—the so-called “shadow of the future.” Robert Keohane (1984) argued that an evolving web of international institutions was increasingly able to facilitate international cooperation. Later, Alexander Wendt (1992) took a considerably more radical position, arguing that, as the title of the article puts it, “anarchy is what states make of it”: anarchy is not an inherent feature of the international system but is rather a social construction that is amenable to reinterpretation.

It is no exaggeration to say that these and related works laid the foundation for international relations theory for decades. A summary of the research that came in their wake would take multiple chapters. The main point, though, is that much of the debate centered on the impact of anarchy on the behavior of the countries that make up the international system and how that impact might be mitigated.

At a minimum, the logic of international anarchy calls into question the claim that a nonviolent public will automatically produce a nonviolent foreign policy. As the old Latin adage goes, *Si vis pacem, para bellum* (If you want peace, prepare for war). Even strong advocates

of nonviolence can find themselves compelled to advocate military means to defend the national interest, and the defense of the national interest is a constant concern in the absence of world government. Self-defense can easily be mistaken for aggressive intent and produce precisely the conflict that it is meant to deter. For the most part, Pinker and Mueller, the main advocates of the norms-of-nonviolence explanation, simply don't address international anarchy or explain how the peaceful dispositions of the citizens of a country could prevail in an international context that compels countries to risk conflict.¹⁴

The Spread of Enlightenment Humanism

Another reason to be skeptical of the argument that underpins the more ambitious variant of the decline-of-war thesis is that the causal story that drives it—the spread of Renaissance humanism and empathy—is a bit too neat and clean to be true. The idea that human progress marches steadily in a single direction, albeit with occasional slight stumbles and reversals, is an example of what the eminent British historian Sir Herbert Butterfield (1965, v) called “the whig interpretation of history”:

the tendency in many historians to write on the side of Protestants and Whigs, to praise revolutions provided they have been successful, to emphasise certain principles of progress in the past and to produce a story which is the ratification if not the glorification of the present.

Regardless of the debate, Butterfield (1965, 5) writes, “The historian tends in the first place to adopt the whig or Protestant view of the subject, and very quickly busies himself with dividing the world into the friends and enemies of progress.”

Whiggish accounts of history suffer from multiple shortcomings. In the first place, they tend to view the past through the lens of the present and overemphasize those elements of history that are comprehensible and sympathetic to their authors. For that reason, the understanding of the past that they convey is biased in favor of the ideas and institutions of the present. That bias tends to produce a narrative that emphasizes historical progress toward those ideas and institutions rather than the usually more complex, usually more alien understanding of history as it actually happened.

Such accounts are also teleological, meaning that they tend to portray history as progressing toward a particular goal rather than as being driven toward an uncertain future by the ideas, resources, and passions of the peoples who comprise it. Hindsight is always 20/20, as the saying goes, but Whiggish hindsight is even more acute and considerably more narrow. Historians generally struggle against this artificial clarity, and with good reason.

Professor Pinker is clearly aware both of the charge of Whiggery and of its implications. He (2011a, 692) writes:

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.

Much of this book is devoted to an evaluation of that last claim, so I'll leave it to the reader to decide whether or not it's warranted. I will note in passing that it seems to me to be an odd defense: Few if any Whig historians *don't* believe their accounts to be supported by the facts.

While the charge of Whiggery is a fairly abstract (one might even say “academic”) objection, it has real consequences. I briefly explore three below: an unwillingness to recognize those aspects of Enlightenment thinking that aren't especially pacifistic; the tension between perpetual peace and just war; and the fact that, even now, Enlightenment values are limited to a fairly small and unrepresentative part of the globe.

The Dark Side of the Enlightenment

The Enlightenment was an eighteenth-century movement that gave rise to some of the most powerful and enduring ideas of the modern era, many of which—representative governance, freedom, progress, an emphasis on reason, tolerance—are so fundamental to liberal democracy that many citizens simply take them for granted. It would be absurd to argue that the Enlightenment did not represent a substantial leap forward in human progress or that much of the betterment of the human condition that has taken place over the past two centuries does not owe a very considerable debt to the ideas that came out of the Enlightenment.

That said, the Enlightenment gave rise to a tremendous diversity of ideas, not all of which turned out to be either liberal or especially benign. The philosopher John Gray (2015), in his critique of *Better Angels*, makes this point more expertly than I will here, but the upshot of my complaint is this: The Enlightenment produced a big, complex, often contradictory body of ideas that don't all lead to outcomes that are liberal, peaceful, or progressive.

Exhibit A for this argument has to be Jean-Jacques Rousseau. Rousseau, one of the best-known of all Enlightenment thinkers, was also one of the most articulate critics of progress. He is most prominently associated with the argument that modernism, science, and progress are corrosive to morality. Johann Gottfried Herder, undeniably an Enlightenment philosopher, is perhaps the most central philosopher of nationalism, an idea that cuts directly against the universalism that is typically associated with Enlightenment thought and that is rarely associated with the spread of peace. Georg Wilhelm Friedrich Hegel's emphasis on freedom derived from the writings of such philosophers as Rousseau and Immanuel Kant, but in *Elements of the Philosophy of Right* he argued that true freedom can only be achieved via a strong state—an idea that would be anathema to modern libertarians but was welcomed by twentieth-century fascists as well as by Karl Marx, who adapted Hegelian ideas about historical progress to produce an entirely different brand of totalitarianism. If nothing else, the Cold War should have dispelled any notion that Enlightenment values will save us from conflict: Marx was nothing if not a child of the Enlightenment, yet his disciples clashed, dangerously and often and at staggering cost, with those of Locke and Kant.

The argument that Enlightenment humanism leads directly to peace also ignores the distinctly illiberal ideas that arise as a reaction to the shortcomings of Enlightenment thought and against the modernity that it ushered in. This point is the central theme of Pankaj Mishra's 2017 book *Age of Anger*, which argues that much of the violence of the past two centuries has its roots in the anger of the people left behind by modernity and the philosophies and demagogues to which they were drawn. Similarly, Mark Lilla's *The Shipwrecked Mind* is an extended meditation on the power of political nostalgia and the

reactionary ideas to which it gives rise, while Jan-Werner Müller's *What Is Populism?* highlights the antipluralist undercurrents that both arise from and erode liberal democracy. The bottom line in each case is that, even in democratic, free-trading societies that reflect the ideals of Enlightenment humanism, some people end up a lot happier than others, and disaffection can ripen into conflict.

Why do these examples matter? I'm not arguing that Kant didn't write *Perpetual Peace* or that the values of liberal democracy owe nothing to the Enlightenment. But when Professor Pinker argues that "liberalism, modernity, cosmopolitanism, the open society, and Enlightenment values always have to push against our innate tribalism, authoritarianism, and thirst for vengeance" (Edsell, 2017), he misses the point that much of that tribalism and authoritarianism owe their present-day expression either directly or indirectly to the Enlightenment as well. That, in turn, raises the very real possibility that the relationship that Pinker and others see between Enlightenment values and peace is either circular or wrong. If the only Enlightenment ideas that are acknowledged as such are those that haven't given rise to war, the proposition that Enlightenment values cause peace becomes true by definition. If we look at the full range of ideas that came out of the Enlightenment as well as those that have arisen as a reaction against the more liberal ones, it becomes hard to sustain the claim that Enlightenment values inevitably lead to peace.

Indeed, scholars who have taken a broader and more nuanced view of the Enlightenment have often found it to be a mixed blessing at best when it comes to peace. Some even conclude that it has done more harm than good. Roger Osborne, after a sweeping review of Western civilization in which he chronicles ideologies, extremism, genocide, war, and a shocking range of examples of what Robert Burns called "man's inhumanity to man," offers a forceful and not atypical summary:

There remains a belief, particularly among liberal westerners, that [the present moment] is simply a short-term crisis brought on by the hypocritical piety of certain leaders. There is even an idea that the current situation has been brought about by irrational, religious-based ideas, and that a healthy dose of rationalism will put us back on course. The history of the last 2,500 years, and the last 150 years in

particular, shows that this is an illusion. The fundamental western belief that there are rational ways of organizing the world which will bring benefit to all has been at the root of every human-made catastrophe that has overtaken us. (Osborne, 2006, 491–492).

I'm not a scholar of the Enlightenment by any means. But I'm pretty sure that a discussion of the Enlightenment that only covers the parts about science, reason, progress, and peace does not do the subject justice. Pinker's disagreement with a broad swath of Enlightenment scholars on the nature and implications of the Enlightenment is evident in *Enlightenment Now*, which offers the bizarre spectacle of the Johnstone Family Professor in the Department of Psychology at Harvard University taking a populist position against the intellectuals who disagree with him. Perhaps predictably, the book was savaged by precisely the Enlightenment scholars who would normally be expected to cheer him on.¹⁵

Just War and Perpetual Peace

It's difficult to imagine any ideology of progress leading to the abolition of war, simply because wars are often fought to further somebody's notion of human progress. Even people who subscribe to Enlightenment ideals believe in the concept of a just war, or a war that is considered to be morally justifiable.¹⁶ For that reason, the moral underpinnings of Western liberalism can make people *more* willing to fight under some circumstances than they otherwise would be. As Rory McCann's character, Sandor Clegane, put it in *Game of Thrones*, "Lots of horrible shit in this world gets done for something larger than ourselves."¹⁷

One category of liberal just war is humanitarian intervention, or intervention to protect the human rights of people under threat. As Professor Gary Bass (2008) demonstrates in his engaging study of the subject, the spread of liberalism in Europe corresponded with the rise of humanitarian intervention in practice, starting with the Greek civil war in the 1820s. Recent examples include NATO's involvement in Kosovo in 1999 and Libya in 2011, as well as, arguably, the present conflict with Islamic State forces.

While some commentators do see a trend away from American humanitarian intervention starting with the George W. Bush administration (Kim 2003), global trends are moving in precisely the opposite direction. In 2005, the member states of the United Nations ratified a new doctrine known as the Responsibility to Protect (R2P). While in many ways R2P establishes a formal framework for humanitarian intervention that relies as much as possible on nonviolent means, it also establishes as a fundamental principle of international law not just the right of the international community to violate the sovereignty of independent states in order to protect their populations from human rights abuses but their actual *responsibility* to do so. Given many states' present human rights practices, if taken seriously this principle could lead to widespread intervention that would not have been countenanced or even contemplated in the absence of liberal Enlightenment norms and values. Professor Page Fortna (2013, 569) makes this point succinctly in her review of Professor Goldstein's book:

I support R2P on ethical grounds, and think it will lead to a more just world, but there is a tension here that goes unremarked. Another word for *military intervention*, even if its motive is humanitarian, is *war*. R2P may well increase violence rather than reduce it.

R2P goes beyond intervention, of course. If intervention fails to address the root causes of human rights violations or, worse, destabilizes a state and makes future violations more likely, it will have accomplished little. NATO's intervention in Libya, for example, while hailed as a "model intervention" at the time (Fortna, 2013, 569), left a greatly destabilized country where what little security there was was provided by rival militias.

Accordingly, as the International Coalition for the Responsibility to Protect puts it, "advocates around the world have embraced [R2P] as a full spectrum of responsibility: from the responsibility to prevent, to react, and to rebuild."¹⁸ When, as is often the case, the government of the country in question is responsible for human rights violations, measures up to and including regime change and nation building, *à la* Iraq and Afghanistan, plausibly fall under the umbrella of peacebuilding.¹⁹

Again, these are not necessarily bad goals. Muammar Gaddafi was massacring his people with breathtaking brutality in order to avoid the fate experienced by other leaders during the Arab Spring, and stopping him was the right thing to do. We cannot pretend, however, that stopping him did not amount to military intervention, or that the price of stopping him itself isn't still being paid in blood. A good cause may justify the use of violence, but it doesn't erase the fact of it.

The Study of WEIRD People

By far the best examples of a spread of peace in the decline-of-war literature come from the Western industrialized countries in the post-World War II era. One of Pinker's (2011a, 249–251) most memorable passages has to do with the number zero: No country has used nuclear weapons on another since 1945, no Great Powers have fought one another since 1953, no interstate wars have been fought by European countries, no countries have conquered parts of other countries by force (those last two have to be updated in light of Russia's 2014 war with Ukraine), and so on. Most of these zeros involve the advanced industrialized countries that Pinker argues are at the vanguard of the spread of Renaissance humanism.

This narrow focus omits a lot of people, and there's no reason to believe that the people it includes are representative of the rest. In fact, there are very good reasons to believe that they're not. In 2010, psychologists Joseph Henrich, Steven J. Heine, and Ara Norenzayan (2010, 61) wrote what has since become a very widely cited paper on exactly this issue. Titled "The Weirdest People in the World?," the article pointed out that behavioral scientists regularly draw conclusions from studies of people who are WEIRD—Western, Educated, Industrialized, Rich, and Democratic. WEIRD people, the authors argue, are "among the least representative populations one could find for generalizing about humans" when it comes to traits like cooperation, fairness, and moral reasoning—precisely the sorts of traits that Pinker argues underpin the decline of war.

As you'll see in detail later in the book, I don't think that the claims of a recent decline of war among WEIRD people are entirely wrong. But WEIRD people aren't the only ones who have managed to put a damper on international conflict: other "islands of peace" have existed

at different points in time, and many of them can't be attributed to WEIRDness.

The Role of Chance

My final reason to be skeptical of the major arguments and findings that support the decline-of-war thesis is more abstract but no less important than those that I've listed so far: They generally don't take into account the role of chance.

We don't tend to think about the role of chance much when we're contemplating international conflict. We tend to assume that because things happened a certain way, they *had* to happen that way. We see history as a concrete series of events, and if a particular kind of event like the use of force between two countries happened more during one part of history than it did during another, that's all we need to know. That's the only way it could have happened.

A more sophisticated variant of this argument is grounded in the distinction between populations and samples. The wars that we're interested in are bounded by concrete dates. That means that we have, not a sample of wars, but rather the complete population of wars that occurred during those historical periods. If we have the complete population, one might argue, why are we doing statistical inference at all?

An analogy helps to clarify this position: Survey researchers typically interview only a tiny fraction of a given population, so their conclusions about the population as a whole ("Smith's job approval rating is at 32%, $\pm 3\%$ ") include some degree of uncertainty. But what if they interviewed the entire population? They'd be able to say that Smith's job approval rating is exactly 33.12% (or whatever). There wouldn't be any uncertainty at all about the population's views. Analogously, if you think of these sets of wars as the complete population of wars that happened during those two time periods, then it makes no sense to talk about uncertainty.

This reasoning doesn't command a majority position among the stats-and-war crowd. In fact, I can't think of any practitioner who has actually espoused it. I think that's because the overwhelming majority of us believe, at least implicitly, that the history that we have observed was not fated to happen the way that it did—that chance events could very easily have changed the outcome. To return to the survey research example, people's answers to survey questions about things like approval ratings

are rarely so concrete that you'd get exactly the same answer under different circumstances. If you ask me about President Smith on the first sunny day of spring, when I'm out of my office and enjoying the weather, I might tell you that Smith is doing a bang-up job. If you ask me the same question in the dead of winter, before I've had my morning coffee, I might give you a much less charitable assessment. If that's the case more generally, even a survey of the entire population would produce results that contain some uncertainty because, if you did it over again, you'd get a different number.

So it is with war. In any war, there are critical junctures at which things might have gone a different way. Hitler's Germany might have been stopped cold by the French in 1940 and slowly rolled back to Berlin. Or, as fans of *The Man in the High Castle* would point out, things could have gone another way: As that alternative history goes, Giuseppe Zangara could have succeeded in his 1933 attempt to assassinate Franklin Delano Roosevelt, thereby eliminating both the New Deal and the Lend-Lease Act and undermining the Manhattan Project to such an extent that the Nazis develop atomic weapons first, bomb Washington, and end up dividing North America with the Japanese Empire. One of Paraguayan President Francisco Solano López's military commanders could have talked him out of his doomed war against Argentina, Brazil, and Uruguay in the 1860s, or talked him into surrender once it was clear that the war was going very poorly. Or, as I pointed out back on page 26, the Cuban Missile Crisis could very easily have escalated to nuclear war if one of the three Soviet officers on a Foxtrot-class submarine had changed his mind. When you add up all of those little chance events, it's hard not to conclude that history could very easily have played out differently—that some wars could have been far more deadly and others far less so.

As these examples suggest, chance plays a prominent role in warfare in at least two ways. First, while we can spot conflict-prone situations or regions, we cannot with any certainty predict when conflict will actually break out until it's about to happen, and sometimes not even then. The rate of conflict onset should be higher in conflict-prone situations, but that's a statistical generalization, not a point prediction.

The second way in which chance plays a role in warfare has to do with escalation. Despite the fact that war has been dissected and analyzed in

hundreds if not thousands of scientific books and articles over the past few decades, we simply don't have any meaningful idea of how deadly a war is going to be before it starts. The opposing parties can't really have a clear idea about how much blood has to be shed before a negotiated settlement becomes possible. Worse, although many wars remain fairly small, a very small number of wars become shockingly large—and we don't know with any degree of certainty which wars will fizzle out and which ones will escalate to cataclysmic proportions.

This fact raises a real problem for analysts: How do we distinguish the signal from the noise? Looking only at a series of events and non-events, how can we tell whether the fundamental relationships that govern the thing that we're interested in (the amount of underlying tension that produces conflict, or the escalatory dynamics that turn a few small wars into really big ones) have changed, or whether we're just looking at the kind of chance variation that we'd expect to see over time?

This problem is exacerbated by one of those odd quirks in human psychology: We try pretty hard to spot patterns in random data. There is even a name for this predilection: *apophenia*, the human tendency to perceive meaning in random or meaningless information. The constellations are an obvious example of people's ability to pick out meaningful patterns from a random array of stars. The persistence of horoscopes, too, is a testament to our capacity for seeing patterns in our daily lives where (sorry) none exist. The number of people seeing images of Jesus in everything from toast to marmite to sliced potatoes is so well known that it has inspired a "grilled cheezus" sandwich press.

In short, we humans simply can't be trusted to eyeball something and decide whether or not it's the result of chance. We need statistical inference to keep us honest. Statistical inference is designed with exactly this problem in mind. Its value lies in its ability to estimate, very precisely, how uncertain we are about our estimate of a number, whether that number is the rate of conflict initiation or the propensity of conflicts to escalate. Once we know how uncertain our estimates are, we can answer the central inferential question in the decline-of-war literature: How can we reliably differentiate changes in violent behavior from random noise?

Randomness in Thick-Tailed Distributions

Perceiving patterns in randomness is an especially acute problem when we're dealing with thick-tailed distributions, like the distribution of battle deaths in war. Thick-tailed distributions have the characteristic that the overwhelming majority of observations are relatively small in magnitude and the small number of very large ones are extraordinarily large. Because smaller events are so incredibly common, they're very likely to trigger our apophenia and make us conclude that there's a pattern there when there really isn't. Because larger events are so spectacularly large, moreover, they can make us think that we're looking at a new pattern when we really aren't.

Consider, for example, household income in the United States, which is measured by the Census Bureau's ongoing American Community Survey (ACS). Figure 3.1 shows a sample of household incomes from the ACS's 2009–2013 Public Use Microdata Sample (PUMS), an anonymized subset of the actual survey that is made available for researchers. This particular figure shows the incomes of 1.7 million of America's 123 million households. This is a notoriously thick-tailed distribution: while the majority of the households report modest or even negative income, the top 1% earn upward of \$430,000 per year.

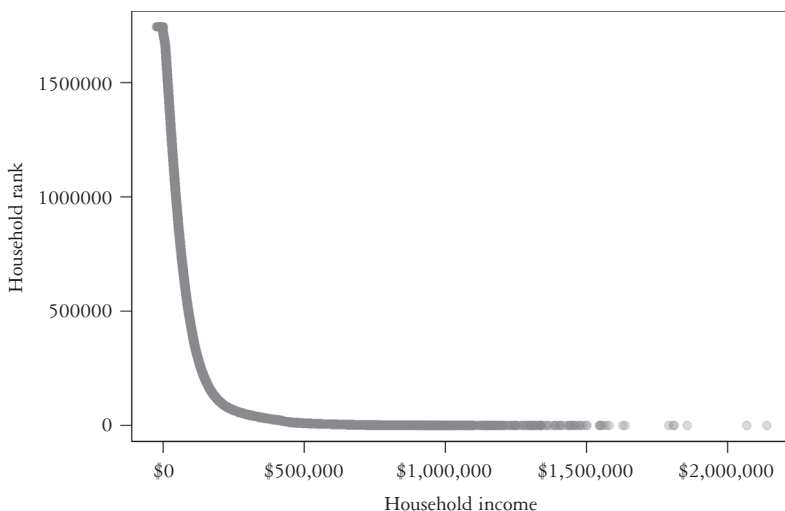


FIGURE 3.1 The distribution of a sample of American household incomes.

Even this sample understates the length of the tail in the distribution of income: if the long tail on the right captured the annual household income of software magnate Bill Gates, whose net worth increases by about \$5 billion every year,²⁰ the rescaling of the graph would make it impossible to distinguish anyone else's income from zero.²¹

Now, let's imagine that you've been hired by the Census Bureau to contact people and ask them questions about their lives, their families, their households, and so on as part of the ACS. You manage to reach fifty respondents over the course of your first day, and you dutifully record all of their answers. At the end of the day, it occurs to you that the calls you've been making didn't actually *seem* very random: your respondents got less wealthy as the day went on. A quick plot of income vs. respondent number for your fifty respondents (Figure 3.2) confirms your impression.²²

The first family you reached had a household income of about \$115,000—higher than average, to be sure, but not shocking. The next family, though, had a household income of over \$850,000, which ended up being the highest income of the day. The third and fourth households were unremarkable, but household five had an income of over \$190,000 and household six brings in over \$525,000! Tallying it up, you find that the first six households you reached had almost 40% of

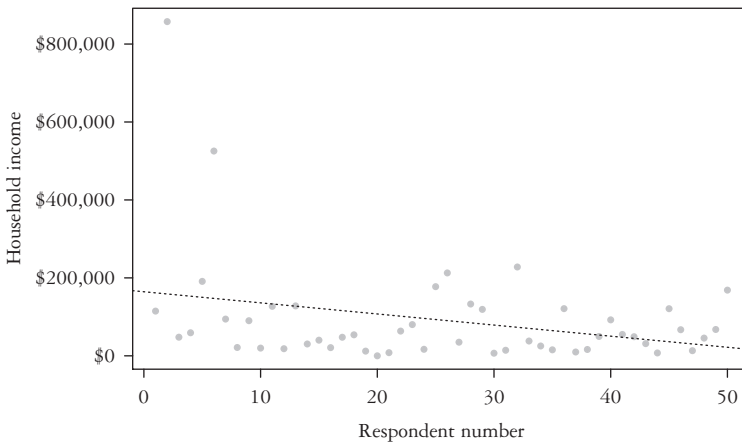


FIGURE 3.2 Illusory decline in average household income over the course of fifty interviews.

the total income of all fifty combined. That seems incredibly unlikely if this really is a random sample—and if it's not, there might be reason to worry about the entire survey. Should you contact your supervisor and explain your concerns?

The answer, as you've almost certainly surmised, is "no." It's not actually too unlikely that you'd get a couple of very wealthy respondents early on. They're rare, to be sure, but they're not *that* rare. What's more important is the fact that the distribution of income is really skewed: the largest incomes are a *lot* larger than the smaller ones. So when you do encounter a few households with really high incomes, your expectations for the rest of your calls are really out of whack. As the day progresses, you don't see any more really high incomes, and you start to wonder whether something has changed. It's normal to think that it has—the downward trend in the incomes of your respondents is pretty noticeable. But it really is an illusion: the fifty observations in Figure 3.2 were drawn totally at random from the PUMS data. It just looks a lot like a trend because the big outliers are so much bigger than we intuitively think they should be by chance—and because we humans are cursed with apophenia.

Now, with all that in mind, take another look at Figure 3.2. Once you've done so, flip back to Figure 2.9, the graph of annual battle deaths divided by world population. Keeping in mind the fact that battle deaths, like household income, follow a thick-tailed distribution, are you *really* confident that what you're seeing is a downward trend in the data and not just random noise? I'm not.

Another way to see this point is to take a look at Figure 3.3, which shows what happens when you draw random numbers from a normal distribution and a particular thick-tailed distribution called a *power law distribution* (which, not coincidentally, provides a pretty good fit to the data on the deadliness of war, as we'll see in chapter 5). The value on the y-axis is the *running mean* of these series of numbers: At observation 200, the running mean is the average of the first two hundred observations. The dashed line represents the average of the distribution from which these observations are drawn. If you want to use a sample value as an estimate of that average, the running mean should converge to the underlying average value pretty quickly.

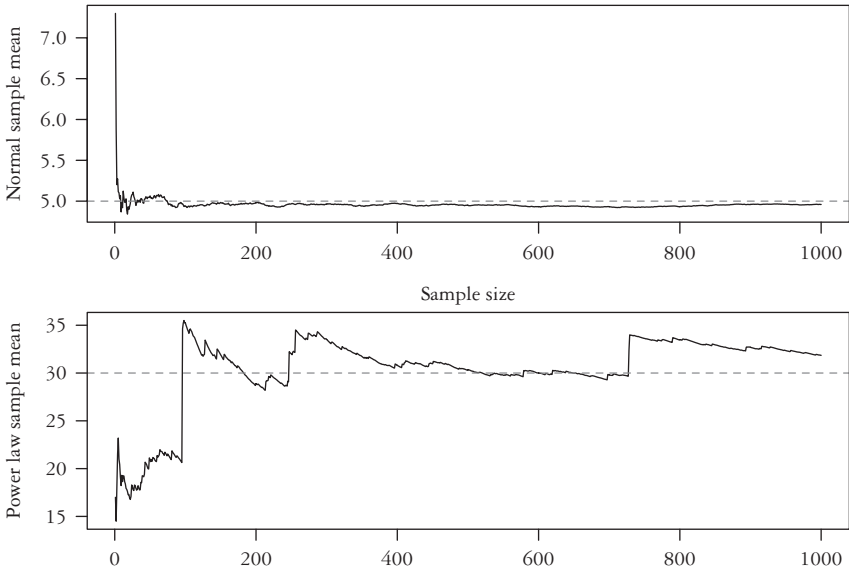


FIGURE 3.3 Running means of random samples drawn from normal (top) and power law (bottom) distributions as the number of observations increases from 1 to 1,000. Dashed gray lines represent the true average, or population mean.

We can see that in the case of the normal distribution, it does just that. The initial average of your sample observations may be off by a fair bit initially, but it very quickly converges to something close to the true underlying average value and more or less stays there. This is why we can get reasonable estimates of the characteristics of a population (on, say, a survey) just by looking at a sample.

The sample average of the data drawn from a power law distribution, by contrast, wanders all over the place and depends crucially on the number of large observations that occur in the sample. If there are more than we'd expect, the sample average will be too high. If there are fewer, it'll be too low. And because those large observations are really rare events, it takes an incredibly long time for them to average out and produce a sample mean that's reliably anywhere near the value that we're trying to estimate. That's why we can't just use standard statistical tests, like a difference-of-means test, to answer the question of whether war

is becoming less deadly. Fortunately, as we'll see in chapter 5, there are some nonstandard statistical tests that can be of use.

Specifics aside, the point is this: The only way we can really know whether we're looking at a trend or at random noise is to rely on statistical tests to help us determine whether the number that we're trying to track, whatever it is, has changed more than we'd expect due to chance. Despite the fact that this problem is *at the heart of* the decline-of-war debate, such tests are routinely disregarded. In two recent articles in which there have been statistical tests of the battle-death data, the results indicate that the apparent trend is very plausibly an illusion—a normal pattern following the misleadingly large outliers of the late 1940s and early 1950s.²³

Conclusion

This chapter and the previous one have laid out a handful of reasons that have prompted me to be skeptical of the decline-of-war thesis. Undermining the evidence in favor of that thesis is not, of course, the same thing as showing that there is no decline: The absence of evidence is not evidence of absence. It is much harder to answer the question of whether or not war is in decline, and if so, when, where, and why. I take up this challenge in the next three chapters.