Slouching Towards Utopia?
An Economic History of the Long Twentieth Century

VII. The Knot of War, 1914-1920

J. Bradford DeLong
U.C. Berkeley Economics and Blum Center, NBER, WCEG

<https://www.icloud.com/pages/08jYot8ecE0dGQthZAIfHYJgg>

In November 1962, in the middle of the Cuban Missile Crisis, the General Secretary of the Communist Party Nikita Sergeyevitch Khrushchev wrote to the American President John Fitzgerald Kennedy thus:

> We and you ought not now to pull on the ends of the rope in which you have tied the knot of war, because the more the two of us pull, the tighter that knot will be tied. And a moment may come when that knot will be tied so tight that even he who tied it will not have the strength to untie it, and then it will be necessary to cut that knot, and what that would mean is not for me to explain to you, because you yourself understand perfectly of what terrible forces our countries dispose…

Two chapters ago we shifted our focus from economics to political economy: we needed to look not just at technology, production, organization, and exchange, but also at how people governing themselves and others tried to regulate the economy to preserve or produce a good society, or a society good for them.

One chapter ago we shifted our focus to imperial politics: we needed to look not just at how peoples and their elites governed themselves, but how they governed others. Each of these two shifts brought us away from processes and factors that seem almost inevitable—in which the actions of individuals mostly cancel out, and if an opportunity was not seized by one person at one date it would have been seized by another soon after. Each of these two moved us closer to that part of history where individual actions matter: where individuals and their luck can divert history for good, either because of their place in the society or because of the

waves of belief and expectations that they set in motion. And so the history became less a flowering of long-planted seeds and more choice and chance.

This chapter takes a further step in that direction: into politico-military affairs, where choice and chance is dominant. This fits awkwardly into an economic history. But it is necessary. For we cannot understand what the world was like in 1918 without looking at World War I. The world in 1914 had been a growing, substantially peaceful, prosperous—with problems, but prosperous—world, in which it was not irrational to be optimistic about human civilization. The world, especially Europe, in the ashes after World War I was different.

7.1: Roots of War

7.1.1: The Economic Illogic of War

Perhaps the saddest book on my bookshelf is Norman Angell's *The Great Illusion*. If, Angell argued: "conquest and extension of territory is the main road of moral and material progress... then... the Austrian should be better off than the Switzer.... If a nation's wealth is really subject to military confiscation… the wealth of those small states should be insecure indeed—and Belgian national stocks stand 20 points higher than the German…. It is such quite simple questions as these, and the quite plain facts which underlie them which will lead to sounder conceptions in this matter on the part of the peoples…"

It was, Angell rightly pointed out, much cheaper to make and trade for what you want than to build war material and then spend the blood of your people to extract it. War and empire to become rich was, Angell rightly pointed out, profoundly stupid in the age of destructive industrial war. War and empire to provide a greater domain for the king to rule or duchies for younger sons was, Angell thought, no longer a motive for anyone. And war and empire to make people worship God the right way was, Angell thought, another habit that humanity had outgrown.

It was not.

7.1.2: The Boer War

Starting in 1899 Britain waged a War of Choice in South Africa: the Boer War.

From the 1860s the expansion of European empires was coupled with a willingness to hand over power over local affairs to locals—to white locals—Canada in 1867, Australia in 1901, New Zealand in 1907, and South Africa in 1910, even though the majority of the white population of the newly-established Union had been at war with the British Empire only a decade before, when Britain had sent 250,000 soldiers to South Africa to convince 200,000 Boers that they did not want to govern themselves but rather to be ruled from London.

The British navy occupied the Cape of Good Hope at the start of the 1800s. The Dutch-Afrikaans speaking Boers of earlier Dutch colonization responded by moving north. And there, in the Boer republic of the Transvaal in 1886, they found gold. Miners and speculators carried Johannesburg in a few years to a population of 100,000. The Boer farmers watched nervously as the numbers of the *uitlanders* grew. The denied immigrants the vote. They taxed the gold industry. They gave a monopoly over dynamite sales to Alfred Nobel's company. Their President Paul Krueger sought a railway line to the sea independent of British control. British Cape Colony boss Cecil Rhodes sought to overthrow the Boer government by *coup d'etat*—the 1895 Jameson Raid. After the raid's failure the Boer republics began buying and stockpiling rifles. Britain reinforced its troops in the Cape Colony and Natal. Colonial Secretary Joseph Chamberlain—father of 1930s Prime Minister Neville Chamberlain—preached the annexation of the Transvaal and the Orange Free State. And in 1899 Joe Chamberlin he sent an ultimatum: equal rights for British citizens in the Transvaal, or war.

What, after all, did the mightiest empire the world had ever seen have to fear from the two small Transvaal and Orange Free State republics of unindustrialized farmers? More than you would think. The Boer army attacked, besieging British garrisons in towns named Mafeking, Ladysmith, and Kimberley, and defeating British relief columns in battles at places named Spion Kop, Vaal Kranz, Magersfontein, Stormberg, and the Tugela River. 600 of Sir William Gatacre's 3,000 troops were captured at Stormberg, as British troops fled after being sent up a near-cliff against entrenched Boers with rifles. 1400 of Lord Methuen's 14,000 were killed or wounded at Magersfontein, as they assaulted the Boer trench line. Buller's 21,000 suffered 1200 killed and wounded to the Boer's 50 in a failed attempt to cross the Tugela River. Short and victorious Joseph Chamberlain's war was not.

Any calculation of costs and benefits would have told the British cabinet to talk peace: It was time to stand down, in return for promises from the Boers to treat British miners and prospectors as white people should be treated.

Instead, a quarter of a million British soldiers were sent to South Africa starting in February 1900: the same proportional manpower commitment as two million would be for the U.S today. This gave the British overwhelming numbers: a five to one edge even over the entire Boer people-in-arms. And the British sent a competent general—Field Marshal Lord Roberts. Orange Free State capital Bloemfontein fell on March 13, 1900, Johannesburg fell on May 31, and Transvaal capital Pretoria fell on June 5.

But the war was not over. Defeated in open battle, the Boers turned to guerrilla warfare. The dispersed Boers waged a guerrilla insurgency against the British for a year and a half, and at one point they captured the British second-in-command, Lord Methuen.

What does an invading military superpower do when its troops are faced with a guerrilla insurgency in a land where they do not speak the language? The British invented the concentration camp. Are guerrillas active in an area? Round up everyone—everyone—and stick them behind barbed wire, don't feed them too well, and don't spend too much time worrying about sanitation. Build small forts and construct wire fences to reduce the guerrillas' mobility. Roughly 30,000 Boers, most of them children under 16, died in the concentration camps. Nearly 100,000 people died in the Boer War: in addition to the 30,000 Boer civilians, perhaps 8,000 British battle deaths, 14,000 British soldiers dead of disease, and 10,000 Boer soldiers. And perhaps 30,000 indigenous Africans—nobody counted them.

Britain mobilized 2.5% of its adult male population for the war, and about one in ten of those died.

The 1900 British general election was a huge political victory for the warmongering Conservatives led by Lord Salisbury: a “Khaki Election”. A peace treaty ending the war was signed in 1902, annexing the two Boer republics to the British Empire. But by 1910 South Africa was a white self-governing dominion with equality for Afrikaans and English as official languages, and with a voting population about as well-disposed toward Westminster as, well, the population of Ireland was in 1910.

Would it not have been better if all this could have been avoided?

7.1.3: Nationalism

The people on the ground did not think it would have been better. They were nationalists. What is a nationalist? Well, consider German social scientist, German *liberal*, for his day, social scientist Max Weber, who wrote in his "The National State and Economic Policy" that:

> The German character of the East... should be protected.... The German peasants and day-labourers of the East are not being pushed off the land in an open conflict by politically-superior opponents... [but] are getting the worst of it in the silent and dreary struggle of everyday economic existence... abandoning their homeland to a race which stands on a lower level... moving towards a dark future in which they will sink without trace…. The economic policy of a German state, and that standard of value adopted by a German economic theorist, can therefore be nothing other than a German policy and a German standard.... Our successors will... hold us responsible... for the amount of elbow-room we conquer for them in the world…

Weber was a dark-haired square-headed low-melanin Caucasian male who spoke German. He greatly feared dark-haired square-headed low-melanin Caucasian males—who spoke Polish.

Forty-eight years after Weber's speech, the largest single military command of German-speakers ever—Adolf Hitler's *Heeresgruppe Sud*—would be fighting an even larger army in the Ukraine in a war seeking to win "elbow-room" for the German *volk*. Its commander would be a man who had, at birth, been named Fritz Erich Georg Eduard von Lewinski.

That last—Lewinski—is not a name that springs from the Germanic branch of the Indo-European language tree. The preceding "von" does signify that the name is a German noble name. But the suffix "-ski" is Slavic: it signifies that the name is a Polish noble name. What is in between the "von" and the "ski" is "Levy".

In the Torah, in the book of Genesis, Abraham's grandson the trickster Jacob serves Laban for seven years in order to gain permission to marry his daughter Rachel. At the wedding Laban tricks the trickster and marries Jacob to his daughter Leah instead. Jacob then serves Laban seven more years for Rachel. Jacob and his junior wife Rachel's children were Joseph and Benjamin. Jacob and his concubine (and Rachel's handmaid) Bilhah's children were Dan and Naphtali. Jacob and his concubine (and Leah's handmaid) Zilpah's children were Gad and Asher. Jacob and his senior wife Leah's children were Dinah—the one daughter—and Reuben,

Simeon, Judah, Issakar, Zebulon, and… Levi. Levi is the great-grandfather of Moses. There is not a more Jewish last name in the world than "Levi".

The young Fritz Erich Georg Eduard was the youngest of his parents' sons. His mother Hélene's younger sister Hedwig was childless. His parents gave him up to be adopted and raised by Hedwig and her husband, Georg von Manstein. Manstein-formerly-Levy traced his straight-line paternal ancestry back to some so-and-so Lewinski—a Polish noble—and earlier to some so-and-so Levy—i.e., someone claiming descent from Jacob and Leah's third son, whose tribe became the priestly tribe of Israel. Erich von Manstein bore, at least symbolically, Abraham's Y-chromosome.

Yet he fought skillfully and tirelessly for a régime whose most important goal was to kill as many Jews as possible.

When Max Weber wrote about a "silent and dreary struggle" in the mixed borderlands where some people spoke German and others looking much the same spoke Polish. The process he condemned was one that we rootless cosmopolites see as a win-win. Technology advanced in German cities like Hamburg and Essen: industrialists and merchants were desperate for workers, and pulled workers out of agricultural employment in Pomerania and Prussia, promising them higher wages and a better life if they would move to the seaports and to the Rhineland.

Rather than matching the wage offers made by the ironlords of the Rhine, the landlords of the German East pulled Polish workers in from the Vistula valley further east. The Polish-speaking population remaining in the Vistula valley was happy: they had larger farms. The Polish-speaking population who moved to Germany were happy: they had higher wages and a better life. The German-speaking landlords were happy: they could sell their grain at a higher price to the booming German West without having to match the wages of the German West.

The German-speaking workers who moved west were happy: they were higher wages and a better life. The German-speaking ironlord industrialist and merchants were happy: they had an expanded labor force. The aristocrats who ran the German national state were happy: they had a stronger economy, more tax revenue, less poverty, and thus a lower level of democratic-egalitarian-socialist agitation.

Who was left to be unhappy? Max Weber, that is who. Also unhappy were all the others who saw the "German character of the German East" as endangered.

Note that Weber was, in pre-WWI Germany, solidly in the center-left: not a socialist, but otherwise a friend to political democracy, to mass education, to economic prosperity, and a foe to parasitic aristocracies and rigid social orders.

The scary thing is that German nationalism was not exceptional in pre-WWI Europe. War was viewed not as a catastrophe but as an opportunity: an opportunity for national assertion, national mobilizations, and the creation of a stronger national identity—as well as an opportunity to win the spoils of war, whatever those might have been.

7.1.4: War "Aims"

For example, the politicians and journalists of the French Third Republic were spoiling for a war.

The newly-formed German Empire had ripped the provinces of Alsace and Lorraine from France as part of the treaty that ended the Franco-Prussian War of 1870-1871. (The justification was that these provinces had been previously ripped away from Germany by French aggression-but their incorporation into France had taken place more than two centuries before, Alsace in the first half and Lorraine in the second half of the seventeenth century.) And for more than forty years the French army and French politicians had been getting ready for a rematch. From the perspective of France's politicians and generals, a war with Germany was to be welcomed-as long as France's allies were securely on board as well. A war would restore French predominance in Europe and dominance over Germany, and repay their enemies across the Rhine for the insult of 1870.

But why would France have any allies against Germany? Why wasn't Germany Britain's potential ally against France in 1914? Britain had been at war with France for more than half of the millennium before 1914, after all.

British geopoliticians feared Germany because Germany had built a modern navy strong enough to challenge and—possibly, if they were lucky—beat the British navy. Such a naval defeat would leave food-importing Britain helpless, with no choice but to surrender. France had not built such a navy.

Why had the Germans built such a navy?

Because the admirals convinced the German Emperor—the "Kaiser," i.e. "Caesar"—Wilhelm II that the British would never respect Germany unless it did

have a fleet strong enough to challenge the British navy. His British cousins, they told him, only respect those who are strong. If we are strong enough to harm them they will respect you and us. If we are not, they will not.

It is not clear that the British respected pre-World War I Germany. It is clear that they feared it. And they armed against it. Winston Churchill said, when the magnitude of the German naval construction program became clear, "the politicians proposed [to build] four [new battleships every year], the admirals demanded six, and we compromised on eight."

For the politicians of the British Empire in London, risks of war were worth running for reasons of "face"—to show that the British Empire could not be pushed around. Britain had said that foreign armies should not march through Belgium, foreign armies should not march through Belgium no matter how much they apologized or how hard they begged for British neutrality and Belgian approval for passage or how much in indemnities they initially offered for their violation of Belgian neutrality.

7.2: The Start of World War I

7.2.1: The Damned Foolish Thing in the Balkans

It is worth stepping back, and noting that all of these politicians and military officers were at best badly mistaken, and at worst criminally insane. Nearly ten million people would die in World War I. All of the continental European emperors whose ministers made war would lose their thrones as a direct result of the war, the British monarch alone surviving (the kings of Italy and Belgium also survived: their countries joined the winning Anglo-French side).

The rulers of Austria-Hungary had for a long time been worried about Serbian nationalism, or rather the extension of Serbian nationalism northward as ideologues argued that Serbs, Bosnians, Croats, Slovenes, and others were really one nation—"Yugoslavs"—and that only alien rule by Turks from Istanbul and Germans from Vienna had prevented the previous emergence of a glorious south-slav nation.

From today's perspective it is easy to be very, very cynical: less than 80 years separate the time when Serbs and Croats were blood-brothers (so much so that the Serbs would risk bloody war with Europe's great powers to rescue the Croats from

oppressive foreign despotism) and our time, when Serbs and Croats cannot live in the same village or province without the political leaders of at least one side calling for (and getting) the extermination and exile of the other. To fight one set of wars at the start of the twentieth century to unify Serbs and Croats and to fight another set of wars at the end to dissolve the union and "ethnically cleanse" the region seems among the sickest of the jokes that History plays on human populations.

From our perspective a semi-democratic, constitutional monarchy like that of the Habsburg-ruled Austro-Hungarian Empire, ruling over various nationalities, a monarchy that respected (most) local customs, kept the peace, and allowed freedom of commerce, belief, and speech (within limits), seems much more than halfway up the list of desirable regimes. Would one prefer Marshall Tito? Or Milosevic? Or Karadic? Certainly not.

In the summer of 1914, a Bosnian terrorist seeking Bosnian independence from the Austro-Hungarian Empire and union with Serbia assassinated the heir to the throne of the Austro-Hungarian Empire, the Archduke Franz Ferdinand and his wife. The terrorists had received some assistance from the secret police of the Kingdom of Serbia—although almost surely not with the active knowledge of the King of Serbia. What ruler, monarchical or otherwise, has an interest in the declaration of an open hunting season against heads of state and their near relatives? The political objective of the assassination was to break off from Austria-Hungary her south-slav provinces so they could be combined into a Greater Serbia or a Yugoslavia. The assassins' motives are consistent with the movement that later became known as Young Bosnia.

For the old emperor Franz Josef in Vienna and his advisors, the outrageous murder of his nephew—with help from at least some within the Serbian government—seemed to call for action to chase and punish the guilty, humble and shame Serbia, and make it plain that Austria was the great power in the Balkans. Thereafter Serbian foreign policy had better trim its sails to the Austrian wind.

To establish this seemed worth a small risk of a large war. After all, the Franco-Prussian War of 1870, the Austro-Prussian War of 1866, the Prusso-Danish War of 1864, the Franco-Austrian War of 1859, and the Balkan Wars of the early twentieth century had all been very short. Few looked at the slaughter of the American Civil War of 1861-65, or at the bloody trench warfare of the Russo-Japanese War of 1905, or even at the Boer War, and thought about what they might mean.

The not-so-old Czar Nicholas II in St. Petersburg and his ministers thought that it was important to demonstrate that did not demonstrate that Czarist Russia was the great power in the Balkans, and that slavic-speaking small nations could count on it to protect them from Viennese hegemony.

But World War I did not show anybody that Czarist Russia was the great power in the Balkans, and that slavic-speaking small nations could count on it to protect them from Viennese hegemony. Instead he lost his throne, his life, and his country. Russia lost a generation of young men dead or mutilated, and lost its chance to have a less-than-totally-unhappy twentieth century.

The not-so-old German Emperor Wilhelm II in Berlin and his ministers thought that a short, sharp victorious war—first defeat France, then occupy Paris, then accept the French surrender, then move the army east to Russia and force Russia to make peace as well—would secure for Germany a dominant "place in the sun" among the great powers of Europe. Hence a decision to back Austria to the hilt in whatever action it chose to take in response to the assassination of Franz Ferdinand-up to and including war-was nearly automatic. They looked back at a nineteenth century in which the standing and power of the core of the turn of the century German Empire, the Kingdom of Prussia, had been radically enhanced by short victorious wars provoked and managed by the so-called Iron Chancellor, Prince Otto von Bismarck, a German politician whose best-remembered sentence is that: "It is not by speeches and debates that the great issues of the day will be decided, but by Blood and Iron."

Bismarck's shoes were hard to fill. His legend was hard to live up to. But attempting to live up to it seemed to involve an eagerness to court and welcome the risks of war. No one remembered that Bismarck had sought war against isolated powers without allies—Denmark in 1864, Austria in 1866, and France in 1870—and only when he had stacked the deck to make rapid victory all but certain. And no one remembered that Bismarck had never had any desire to escalate political conflict in the Balkans. Perhaps his second-best-remembered sentence is that: "There is nothing at stake [in the Balkans] that is worth the bones of a single Pomeranian grenadier."

World War I did not secure for Germany a dominant "place in the sun" among the great powers of Europe. Wilhelm lost his throne. His country lost its political and military autonomy, a generation of young men, and took the first steps along the road to Hitler's Third Reich, a regime that will blacken the name of Germany for millennia.

The old Emperor Franz Josef in Vienna would die while World War I was still going on; but his Habsburg dynasty would lose its throne, and his empire would be chopped up and handed out to no fewer than seven nation-states (today between thirteen and fifteen, depending on whether you count Bosnia-Herzegovina as one or three).

The French would lose a generation of young men dead or mutilated. And it would take more than thirty more years before French politicians would realize that trying to contain Germany by using your army simply did not work, and that perhaps a better way to try to contain German power would be to integrate it economically into a wider Europe.

The British would lose a generation of young men. And the post-World War I British Empire would be much weaker, and eventually find itself in a worse strategic position, than even a pre-World War I Britain facing a German-dominated Europe would have possessed.

7.2.2: Germany Attacks Belgium

The Archduke had been killed. Serbia had rejected Austria's ultimatum. Austria had declared war on Serbia. Germany sought to convince Austria that it should attack to demonstrate that it was serious, but then "halt in Belgrad" and negotiate. Russia began to mobilize…

At that point Germany attacked Belgium.

It was that stupid.

Why did Germany attack Belgium?

The explanation was that Germany had only one war plan. France and Russia were allied—a war with one was a war with another. Germany was going to war with Russia. It would have to fight France too. Its war plan was to fight France first while Russia was still mobilizing. And its war plan was to begin the war not by attacking the French fortification line on the Franco-German border but by outflanking the French army by marching—hopefully unopposed—through neutral Belgium, apologizing while doing so. Hence the first shots in what was a dispute between Austria and Serbia were fired on the German-Belgian border. The laughter

of the guns began, as Germany's heavy artillery began destroying Belgian forts and killing Belgian soldiers and civilians.

That attacking Belgium might well push Britain into the war against Germany, immediately cut Germany off from all outside resources, and add an extra great power to its enemies was not thought to be important. Britain could only bring its power to bear if the war was long. And one way or another it would be a short war.

And so the trigger was pulled. The war would be fought by the mass-conscripted 18-21 year old boys of Europe, augmented by reserves who had received their military training in the previous decades. The mass armies marched off to war enthusiastically, singing, taking the causes of the emperors and the generals for their own, on all sides expecting a short victorious war.

But it was not a short war.

7.3: The Course of World War I

7.3.1: It Ought to Have Been a Short War

World War I really ought to have been a short war.

The German decision to turn an Austro-Serbian or an Austro-Russian dispute into a world war was amazingly stupid—propelled by the belief that it would solve domestic problems by busying giddy minds with foreign quarrels, that it would improve the breed and demonstrate the fitness of the German race, that it was what the Junker warrior aristocrats were born to do, and that if Germany did not strike eventually the Franco-Russian alliance would—and if allowed to strike first the weight of three times as many French and Russians as Germans with twice the Gross National Income would tell. But even with all those they ought not have launched a war.

And even with all those the war they launched should have been a short war. Germany ought to have lost quickly.

Indeed, for the German army, a long war was unthinkable. Germany's entire war strategy was based on the belief that they needed to win quickly or not at all. And thus when they failed to win quickly, sane national and military leaders would have

sought peace terms rather than face the destruction of a long, grinding war of attrition that they would lose—that they did lose.

Three other factors turned the diplomatic crisis of the summer of 1914 into a war, and the war into a civilization scarring catastrophe. Those three were: the professional attitudinal habits of the Prussian army, the genius of German scientists and administrators, and the adopted eastern civilizing mission of the German nation.

7.3.1.1: The Prussian Way of War

On the Prussian way of war, consider an army and an officer corps taught that ever since the days of the seventeenth-century Great Elector Friedrich Wilhelm I Hohenzollern that the best way to fight was to attack—ferociously, cleverly, ruthlessly, and unexpectedly from a surprise direction—no matter what.

Military Robert Citino argues that the cornerstone, the foundation-story, was the June 28, 1675 Battle of Fehrbellin. Friedrich Wilhelm and his Field Marshall George von Derfflinger abandoned their supply wagons and marched their army 160 miles as the crow flies in two weeks over seventeenth-century roads—twice as fast as seventeenth-century armies typically moved. The 69-year old Field Marshall, riding alone, induced his Swedish enemies to open the gate of Rathenow after first having a fifth column inside the town hold a banquet to get all the Swedish officers as drunk as possible. Cut in two, the Swedish army retreated to regroup—and found itself trapped and forced to fight because Friedrich Wilhelm had destroyed the bridge over the Rhin River at Fehrbellin. The demoralized Swedes, fighting an enemy that wasn't supposed to be there in a place where they were not supposed to have to stop, were beaten before the first cannon fired.

An army trained in that tradition will respond to Russian mobilization during an Austro-Serbian dispute by attacking Belgium—ferociously, cleverly, ruthlessly, and unexpectedly from a surprise direction. Supply wagons and logistics? Leave them behind to be somebody else's problem because you can always fix your logistical problems after your victory. Industrial mobilization? Ignore it, because if you have to fight a long war you have probably already lost. Strategy—what is this "strategy"? Grand strategy—how to avoid making more enemies and maximize your numbers of friends? Again, that only counts in a long war, which is one that you have lost. Tactics and operations are all.

And, indeed, since Fehrbellin, the odds are that first a Prussian and then a German army would be a fearsome and terrifying foe, greatly outpunching its weight on the tactical and operational level—but, as far as logistics, industrial mobilization, strategy, and grand strategy are concerned, a group that could be out-thought and out-fought by a committee of six-year-old children.

And so it turned out: fearsome and terrifying in the onset. But rapid victory eluded its grasp. The Imperial German Army's plan to surround and crush the French before the Russians could fully mobilize misfired. Out of supply and exhausted, the German armies on the western front retreated and consolidated, digging trenches, and soldiers were transferred east to fight the Russians.

But did the army then pressure the government to seek peace? No. And here Citino's second cornerstone of the mental map of German army officers came into play: *Totenritt*—a death ride—carrying out senseless orders to the best of one's ability, as faith is substituted for logic and calculation. "It will cost what it will cost", said cavalry commander von Bredow, ordered to destroy his own cavalry brigade by a charge of dubious military utility at the Franco-Prussian War's Battle of Mars-le-Tour. And he and his were applauded in Germany, in a way that British Lord Cardigan's similarly-disastrous Crimean War charge of the light brigade had not been.

Thus, instead of telling the government that the strategic situation was very bad, nd that it was time to negotiate, the German army dug trenches and hunkered down. Its generals began to attrit the French and the Russians in a kind of war-as-chemotherapy: hoping that the poison will kill your adversary before it kills your self.

7.3.1.2: German Science and Management

That hunkering down would have been to no avail, however, without the genius of German scientists and administrators. The scientists were men like Fritz Haber, winner of the Nobel Prize in 1918 for his creation of the power to extract useful nitrogen compounds literally out of thin air. This was an enormous boon to those who needed fertilizers to grow crops. This was also essential to Germany's fighting anything other than a very short war: without nitrogen pulled from the air by the Habor-Bosch process, Germany runs out of explosives and ammunition within six months of the start of the war. The administrators were people like Walther Rathenau, who established the industrial-materials priority command-and-control system that Germany used to keep its value chains functioning, at least for the

production of war materiel, after the British naval blockade had cut itself off from international trade. "I am a German of Jewish origin. My people are the German people, my home is Germany, my faith is German faith, which stands above all denominations", wrote Rathenau. He was assassinated by right-wing anti-semitic German terrorists in 1922.

7.3.1.3: "Against Czarism!"

The third thing that kept Germany going during World War I was a strong current of thought believing that Germany was fighting on the side of civilization. The real struggle, it was claimed, was not over what language should be spoken by the mayor of Strasbourg (or Strassburg) on the Franco-German border or whether Belgian neutrality should be respected or even what Balkan lands should be ruled by German-speakers in Vienna, but one of German civilization versus Russian barbarism.

Consider the German Socialist Party, the SPD. Founded in 1875, and promptly outlawed by Bismarck, by 1914 it had a million dues-paying members. It was the largest political party of the world. It held 34% of the seats in the German Reichstag. It had been founded to bring about the overthrow of capitalism and a just socialist society—whether that would be created by revolution, evolve naturally as the contradictions of capitalism manifested themselves, or evolve and then have to be defended in the streets against a reactionary coup was left ambiguous. Lit had been founded to advance the international brotherhood of workers. It had been founded to oppose militarism in all of its forms.

So what was the SPD supposed to do when the Emperor Wilhelm II's ministers asked for money to fight World War I?

The SPD's caucus met on August 3, 1914. SPD Co-Chair Hugo Hasse led the pacifist faction, and was appalled by what happened: "You want to approve war credits for the Germany of the Hohenzollern [Emperor] and the Prussian [landlord-aristocrat-officer-bureaucrat] Junkers?" he asked. "No," said his fellow Co-Chair Friedrich Ebert. He went on: "Not for that Germany, but for the Germany of productive labor, the Germany of the social and cultural ascent of the masses. It is a matter of saving that Germany! We cannot abandon the fatherland in its moment of need. It is a matter of protecting women and children…" Only 13 other of the 110 SPD Reichstag deputies joined Hasse's position in the internal caucus vote.

What were they protecting women and children from? They were protecting them from the Czarist tyranny that would follow a Russian victory and conquest in the war that Germany had started by attacking Belgium.

Younger-generation Reichstag member Karl Liebknecht had voted with his party to fund the war on August 4, 1914. But by December 2 he had moved into opposition to "this war which nobody desired... an Imperialist war... a preventative war by the German and Austrian war parties working in the shadows of semi-absolutism and secret diplomacy... a Bonapartist attempt to demoralize and destroy the growing Labor movement…"

By December the Germans were no longer fighting to protect German homes and families from imminent Czarist tyranny. The German army had already won its first great victories over the Russians at Tannenberg and the Masurian Lakes. Instead, government was calling for Germany to fight to liberate the peoples of the Russian Empire from the Czar. Liebknecht replied: "Germany... does not possess any of the qualities necessary to play the role of a liberator [from Czarism].... We must demand a peace which will humiliate no one as soon as possible... Simultaneous and continuous demands for peace in all belligerent countries can stop the bloody massacre before complete exhaustion…"

But only a trivial minority wished to hear him.

And so the war continued.

7.3.1.4: Why Did the Allied Powers Fight?

But even after Germany had attacked Belgium, why did the allied powers—France Russia, Britain, eventually Italy and the United States—fight? Why did not they recognize that modern industrial war is, in the words of the computer in the movie War Games, "a very interesting game: the only way to win is not to play"?

First of all, there was deterrence. One has allies in order to constrain what potential adversaries may do. And if one does not keep one's promises, one soon has no allies. Only if the cost of keeping one's promises looks very high might one shrink from doing so. And everyone expected a short, victorious war. Or, at least, a short war. Thus Russia and Britain kept their promises.

It is true that some did fear. It was Edward Grey, the British Foreign Secretary who committed the British Empire to the war, who is reputed to have looked out his

window one evening at dusk in the last days and said: "The lights are going out all over Europe. I do not think we shall see them lit again in our lifetime…" Which raises the question of why—if that was truly his judgment—he did not do more to stop the machine then in motion.

Second, once the initial German lunge had ended, the strategic situation was very favorable for the allies: they were going to win a long war of attrition. Why then should they settle for anything less than, at a minimum, a return to the *status quo ante bellum*?

The problem was that the German government kept telling its people that they were winning. And, indeed, they had won a great many battles. They had conquered Belgium and Poland, and eventually Roumania. Their armies were holding deep positions inside Russia and France. Could they turn around and tell the voters that "we are sorry, but we are actually losing this war and we ought to make peace" and still survive as a government? They did not think so.

And, of course, there was still the Prussian way of war. Germany had started with a surprise attack through Belgium to outflank and disrupt the French army, believing that even if that attack did push Britain into the war against Germany that would not matter because Britain could only bring its power to bear if the war was long. And, in 1917, they did it again. This time they attacked not a neutral power on land but a neutral zone in the sea: began unrestricted submarine warfare against all ships headed for Britain. They believed, once again, that even if that attack did push the U.S. into the war against Germany that would not matter because the U.S. could only bring its power to bear if the war was long. Longer.

And so the attrition war that Germany could not win and that the allies should not have fought continued.

7.3.2: It Was a Long War

World War I would have been bad but not a disaster—check that: World War I would have been a disaster but not an utterly intolerable catastrophic disaster—if it had been a short war. But it was not a short war. It was a long one. British assistance to France kept it from being overrun in the fall of 1914. German assistance on the eastern front kept Austria from being overrun in the fall of 1914. And then they all dug trenches. It became a total war, a resource mobilization-based war of attrition that dragged on for more than four years.

7.3.2.1: Trench Warfare and Attrition

At first it had seemed as though victory would be quick, and would go to Germany and its allies, the so-called central powers. The first-mobilized vanguard of the Russian army was decimated in the forests of eastern Germany. The first battles between the French and the Germans saw the French take much heavier casualties, and retreat almost to Paris before the Germans outran their supply lines.

Thereafter the war settled into stalemate. The front line settled down into a fixed line of trenches in which soldiers hid from flying death. Offensives degenerated into episodes of artillery death from the skies killing anyone in the open followed by episodes of machine-gun target practice, in which the attackers always took far heavier casualties, and invariably gained little ground of no strategic value. Nevertheless, they persisted. Generals called for greater and greater commitments of resources to the front: if battles could not be won by strategy, perhaps they could be won by the sheer weight of men, metal, and explosives committed to the front. In Britain—which attained the highest degree of mobilization—the government was sucking up more than one-third of national product (plus the time of conscripted soldiers) for the war effort by 1916.

7.3.2.2: Mobilization

Mobilizing economic resources for total war was not something anybody had planned for. Military plans had all been based on the assumption of a short war: one in which decisive victory would be won or lost in a matter of months, in a single battle or two. When that turned out to be false, governments and armies turned to frantic expedients to try to manage resupply and the ramp-up of war production. Desired production became much more that dictated by the representatives of industry's largest customer, the military, than by market forces. Yet the army could not simply pay through the nose what the industrialists wanted to charge. And so the market needed to be substantially replaced by rationing and command-and-control.

Was that possible? Yes. In all cases, those that ran the industrial materials-allocation directorates succeeded. Such success turned out to be suprisingly easy, even though to do so efficiently would have been surprisingly difficult, and the changing character of the war meant that total mobilization was necessary.

The example of the German war economy made some, like Vladimir Lenin, believe that a “command economy” was possible: that you could run a socialist

economy not through the market but by using the government as a command-and-control bureaucracy not just during national emergency, but as a matter of course.

7.3.3: The Weight of Men and Metal

Under the pressure of military defeat and domestic poverty accentuated by the diversion of resources to the war, the Czar's government collapsed in late winter 1917 and a Russian Republic was proclaimed. That republic was there overthrown in a coup by Vladimir Lenin and his Bolsheviks in their October Revolution seven months later. They then dismissed the Constituent Assembly that was to write a constitution and then run elections. They took the burden of government upon themselves. Russia withdrew from the war. But America took its place.

In the end, the weight of men and metal arranged against Germany and its allies did tell. France, Belgium, Russia, the United Kingdom, Italy (from 1915), Romania, and the United States (from 1917) against the Austro-Hungarian, German, and Ottoman Empires and Bulgaria. At the end of 1918 the Austro-Hungarian Empire's army collapsed. The generals announced that the German army in France had been attrited and was facing defeat. The German population at home was over the edge of starvation because of the blockade. And Germany sought an armistice.

If you want to read more about battles and leaders and campaigns and casualties, read somebody else to learn what happened during the war. I don't have the heart to write it down. There were 10 million dead; 10 million maimed; 10 million lightly injured—out of major belligerent populations of some 100 million adult men, with the overwhelming proportion of war casualties were soldiers, not civilians. The amount of economic production that had been devoted to blowing things up and killing people rather than making useful commodities for human flourishing amounted to the belligerent powers' production in a full year. The imperial-authoritarian political orders in the Russian, Turkish, Austrian, and German empires had collapsed. The political order in Italy was at the point of class. Confidence that the world was run by far-sighted statesmen in a way that supported progress was gone.

And the great powers of the North Atlantic and others had to figure out how to try to pick up the pieces and put a world order back together again, so that the globe could return to the path of unprecedented and rapidly increasing global prosperity that it had been on from 1870-1913