INTRODUCTION

My trade is courage and atrocities.

I look at them and do not condemn.

I write things down the way they happened,

as near as can be remembered.

I don't ask *why*, because it is mostly the same.

Wars happen because the ones who start them

think they can win.

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–MARGARET ATWOOD, The Loneliness of the Military Historian[1], 1995

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In Greek mythology the gods of war brought misery and mayhem. Ares, once let loose, became dangerous and terrifying. His companion, Enyo, destroyed cities, and his children embodied strife, fear, and dread. From Enyo's brother Polemos came the rarely used word 'polemology' for the study of war and the more frequent 'polemic' for aggressive language. Polemos appeared in Greek literature as war's vicious personification. One of Aesop's Fables describes how, as the gods chose their mates, Polemos struggled to find a partner. Eventually only Hybris was left. She was the goddess of reckless, arrogant pride, from whom we get the word 'hubris'. Polemos fell madly in love with Hybris and followed her wherever she went. The moral of the story was that the nations of the world should never allow Hybris to come among them for if they did war would not be far behind.

The Romans also linked war with the intrigues of the gods. Virgil's *Aeneid* described how war can become all-consuming, its furies sparing neither side, especially when it erupts into *discordia*—a civil war. Yet they also could see nobility and purpose in war. As Ares transformed into the

Roman god Mars, he gained dignity and praise as a guardian of the people rather than as a source of disruption. Enyo became Bellona, who came with shield and sword. She had her own temple for meeting foreign ambassadors, proclaiming victorious generals, and declaring wars. But Bellona was in no sense sedate. In early Roman times she was honoured by human sacrifices and drinking blood. Her role was to inspire and urge on the soldiers to violence. Virgil describes her as carrying a blood-stained whip.

Bellona's name derives from the Latin word for war, *bellum*. This word lives on when we talk of people inclined to war as being bellicose or belligerent. The English wordsmiths of the first millennium, however, considered *bellum* to be inappropriately close to the word for beauty, *bellus*. They therefore looked for alternatives. The term that came into use was an old English word for struggle or strife—*gewin*. This was eventually replaced by the German *werran*, which meant something similar, and is linked to our word *worse*. *Werran* became *weorre* and then *warre* in English, and *guerre* in French.

War therefore has a long association with confusion and discord, but also with honour and the defence of all that is most valued. This duality of war means that it is driven forward because something that really matters is at stake, yet shaped by means that are inherently destructive, unruly, hard to control and contain. This is why war invokes such contrary emotions. On the one hand it describes the grim consequences of conflict. War can tear the heart out of communities. On the other it can be a source of extraordinary solidarity. It tends to be filled with desperate moments of tragedy and sorrow, of cruelty and waste, but also of inspiring moments of heroism. The gadgetry of war fascinates just as much as its effects appal. States continue to prepare for war while professing to wish to legislate it out of existence. If they must fight, they insist, they will do so only for the most righteous of reasons, as a last resort, and in the most civilized manner. Western culture, not at all uniquely, is infused with a keen sense of this duality, of war as a terrible thing to happen but on occasion a noble and necessary thing to do. We define war through this duality, acknowledging its inescapable violence but requiring that at least this be organised and purposive. Random acts of violence or conflicts that are conducted without violence do not count as wars.

THE INDICTMENT OF WAR IS THAT THE PURPOSES SERVED can never justify the costs. While instances might be found to refute this charge attempts to defend war as a means of resolving disputes have struggled since the arrival of nuclear weapons in 1945. The possibility that they would be employed in a Third World War created a catastrophic prospect, and not only for the belligerents but also for humanity as a whole. In such a war there could be no nobility and no purpose, and the confusion and discord would reach unimaginable levels. This is one reason why the major powers held back from another great war, even as they kept up their military inventories and conducted research into new generations of weaponry. Without much difficulty, they looked into the likely character of a future war and decided that this was not one they could survive. Observing this in 1985, the historian John Gaddis coined the term 'the Long Peace' to describe the years since 1945. This was a period in which millions had died in violent conflicts. The great powers were often involved, but there was comfort to be drawn in the absence of war directly between them.[2] Perhaps by reaching such horrific peaks of destructiveness, great-power war had almost abolished itself.

Optimism on this score grew in the 1990s after the end of the Cold War. The Long Peace continued, leading to speculation that perhaps humankind had learnt something about war. The historian John Keegan wondered whether: 'War… may well be ceasing to commend itself to human beings as a desirable or productive, let alone rational, means of reconciling their discontents.'[3] The political scientist John Mueller had long taken a similar view: 'like duelling and slavery, war does not appear to be one of life's necessities'. It was a 'social affliction, but in certain important respects it is also a social affectation that can be shrugged off.'[4] The cognitive psychologist Steven Pinker in his book *The Better Angels of Our Nature*, published in 2011, marshalled a great array of sources to offer an even more encouraging prospect. Slowly but surely over human history, he reported, there had been a steady move away from reliance on violence to settle disputes.[5] The reason for this was normative progress, for among 'influential constituencies in developed countries' there was a growing 'conviction that war is inherently immoral because of its costs to human well-being.' On this basis, he argued, interstate war among developed

countries would surely go the way of those domestic customs that over time had moved from being 'unexceptionable to immoral to unthinkable to not-thought-about'. Here he had a long list of obnoxious practices, starting with slavery and serfdom, and moving on to include disembowelling and heretic-burning before concluding with flogging and keelhauling (a particularly nasty naval punishment).[6]

He had evidence to support his general thesis on the decline of violence. Fifteen per cent of our early ancestors met with a violent death; by the sixteenth century this was down to some 2 per cent; over the last century around 0.7 per cent of the world's population died in battle.[7] After the book's publication, the *Human Security Project*, based at Simon Fraser University in Canada, confirmed a positive trend. The number of interstate wars had shrunk from six a year during the 1950s (including anti-colonial wars) to barely one a year in the first decade of the twenty-first century. More startling was their report that the total number of all conflicts over this period had dropped by some 40 per cent while the deadliest had gone down by more than a half. In terms of fatalities the decline was even more remarkable. In 1950 the annual rate was approximately 240 reported battle-related deaths per million of the world's population; in 2007 it was less than 10 per million. Even taking account of the growth in the world's population, and noting that the trend has been far from linear, that was still an absolute and not just relative decline.[8] This positive conclusion was picked up not only by commentators but also by governments.[9] Pinker was careful not to promise that humankind was on the eve of an 'Age of Aquarius' in which violence had been abolished.[10] Combinations of personalities, circumstances, and chance could produce unexpected surges of death and destruction. Nonetheless the effect of his work was calming. He acknowledged that the situation might change, perhaps abruptly, but no reason was given to suppose that it would. '[F]rom where we sit on the trend line, most trends point peaceward.'[11]

The long-term decline in rates of homicides and state cruelty and in the incidence of all wars reflected, he argued, the progressive triumph of our 'better angels' of empathy, self-control, and morality over the 'inner demons' of instrumental violence, domination, revenge, sadism, and ideology. This had come together as a 'civilising process'.[12] The

contributing factors were: 'gentle commerce' encouraging trusting relationships across boundaries; 'feminisation', as women were less belligerent than men; an 'expanding circle of sympathy', as more cosmopolitan societies could not dismiss the pain and feelings of others as irrelevant or demonize them as subhuman; and, lastly, 'the escalator of reason', allowing for an intelligent, educated critique of claims that might once have been used to justify appalling practices. Underlying his argument, therefore, was a liberal scepticism about state power, opposition to militarism, disdain for mercantilism, and support of cooperative action and internationalism.

There were two big problems with Pinker's thesis. The first was the methodology. His focus was not the actual number of violent acts but the chances that an individual alive at a particular time would suffer a violent death. The yardstick therefore was the proportion of the world's population affected by violence and homicides as well as wars, measured as the number of deaths per 100,000 people.[13] On this measure he wished to show that there had been a persistent trend over centuries, even including the Second World War, the worst bloodletting of our time. Though past acts of violence may have been less deadly in their time, they represented larger proportions of the global population. Here he got himself into a tangle. As we shall see there is an enormous range of casualty estimates for the Second World War, and he was by no means taking the highest. Moreover, the speed of killing matters. Some terrible violence took place in the past but was over an extended period.[14] More seriously, the decline in deaths was not only a measure of violence but also of improvements in medical and social care and therefore longevity. With more people living past their fifties, the proportion of the population prone to street fights and military service declined. Over time the risk of being killed in battle went down.[15] Recruits now are likely to be healthier, and so able to cope better with injury. The only violence Pinker consistently considered was fatalities, but his charts might look different if he had looked at attempts to inflict bodily harm. Death tolls from deliberate violence measure consequences rather than intentions.

Knowing the proportion of the total world's population killed by war (and violence more generally) is unhelpful if the aim is to understand

social and political processes. Numbers need to be related to particular contexts. Even during the Second World War some parts of the world were barely affected by hostilities. Governments and individuals do not assess risks by reference to global possibilities but to actual situations. To know that one is living at a time when less than one per cent should expect to die in battle is of little value when facing a heavily armed enemy any more than it is of interest for a new mother in Africa to know the life expectancy of babies in North America.

The second problem with Pinker was his desire to demonstrate the progression of civilisation. With industrialisation and easier trade it was harder to see the gain in war, while the costs were invariably large and the risks high.[16] Imperial conquests once promised cheap acquisitions, but by the middle of the last century the urge to seek out more pieces of the earth's surface to control and exploit was largely spent, and by its conclusion most of those pieces taken as colonies had been handed back to local people. War imposed heavy demands in terms of debt, diverted industrial effort, and the loss of trading opportunities. Simply put, wars became not only more dangerous but also less profitable.

Pinker pushed this a step further, seeking to demonstrate that humankind was advancing on a long learning curve so that, with regrettable exceptions and occasional setbacks, it was getting progressively better at avoiding violence. When history was viewed as a sort of Manichean struggle between the angelic good and demonic evil, only the civilising process could explain war's decline. Armed force described the problem and so could never be part of the solution. Relying on balances of power was distasteful because they consigned nations to permanent anarchy by assuming leaders would 'act like psychopaths and consider only the national self-interest, unsoftened by sentimental (and suicidal) thoughts of morality.'[17] The idea that considerations of power might have recently worked to reduce violence by encouraging countries to avoid war out of common prudence was rejected. He saw no consistent effect at work and no correlation over history 'between the destructive power of weaponry and the human toll of deadly quarrels.'[18]

It is certainly now rare for states to come directly to blows, but it was also rare in earlier periods. The numbers of all interstate wars stayed low

during the post-1945 period, and there was no major war involving the great powers (though the 1950 Korean War was close). The position on civil wars, however, was much more mixed. The recorded conflicts showed a progressive rise from 1945, peaking in the early 1990s. There were forty armed conflicts in the world in 2014, the highest number since 1999. The number had risen from thirty-four in 2013, and they were becoming more deadly, with about a quarter accounting for all but a few per cent of the casualties.[19] There was no consistent and reliable trend line. A few of the conflicts had an enormous effect on the amount of violence around at any given time, such as Vietnam during the 1960s, or the Democratic Republic of the Congo in the 1990s, or Syria in the 2010s.

In 2011, the year Pinker's book was published, five Norwegian researchers, taking account of all the available research, sought to develop a model to predict internal conflict. This was done with considerable precision. They considered 'the most important structural factors that explain the onset, risk and duration of armed conflict' as an aid to good policymaking. If, for example, there was a high probability of conflict in Tanzania around 2030 then, the authors argued, 'the UN should monitor the country closely in order to be able to move early if this conflict should happen, and seek measures to address the underlying causes of conflict.' Overall their conclusion was optimistic: by '2050, the proportion of countries in conflict will be reduced to half the present rate.'[20]

They looked at the factors prominent in analyses of origins of civil war and the persistence of conflict, such as size, demography, including the numbers of unemployed young people, and the rate of socio-economic development. With economic growth, improved education, and healthcare came a measure of internal stability. On this basis, the 'main driver of the reduction in conflict that we predict', they reported, was the 'poverty reduction that the UN expects to continue over the next decades'. Just a few years of peace could make a real difference to a battered country's chances of escaping forever from violence. They highlighted 'the importance of assistance to post-conflict countries in the form of peacekeeping operations and other interventions.' These interventions could involve a range of actions from peacekeeping forces monitoring ceasefire arrangements to more robust engagements to impose a

settlement on recalcitrant parties.

Unfortunately a problem with the analysis was revealed quite quickly. The data stopped in 2010, so it did not include conflicts in countries not mentioned at all in the study, notably Syria. In an interview in late 2012 one of the leaders of the project acknowledged that conflicts in the Middle East had weakened the clear correlation between socio-economic development and the absence of civil war. The fighting in Syria and Libya had shown that 'we also have to include democratisation processes in the model'.[21] The problem was actually larger. By focusing on factors which made states prone to civil war the model could not take account of political developments, and in particular the upheavals within the Muslim world, which had unleashed a new wave of uncompromising, hard-line movements.

The incidence of war therefore is hard to predict. After a period of optimism at the start of the 2010s there was a turn to pessimism. Vicious conflicts in Ukraine and Syria caught the headlines and reminded of war's terrible cost. The rise of China into full great-power status promised turbulence in the international system. The attitude of the Russian leadership hardened, with President Putin stressing the importance of his country's military strength, while the replacement of President Obama by President Trump also appeared to put the United States on a more nationalist course. There were concerns about how well states would cope with the stresses and strains of economic downturns or climate change without coming apart in civil wars or finding themselves clashing with neighbours in a struggle for scarce resources.

QUESTIONS ABOUT THE RISKS AND LIKELY CHARACTER OF future war have long preoccupied politicians, military practitioners, diplomats, jurists, journalists, and novelists. They concern the ambitions of powerful states, the reliability of allies, potential performance in battle, the attitudes of oppressed peoples, the likely impact of the latest weaponry, means to mitigate war's harmful effects, and whether much might be expected from the latest international conference. These questions are now addressed with added professionalism in specialist think tanks, university departments of international relations, planning staffs at the top of

governments, dedicated cells in command centres, and horizon-scanning groups reporting to the chief executives of major defence contractors. How they answer determines whether their customers assume the risks of peace or anticipate those of war, or get taken by surprise in either avoidable war or in a fight that they might have expected to win.

A variety of agendas therefore have long informed writing on future war. The intent has rarely been deliberately predictive. This was not only for the obvious reasons—prediction is difficult and likely to be wrong—but also because the concern was often to make the audience aware of lurking dangers or exciting prospects. The aim was to prescribe courses of action that would improve security or avert catastrophe, encouraging governments to put more resources into the military, or shift priorities, or recognize the threat posed by some rising power, or redouble their efforts to resolve the most pressing disputes, or find a way to abolish categories of weapons or even outlaw war. Some were works of cool rationality, demonstrating the folly of war. Others displayed passionate advocacy to alert people to war's horrors. Some conveyed their message analytically, increasingly employing the methodologies of the social sciences, while others relied on more literary forms.

Whether we go back to what can now seem the naïve optimism from before the First World War, the fearful realism that preceded the Second World War, or the attempts to come to terms with the utterly terrifying prospect of a nuclear conflict, this literature is valuable for what it reveals about the assumptions of earlier times, what was feared and why, and the remedies proposed. It tells us what was thought about the sort of disputes that could trigger wars, the rivalries that mattered, and the critical capabilities that could make all the difference. Observing how our past appeared when it was the future can help us understand why events occurred as they did, how individuals became prisoners of their experiences and missed what was blindingly obvious to later generations, and occasionally saw with Cassandra-like clarity what was coming, only to be ignored by their contemporaries. In short, the future of war has a distinctive and revealing past.

There are examples of imaginative fiction that looked far ahead, most obviously the novels of H. G. Wells. Most writers on future war, however, described worlds resembling their own. They wrote about possibilities

inherent in the current state of affairs. Whether or not these would be realised depended on whether the right measures were taken, be they prudent forms of military provision or sensible efforts to resolve conflicts. This is why books about war were often books about peace, including schemes to eliminate war forever. Lastly, they were also about the past, because they picked up on observable social, political, economic, and technical trends. A plausible prospectus referred to events and tendencies that readers would recognise.

Two larger themes recur in this literature. First, a growing appreciation of the difficulties of containing war so that its destructiveness could be bounded in time and space, and second, linked to this, a search for a form of decisive force that might inflict a knockout blow on an enemy and so end a war quickly and successfully. Thoughts of future war often quickly alighted on a compelling strategy that might bring it to a speedy conclusion, promising if followed by one's own country but dangerous if adopted by an enemy. Far less thought was given to the consequences of a first blow that failed to floor the opponent, or how a war's course might be increasingly determined by non-military factors, including the formation and breaking of alliances, underlying economic and demographic strength or the public's readiness to make sacrifices and tolerate casualties.

Explanations for why the first moves in a coming war might be more successful than those attempted in previous wars tended to point to new technologies or tactics. It was easier to anticipate the hardware than the politics, because there was normally some idea on what was in the developmental pipeline. Machine guns, submarines, aircraft, armoured vehicles, radar, missiles, nuclear weapons, precision guidance, digitisation and artificial intelligence all challenged in their time established ways of thinking about the forms battle might take and the effort required for victory.

Although technology was presented as the main driver of change in warfare, its influence was shaped by the political context. The dismantling of empires, and later the implosion of European communism, led to the creation of many new states, a number with fragile political institutions, undeveloped economies, and social divisions. Much contemporary conflict has been bound up with the efforts of the governments of these countries to cope in conditions of continuing instability, the regional reverberations

of their inability to do so, and attempts by outsiders to identify and deal with the causes and consequences of these conflicts.

Compared with the continuing and intensive study of how a great-power war might come about and what would happen if it did, until the 1990s far less effort was expended on civil wars, although these were far more frequent and often extremely deadly. There were always available scripts for great-power war and even great-power peace: when it came to civil wars, and external interventions to soften their impact and bring them to a close, the scripts were almost entirely improvised. The more it became necessary to look into particular societies at the violence within them, the more the definitions of war came to be stretched. The category could include both a nuclear war of short duration destroying whole civilisations, and some vicious local combat that had continued for years while neighbours barely paid attention. It has become reasonable to ask whether the more ferocious forms of gang warfare, hidden from view in the slums of modern mega-cities, should now count as armed conflict.

The reason that the future is difficult to predict is that it depends on choices that have yet to be made, including by our governments, in circumstances that remain uncertain. We ask questions about the future to inform choices not to succumb to fatalism. By stressing this aspect of thinking about war, peace, and the use of armed force this book provides a reminder that history is made by people who do not know what is going to happen next. Many developments that were awaited, either fearfully or eagerly, never happened. Those things that did happen were sometimes seen to be inevitable in retrospect but they were rarely identified as inevitable in prospect. 'History', as John Comaroff has observed, can be usefully studied as 'any succession of rupturing events which together bring to light our misunderstandings and misrecognitions of the present'.[22]

This book locates the writing on future war in the concerns of the time. The aim is not just to assess how prescient different writers were, or whether they could have done better given what was known about new weaponry or the experience of recent wars, but to explore the prevailing understandings about the causes of war and their likely conduct and course. How people imagined the wars of the future affected the conduct

and course of those wars when they finally arrived. Unanticipated wars, in forms that had not been imagined, left participants and commentators struggling to understand where they had come from and how they might best be fought. The focus is largely but not solely on the United Kingdom and the United States. These countries are chosen not just because they happen to be the two that I know the best but because they have been at the top of the international hierarchy for some time. Due to their position, they worried more than most about a range of threats: they had a global perspective, and they were anxious about any disruptive challenge to a status quo which suited them well.

The book is divided into three parts. The first looks at the period from the middle of the nineteenth century to the end of the Cold War from around 1990. During this period there were dramatic developments in the technology and practice of warfare, including two world wars and concern about an even more cataclysmic third. The starting point, however, was an idealised model of warfare geared towards decisive battles that could be used to regulate relations among the great powers. This model encouraged efforts to achieve the maximum effect with the first blow in the hope that the resulting conflict could be contained and kept short. This model came under strain not only because of the difficulty of keeping wars short but also because of the progressive importance of the civilian sphere—as a source of resistance but also as a target. Attacking civilians became a way of disrupting the enemy war effort, coercing a society into seeking peace terms, and, at the extremity, eradicating a hostile population. These tendencies all peaked in the Second World War, with the Nazis seeking to exterminate European Jewry, partisan warfare in occupied territories, and massive air raids against major cities, culminating in the two atomic bombs of August 1945. Nuclear technology raised the possibility of the obliteration of whole civilisations. The effect of this was to introduce great caution into great-power relations, as war became an extraordinarily high-risk venture, and to encourage searches for ways to fight using new technologies that would reduce dependence upon nuclear threats. Because these were the wars that Western countries had to prepare to fight they dominated writings on future war, in both imaginative fiction and professional commentary.

Part II covers the period after 1990. The great surprise turned out not to

be the cunning ways that adversaries found to catch out the West but the speed with which the Soviet Union and its Warsaw Pact alliance fell apart. The Soviet Threat that had so dominated all considerations of future war was suddenly absent. With no obvious scenarios for major war, a whole intellectual and policy effort ground to a shuddering halt. Attention soon moved to civil wars, not so much because they were a new phenomenon but because they began to draw in Western powers. As this happened there was no body of theory to illuminate the character of civil wars and provide guidance on intervention. The supposition had to be that the pattern for the future was being established. In trying to make sense of present conflicts, academics and practitioners hoped to set the terms for future engagements. But they struggled to do this. A better understanding of the nature and character of these wars meant that they often appeared even more complicated and intractable than previously supposed.

It was not humanitarian considerations but the al-Qaeda attack on the United States of 11 September 2001 that created the strategic imperatives for intensive Western intervention in Afghanistan and Iraq. The experience was sobering. It proved difficult to find the right mix of armed force and social reform that would make it possible to defeat insurgencies and bring stability to war-torn countries. Somehow to escape from the trap of perpetual conflict it was necessary to address the sources of fragility in states, but this required levels of external support that in most cases was difficult to provide, especially without credible indigenous political leadership. The quarter century after the end of the Cold War thus combined an improving academic appreciation of the sources of conflict in non-Western conflicts, deeper and more realistic than anything available in 1990, with an arc of Western engagement. The arc began tentatively, fuelled by greater commitment and ambition, until disillusion set in, confirming the early inclination to stay clear of these conflicts. There had been a search for a new type of future for war, but it had not been found.

In Part III we see how as enthusiasm for overseas interventions waned, great-power conflict made a comeback. Russia asserted its distinctive interests while China's rapid economic growth began to put it in a position where American predominance in the Asia-Pacific region might be challenged. Technological advances in robotics and artificial intelligence

gave credibility to visions of future battle populated by automatons and offered the prospect of sleek and almost dehumanised versions of the ideal type of classical warfare. The practice suggested continuing tentativeness by the major powers when contemplating war with each other, reflected in the adoption of forms of warfare short of all-out war—perhaps involving attacks on cyber-systems or using information warfare as much as armed force. At the same time, against these idealised models of future combat, or the persistent fears of a nuclear confrontation, there was the everyday reality of grim, grinding civil wars, drawing in outsiders whose interventions were as likely to keep them going as bring them to a conclusion. There is no longer a dominant model for future war, but instead a blurred concept and a range of speculative possibilities.