# WAR

How Conflict Shaped Us

# MARGARET MACMILLAN



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# Contents

Introduction	I
One: Humanity, Society and War	14
Two: Reasons for War	41
Three: Ways and Means	61
Four: Modern War	95
Five: Making the Warrior	133
Six: Fighting	163
Seven: Civilians	189
Eight: Controlling the Uncontrollable	218
Nine: War in Our Imaginations and Our Memories	251
Conclusion	282
List of Illustrations	290
Bibliography	293
Acknowledgements	308
Index	310

### INTRODUCTION

'War remains, as it always has been, one of the chief human mysteries.'

- Svetlana Alexievich, The Unwomanly Face of War

War. The word alone raises a range of emotions from horror to admiration. Some of us choose to avert our eyes as if the very act of remembering and thinking about war somehow brings it closer. Others of us are fascinated by it and can find in war excitement and glamour. As a historian I firmly believe that we have to include war in our study of human history if we are to make any sense of the past. War's effects have been so profound that to leave it out is to ignore one of the great forces, along with geography, resources, economics, ideas, and social and political changes, which have shaped human development and changed history. If the Persians had defeated the Greek city-states in the fifth century BC; if the Incas had crushed Pizarro's expedition in the sixteenth century; or if Hitler had won the Second World War, would the world have been different? We know that it would although we can only guess by how much.

And the what-ifs are only a part of the conundrums we face. War raises fundamental questions about what it is to be human and about the essence of human society. Does war bring out the bestial side of human nature or the best? As with so much to do with war, we cannot agree. Is it an indelible part of human society, somehow woven in like an original sin from the time our ancestors first started organising themselves into social groups?

Our mark of Cain, a curse put on us which condemns us to repeated conflict? Or is such a view a dangerous self-fulfilling prophecy? Do changes in society bring new types of war or does war drive change in society? Or should we even try to say what comes first, but rather see war and society as partners, locked into a dangerous but also productive relationship? Can war – destructive, cruel and wasteful – also bring benefits?

Important questions all, and I will try to answer them, and others that will come up along the way, as I explore the subject. I hope to persuade you of one thing, however. War is not an aberration, best forgotten as quickly as possible. Nor is it simply an absence of peace which is really the normal state of affairs. If we fail to grasp how deeply intertwined war and human society are – to the point where we cannot say that one predominates over or causes the other – we are missing an important dimension of the human story. We cannot ignore war and its impact on the development of human society if we hope to understand our world and how we reached this point in history.

Western societies have been fortunate in the last decades; since the end of the Second World War they have not experienced war first-hand. True, Western countries have sent military to fight around the world, in Asia, in the Korean or Vietnam Wars or in Afghanistan, in parts of the Middle East or in Africa, but only a very small minority of people living in the West have been touched directly by those conflicts. Millions in those regions of course have had very different experiences and there has been no year since 1945 when there has not been fighting in one part of the world or another. For those of us who have enjoyed what is often called the Long Peace it is all too easy to see war as something that others do, perhaps because they are at a different stage of development. We in the West, so we complacently assume, are more peaceable. Writers such as the evolutionary psychologist Steven Pinker have popularised the view that Western societies have become less violent over the

past two centuries and that the world as a whole has seen a decline in deaths from war. So while we formally mourn the dead from our past wars once a year, we increasingly see war as something that happens when peace – the normal state of affairs – breaks down. At the same time we can indulge a fascination with great military heroes and their battles of the past; we admire stories of courage and daring exploits in war; the shelves of bookshops and libraries are packed with military histories; and movie and television producers know that war is always a popular subject. The public never seems to tire of Napoleon and his campaigns, Dunkirk, D-Day or the fantasies of *Star Wars* or *The Lord of the Rings*. We enjoy them in part because they are at a safe distance; we are confident that we ourselves will never have to take part in war.

The result is that we do not take war as seriously as it deserves. We may prefer to avert our eyes from what is so often a grim and depressing subject, but we should not. Wars have repeatedly changed the course of human history, opening up pathways into the future and closing down others. The words of the Prophet Muhammad were carried out of the deserts of the Arabian Peninsula into the rich settled lands of the Levant and North Africa in a series of wars, and this has had a lasting impact on that region. Imagine what Europe might be like today if Muslim leaders had managed to conquer the whole continent, as they came close to doing on a couple of occasions. Early in the eighth century Muslim invaders conquered Spain and moved north across the Pyrenees into what is today's France. They were defeated at the Battle of Tours in 732, marking the end of the surge northwards. Had it continued, it is possible to imagine a Muslim and not a Catholic France shaping French society and European history over the next centuries. Some 800 years later the great Ottoman leader Suleiman the Magnificent swept through the Balkans and most of Hungary; in 1529 his troops were outside Vienna. If they had taken that great city the centre of Europe might have

become part of his empire and its history would have been a different one. The spires of Vienna's many churches would have been joined by minarets and a young Mozart might have heard different forms of music played on different instruments. Closer to our own times, let us imagine what might have happened if the Germans had wiped out the British and the Allies at Dunkirk in May 1940 and then destroyed Britain's fighter command in the Battle of Britain that summer. The British Isles might have become another Nazi possession.

War in its essence is organised violence, but different societies fight different sorts of wars. Nomadic peoples fight wars of movement, attacking when they have an advantage and slipping away into vast open spaces when they do not. Settled agricultural societies need walls and fortifications. War forces change and adaptation, and conversely changes in society affect war. The ancient Greeks believed that citizens had an obligation to come to the defence of their cities. That participation in war in turn brought an extension of rights and democracy. By the nineteenth century the Industrial Revolution made it possible for governments to assemble and maintain huge armies, bigger than anything the world had seen before, but that also created an expectation among those millions of men who were conscripted that they would have a greater say in their own societies. Governments were obliged not only to listen but also to provide a range of services, from education to unemployment insurance. The strong nation-states of today with their centralised governments and organised bureaucracies are the products of centuries of war. Memories and commemorations of past victories and defeats become part of the national story and nations require stories if they are to be cohesive. Such centralised polities, whose people see themselves as part of a shared whole, can wage war on a greater scale and for longer because of their organisation, their capacity to use the resources of their societies and their ability to draw on the support of their citizens. The

capacity to make war and the evolution of human society are part of the same story.

Over the centuries war has become more deadly, with greater impact. There are more of us; we have more resources and more organised and complex societies; we can mobilise and engage millions in our struggles; and we have a much greater capacity to destroy. We had to come up with new terms to describe the two great wars of the twentieth century: world war and total war. While some threads run consistently through the history of war and human society – such as the impact of changes in society or technology, attempts to limit or control war, or the differences between warriors and civilians – I will be paying a lot of attention to the period since the end of the eighteenth century, because war has become not just quantitatively different but qualitatively. I will also draw many of my examples from the history of the West, because it has pioneered so much in the recent past in war, as well as, it must be said, attempts to keep it under control.

Yet in the majority of Western universities the study of war is largely ignored, perhaps because we fear that the mere act of researching and thinking about it means approval. International historians, diplomatic historians and military historians all complain about the lack of interest in their fields, and of jobs too. War or strategic studies are relegated, when they exist, to their own small enclosures where those called military historians can roam away, digging up their unsavoury titbits and constructing their unedifying stories, and not bother anyone else. I remember years ago, in my first history department, we had a visit from an educational consultant to help us make our courses more appealing to students. When I told him that I was drawing up plans for a course called 'War and Society' he looked dismayed. It would be better, he urged, to use the title 'A History of Peace'.

It is a curious neglect, because we live in a world shaped by war, even if we do not always realise it. Peoples have moved or fled, sometimes disappeared literally and from history, because of war. So many borders have been set by war, and governments and states have risen and fallen through war. Shakespeare knew this well: in his plays war often provides the mechanism by which kings rise and fall while the ordinary citizens keep their heads down and pray that the storm will leave them unscathed. Some of our greatest art has been inspired by war or the hatred of war: the *Iliad*, Beethoven's 'Eroica' Symphony, Benjamin Britten's *War Requiem*, Goya's *The Disasters of War*, Picasso's *Guernica* or Tolstoy's *War and Peace*.

War is in the games children play - capture the flag or the fort – and one of the most popular video games of 2018 in the United States was Call of Duty, based on the Second World War. The crowds who go to sporting events sometimes treat them as battles with the other team as the enemy. In Italy those who are known as Ultra fans arrive at football matches in highly organised groups with a firm hierarchy of command. They wear uniforms and give themselves names such as Commandos, Guerrillas and, much to the dismay of many of their fellow Italians, some borrowed from the partisan bands of the Second World War. They come to do battle with supporters of the rival team more than to watch the match. The modern Olympics were meant to build international fellowship but from almost their first moment they mirrored competition between the different nations. The games were not war but they took on many of its attributes, with the awarding of medals, the playing of national anthems and teams in uniforms marching in unison behind their national flags. Hitler and Goebbels famously envisaged the 1936 Berlin Olympics as key in their campaign to show the superiority of the German people and, during the Cold War, tallies of medals were read as showing the superiority of one side over the other.

Even our language and our expressions bear the imprint of war. After they defeated the Carthaginians in the Punic Wars the Romans continued to use the expression 'Punic good faith'

(fides Punica) sarcastically. In English we say dismissively that someone or something is a flash in the pan without realising that the expression originated with early guns, when the gunpowder meant to ignite the charge flared to no effect. If the British want to be rude they will call something French or Dutch, because those nations were once enemies. Taking French leave means departing rudely and abruptly, while Dutch courage means drinking gin. (And the words British or English fill the same role for the French and the Dutch.) So many of our favourite metaphors come from the military, for the British especially from the navy. If we are three sheets to the wind eating a square meal might help. If we run into a spot of trouble we can wait for it to blow over or give it lots of leeway. If you don't believe me you can always say, 'Go tell it to the marines!' Our conversation and writing are sprinkled with military metaphors: wars on poverty, on cancer, drugs or obesity (I once saw a book entitled My War on My Husband's Cholesterol). Obituaries talk about the deceased as having 'lost the battle' with their illness. We speak freely of campaigns, whether in advertising or to raise money for charity. Business leaders read a Chinese work on strategy written 2,000 years ago for tips on how to outsmart the opposition and carry their enterprises to victory. They boast of their strategic goals and their innovative tactics and are fond of comparing themselves to great military leaders such as Napoleon. When politicians go to ground to avoid questions or scandals - firestorms, they are often called - the media report that they are in their bunkers trying to rally their troops and planning an offensive. In December 2018 a New York Times headline read: 'For Trump, a War Every Day, Waged Increasingly Alone'.

War is there too in so much of our geography. In the names of places: Trafalgar Square in London after Nelson's triumph; the Gare d'Austerlitz in Paris after one of Napoleon's greatest victories; Waterloo Station in London after his final defeat. In Canada there is a town which was once called Berlin-Potsdam because

it had been settled in the nineteenth century by German immigrants; when the First World War broke out, it suddenly became Kitchener-Waterloo. Our towns and cities almost always have their war memorials with the names of those who died or monuments to long-gone heroes. Nelson stands on his column in London; Grant's tomb is a popular meeting place in New York's Riverside Park. Increasingly in the past century, memorials have appeared to the rank and file, the often anonymous participants in war, such as nurses, pilots, infantry soldiers, marines, ordinary seamen and even, in the case of the United Kingdom, to the animals used in the two world wars. Reminders of past wars are so much part of the scenery we often do not see them. I have walked up and down Platform 1 at London's Paddington Station more times than I can remember, never noticing a large memorial to the 2,524 employees of the Great Western Railway company who died in the First World War. At Paddington too is a striking bronze statue of a soldier who stands there, dressed for war, reading a letter from home. Without the commemorations of the hundredth anniversary of the war I would not have stopped to see it, or taken the time at Victoria Station to search for the plaques to the vast numbers of soldiers who entrained there on their way to France, or the one to the body of the Unknown Soldier which arrived back in 1920.

If we pause to reflect on our own histories we can often find traces of war in our memories. I grew up in a peaceful Canada but many of the books and comics I read were about war, from the seemingly inexhaustible supply of G. A. Hentys, with stories of noble and heroic boys in most of the major conflicts before 1914, through the intrepid pilot Biggles and his crew in the Second World War to the Black Hawk comic books, which had started out in that war but moved seamlessly into the Korean one. At Brownies we sang songs – much cleaned up, I later realised – from the First World War and learned semaphore and how to make bandages. At school in the early 1950s

we collected string and foil for the war effort in Korea. We also practised sitting under our desks in case nuclear war broke out between the United States and the Soviet Union.

Many of us will have heard stories told by older generations who knew war first-hand. Both my grandfathers were in the First World War as doctors, the Welsh one with the Indian Army at Gallipoli and in Mesopotamia, and the Canadian one on the Western Front. My father and all four of my uncles were in the Second World War. They told us some but not all of what they had experienced. My father, who was on a Canadian ship escorting convoys across the Atlantic and into the Mediterranean, mostly had funny stories, but once and only once he told us how close they had come to being sunk. His voice shook and he could not go on. His own father never told him much about the trenches, but as often happens he talked to a grandchild, my sister, who was too young to understand much of it. Our grandfather also brought back a hand grenade as a souvenir which sat in my grandmother's curio cabinet along with such treasures as a miniature Swiss cottage and a tiny wooden Scotty dog. We played with the grenade as children, rolling it around on the floor, until someone noticed that it still had its pin. Many families must have such stories and mementoes, the packages of letters from war zones, artefacts picked up on battlefields, the old binoculars and helmets, or the umbrella stands made out of shell casings.

And the souvenirs keep coming as the battlefields around the world give up their debris. Eurostar has had to put up signs to remind passengers who have been to the battlefields of the First World War not to bring on board shells or weapons they have collected as souvenirs. Every spring Belgian and French farmers along what was once the Western Front pile up what they call the Iron Harvest. The winter frosts have heaved the land, bringing to the surface old barbed wire, bullets, helmets and unexploded shells, some of them containing poison gas.

Units of the French and Belgian armies collect the munitions for safe disposal, but the war still claims its victims, among farmers and the bomb disposal experts, workers who dig in the wrong place or the woodcutters who build a fire for warmth on top of a live shell. Construction in London and Germany still turns up, from time to time, unexploded bombs from the Second World War. And relics surface from much older wars. A ship dredging Haifa harbour in Israel found a magnificent Greek helmet from the sixth or fifth century BC. A retired schoolteacher out for a walk with his metal detector found a Roman helmet buried in a hill in Leicestershire. Scuba divers on a routine training exercise on the Shannon River in Ireland found a Viking sword from the tenth century.

Many societies have war museums and days of national commemoration when they remember their dead. And the dead themselves make unexpected appearances to remind us of the costs of war. On the quiet Swedish island of Gotland archaeologists unearthed the body of a local soldier in his chain mail. He had been killed along with many of his fellows fighting Danish invaders in 1361. Bodies can be preserved for centuries if they are buried in mud or mummified in hot countries. In the summer of 2018 archaeologists surveying land near Ypres for a housing development found the remains of 125 soldiers, German mainly, but also Allied, who had lain there since they fell in the First World War. In 2002 thousands of corpses, still dressed in their blue uniforms with buttons bearing the numbers of their regiments, were discovered in a mass grave outside Vilnius. They had died during Napoleon's retreat from Moscow in 1812.

When we pause to remember war we think of its costs – the waste of human beings and resources – its violence, its unpredictability and the chaos it can leave in its wake. We less often recognise just how organised war is. In 1940 Germany tried to force Britain into surrender and for nearly two months London was bombed day and night. Many non-essential civilians were

evacuated to the countryside. Those who remained slept in makeshift shelters or the Underground. The British Broadcasting Corporation - the BBC - which was based in the centre of London, sent several departments away. Music went to Bedford, Drama and Variety to Bristol, until that got too dangerous, and Variety went off to languish rather glumly in the sedate town of Bangor in North Wales. The remaining staff often could not get home at night so the BBC – not nicknamed Auntie for nothing – turned its Radio Theatre into a dormitory, with a curtain down the middle to keep the sexes apart. In October two bombs hit the building. Seven members of staff died as they tried to remove an unexploded one and the fire department rushed to the scene to keep the flames from spreading. The news reader for the nine o'clock news paused briefly as the building shook and then kept going, covered in soot and dust. By the next morning scaffolding had gone up around Broadcasting House and the rubble was being cleared. Think for a moment of the organisation that was involved in that single episode, a tiny one in the overall history of the war. The German bombers, with their fighter escorts, were the products of Germany's war industry, which had mobilised resources from materials to labour and factories in order to get the planes made and into the air. Their crews had been chosen and trained. German intelligence and planners had done their best to select important targets. And the British response was equally organised. The Royal Air Force tracked the incoming planes and did its best to stop them, while on the ground crews manned barrage balloons and searchlights. The blackout over London and other key cities was complete and carefully monitored. The BBC had made contingency plans, the fire department came and the work of clearing up started at once.

War is perhaps the most organised of all human activities and in turn it has stimulated further organisation of society. Even in peacetime, preparing for war – finding the necessary money and resources – demands that governments assume greater control

over society. That has become increasingly true in the modern age because the demands of war have grown with our capacity to make it. In increasing the power of governments, war has also brought progress and change, much of which we would see as beneficial: an end to private armies, greater law and order, in modern times more democracy, social benefits, improved education, changes in the position of women or labour, advances in medicine, science and technology. As we have got better at killing, we have also become less willing to tolerate violence against each other. Murder rates are down in most parts of the globe, yet the twentieth century saw the greatest deaths in war in absolute figures in history. So there is yet another question: how do we reconcile killing on such a scale while simultaneously deploring violence? Most of us clearly would not choose to make war to get its benefits. Surely there is some other way of doing it. But have we yet found it?

There are many such paradoxes about war. We fear war but we are also fascinated by it. We may feel horror at the cruelty of war and its waste, but we can also admire the courage of the soldier and feel the dangerous power of war's glamour. Some of us even admire it as one of the noblest of human activities. War gives its participants licence to kill fellow human beings, yet it also requires great altruism. After all, what can be more selfless than being willing to give up your life for another? We have a long tradition of seeing war as a tonic for societies, as bracing them up and bringing out their nobler sides. Before 1914 the German poet Stefan George dismissed his peaceful European world as 'the cowardly years of trash and triviality' and Filippo Marinetti, founder of the Futurist movement and future fascist, proclaimed, 'War is the sole hygiene of the world.' Mao Zedong later said something very similar: 'Revolutionary war is an antitoxin which not only eliminates the enemy's poison but also purges us of our own filth.' But we have another, equally long tradition of seeing war as an evil, productive of nothing but

misery, and a sign, perhaps, that we as a species are irredeemably flawed and doomed to play out our fate in violence to the end of history.

Svetlana Alexievich is right. War is a mystery, and a terrifying one. That is why we must keep trying to understand it.

#### ONE

## HUMANITY, SOCIETY AND WAR

'War is waged by men; not by beasts, or by gods. It is a peculiarly human activity. To call it a crime against mankind is to miss at least half its significance; it is also the punishment of a crime.'

- Frederic Manning, The Middle Parts of Fortune

If you visit the lovely Alpine town of Bolsano you will often see long queues outside the South Tyrolean Museum of Archaeology. People wait patiently, many with their children, to see one of Bolsano's main attractions: the mummified body of a man who lived around 3300 BC. Ötzi – the Iceman – died before the Pyramids or Stonehenge had been built yet the ice kept his body and possessions intact until he was found by two hikers in 1991. He wore a cloak made from woven grass and clothes, including leggings, boots and a cap, made from leather. His last meals, still in his stomach, were dried meat, roots, fruits and possibly bread. He was carrying wooden baskets and various tools, including an axe with a copper head, a knife, arrows and parts of a bow.

It was assumed at first that he had lost his path in a snowstorm and died alone, to be left undisturbed for the next five millennia. It was a sad story of an innocent farmer or shepherd. In the next decades, however, thanks to advances in medicine and science, it became possible to examine the body more closely, with CT scans, X-rays and biochemical testing. Ötzi had an arrowhead

embedded in one shoulder and his body was bruised and cut. His head had apparently been hit too. It is most likely that he died of the wounds he received from his attacker or attackers. And it is possible that he had at some point killed others, judging by the blood found on his knife and an arrowhead.

Ötzi is by no means the only piece of evidence we have that early humans, certainly by the time of the later Stone Age, made weapons, ganged up on each other and did their best to finish each other off. Graves dating back to Ötzi's time, and earlier, have been found across the globe, from the Middle East to the Americas and the Pacific, containing piles of skeletons which bear the marks of violent death. Although weapons made of wood and skins generally do not survive, archaeologists have discovered stone blades, some still buried in the skeleton.

Violence seems to have been present even earlier, during much the greatest part of our human story in fact, when our ancestors lived nomadic lives foraging for edible plants and killing other creatures for food. Much of what is known is naturally highly speculative. Collecting and reading evidence, especially the further into the past you go – and humans appeared on earth some 350,000 years ago - is extraordinarily difficult, but we are gradually accumulating more thanks to archaeological discoveries and scientific advances such as the reading of ancient DNA. Until very recently in humanity's long history, we now know, we organised ourselves into small bands scattered across the more temperate parts of the globe. There was not much in the way of material goods to fight about and presumably if a band came under threat from others it could simply move away. For much of the twentieth century, those who studied the origins of human society tended to assume that the early nomadic bands lived a peaceful existence. Yet archaeologists have also discovered skeletons from this long-distant period whose injuries suggest otherwise. Anthropologists have tried to get at what that world was like by looking at the few hunter

and forager societies that survived until the modern age. It is a roundabout path with potential pitfalls: outsiders who observe such societies bring their own preconceptions and contact itself brings changes.

Having said that, there are some suggestive findings. In 1803, for example, a thirteen-year-old boy, William Buckley, escaped from an English penal colony in Australia and found refuge among the Aborigines for the next three decades. He later described a world where raids, ambushes, long-running feuds and sudden and violent death were part of the fabric of society. At the other end of the world, in the harsh Arctic landscape, the first explorers and anthropologists found that the local inhabitants, Inuit and Inupiat among them, made weapons including armour from bone and ivory and had a rich oral tradition of stories of past wars. In 1964 Napoleon Chagnon, a young American anthropology student, went to do fieldwork among the Yanomami people in the Brazilian rainforest. He expected that they would confirm the then prevailing view of hunter-foragers as essentially peaceable. He found that within each village the Yanomami lived for the most part in harmony and were gentle and kind with each other, but that it was a different matter when it came to dealing with other villages. Then differences were settled with clubs and spears, and one village would raid another to kill the men and children and abduct the women. In his thirty years of observations, he concluded that a quarter of Yanomami men died as a result of violence.

While there are heated exchanges – wars, indeed – of words and ideas between historians, anthropologists and sociobiologists, the evidence seems to be on the side of those who say that human beings, as far back as we can tell, have had a propensity to attack each other in organised ways – in other words, to make war. That challenges us to understand why it is that human beings are willing and able to kill each other. It is more than an intellectual puzzle: if we do not understand why we fight

we have little hope of avoiding future conflicts. So far there are many theories but no agreed answers. Perhaps war is the result of greed or competition for dwindling resources – for food, territory, sexual partners or slaves. Or are we shaped by biological ties and shared culture to value our own groups, whether clans or nations, and fear others? Like our cousins the chimpanzees, do we instinctively lash out when we feel threatened? Is war something we cannot help doing or is it something we have constructed through ideas or culture? Since war and the fear of war are still very much with us in the twenty-first century, the answers to such questions matter.

War would not be possible without our willingness to kill, but that alone does not define it. We would not describe two men fighting in a bar or even a dozen or so gang members battling in a street or a park as making war. Violence leading to injury or death is part of war, but we tend to see that as a tool of war, not as an end in itself. The great German theorist Carl von Clausewitz, in one of his most famous observations, said, 'War is an act of violence intended to compel our opponent to fulfil our will.' War has a purpose whether it is offensive or defensive. As with individuals or gangs, fighting war can be about honour, survival or control, but it is distinguished from a bar fight by its scale and its organisation. War involves dozens, hundreds, thousands, even millions rather than one or a few people committing violence on each other. It is a clash between two organised societies which command the adherence of their members and have existed over considerable time, usually in their own territory. As Hedley Bull, the English political theorist, put it, 'Violence is not war unless it is carried out in the name of a political unit ...' And, he went on, 'Equally, violence carried out in the name of a political unit is not war unless it is directed against another political unit.' Gangs are organised and their members can claim to share values and goals, but they are not stable political and social units. They might of course become so and grow in size and

in time become clans, tribes, chiefdoms, baronies, kingdoms or nations which are capable of engaging in war.

One of the many paradoxes of war is that humans got good at it when they created organised societies. Indeed the two developments have evolved together. War - organised, purposeful violence between two political units – became more elaborate when we developed organised sedentary societies and it helped to make those societies more organised and powerful. It was only 10,000 years ago - an instant in the much longer human story - when some of us started to settle down and become farmers, that war became more systematic and started to need special training and a warrior class. Along with graves in different parts of the world, archaeologists have found evidence of fortifications, in Turkey for example, which date back to at least 6000 BC, and of clusters of dwellings which appear to have been burned down deliberately. With the advent of agriculture humans were more tied to one place and had more worth stealing, and worth defending. And to defend themselves they needed better organisation and more resources, which in turn led to groups expanding their territory and growing their populations either peacefully or through conquest.

Among the many debates over the origins and evolution of war is whether humans have been getting more violent or less. Steven Pinker and others who think like him, such as the archaeologist Ian Morris, are on the optimistic side and believe there is a clear trend away from violence. Most countries no longer have public executions; they have laws against cruelty to animals or children; and sports such as bear baiting or dog fighting are normally illegal. The optimists go further and attempt to tot up deaths from war in the past — not in itself an easy task — to argue that homicide rates in the past were far higher than they are today and that deaths in war, as a proportion of humans alive at the time, are fewer in the twentieth and twenty-first centuries, even allowing for the great bloodlettings of the two world wars,

than in earlier wars. Others challenge the figures and also point out that war deaths in the twentieth century may amount to 75 per cent of all war deaths in the last 5,000 years. And if you really want to be depressed about the prospects for humanity, studies using mathematical tools at the University of Florence and the University of Colorado claim to show that the trend is for fewer but more deadly wars. Their argument is that the more interconnected societies become the quicker a conflict can spread along the paths of the network – just as computer viruses or forest fires do. A small squabble in the Balkans in the summer of 1914 grew into the Great War because Europe's powers were so interlinked by treaties, understandings or plans that tensions spread upwards and outwards from the assassination of the Archduke Franz Ferdinand in Sarajevo until a general war exploded.

Even if Pinker is right – and the debate goes on – it somehow does not seem very reassuring. Those of us who have enjoyed the Long Peace since 1945 need to reflect that much of the world, including Indochina, Afghanistan, the Great Lakes district in Africa and large parts of the Middle East, has seen and still sees conflict. A long-running project at Uppsala University in Sweden estimates that between 1989 and 2017 over 2 million people died as a result of war. Since 1945 perhaps 52 million have been forced to flee because of conflict.

The prevalence of violence and war in the past and their persistence in the present raise the awkward question as to whether humans are genetically programmed to fight each other. One avenue of research has been to look at our closest relatives in the animal kingdom: the chimpanzees and the bonobos. Both live in organised groups, have ways of communicating with each other and make primitive tools. (In Northern Ireland, a pair of enterprising chimpanzees recently worked together to escape from Belfast zoo by making a ladder out of a branch.) Chimpanzees and bonobos are so alike in appearance that until the 1920s it was assumed that they were the same species. In fact they have

evolved to be quite different in the ways they live together and deal with strangers.

Jane Goodall studied chimpanzees in their natural habitat in Tanzania for over half a century. She and her teams of colleagues became so much part of the scenery that the chimpanzees grew to ignore their presence. The observers watched as the chimpanzees developed relationships, cared for their young, engaged in play - and killed each other. Male-dominated groups, each fiercely attached to its own territory, waged organised conflict against other chimpanzee groups, often without being provoked. They killed lone chimpanzees who strayed too far out of their own territory and they carried out raids, killing rival males as well as females and infants. In a particular long-running conflict one group exterminated another and occupied its territory. In her memoir Goodall said that at first she thought the chimpanzees in her study were 'for the most part, rather nicer than human beings'. Then, she went on, 'suddenly we found that chimpanzees could be brutal - that they, like us, had a darker side to their nature'.

Before we settle on human beings having an indelible dark stain on their natures, we should look at the counter-example of the bonobos, who do not fight or hunt each other. Bonobos seem as intelligent as their chimpanzee cousins but they have evolved very differently, possibly because they live on the south side of the Congo River, where foraging is easy and they do not have more powerful rivals, gorillas in particular, as the Tanzanian chimpanzees do. Among the bonobos, females rather than males form strong groups and they tend to dominate the males. When strange bonobos meet, their first instinct is not to attack but to tentatively gaze and then move slowly towards each other. They start to share food, groom each other and embrace indiscriminately, giving each other a variety of pleasures. (Videos of bonobos at play are very popular on the internet, even if some would think them not suitable for family viewing.) Whether the