

"Only the Dead Have Seen the End of War." The Evolution of War since 1945 - With General Petraeus & Sir Andrew Roberts.

Simon Brewer

Contrary to what was widely expected at the start of the present century, the world has not seen the end of major wars involving large conventional forces, much less the end of so-called small wars, confirming that Plato was right over 2000 years ago when he wrote that only the dead have seen the end of war. Those lines come from a new book just published, titled 'Conflict: The evolution of Warfare from 1945 to Ukraine'. And to encapsulate this book's significance, I will mention just two of its accolades. Henry Kissinger described it as an exceptional book written by two absolute masters of their profession. And General James Mattis, former Secretary of Defence, said it is a book that will shape the thinking of policymakers and military strategists for generations to come. And if you wanted to fuse the analysis and understanding of a widely recognised historian with the experience and insights of a four-star US Army General and former head of the CIA, then this might be the perfect combination. Therefore, General David Petraeus and Lord Andrew Roberts, welcome to the Money Maze Podcast.

Andrew Roberts

Thank you very much, Simon.

David Petraeus

Good to be back, Simon.

Simon Brewer

General, I know you've said I can call you David. Our mutual friend Simon Sebag Montefiore described you as the ultimate scholar and soldier and you're also Partner and Chair of the KKR Global Institute, so it's great to have you back. We conducted an interview on Ukraine back in January. It was listened to in over 52 countries, including multiple downloads in China. And Andrew, you are now Lord Roberts of Belgravia. You are an internationally best-selling historian and biographer whose books include 'The Storm of War', 'Napoleon the Great', which was the winner of the Grand Prix of the Fondation Napoléon, and 'George III'. You're currently a visiting professor at the Department of War Studies at King's College and a visiting research fellow at the Hoover Institute at Stanford University. I've been lucky enough to have dinner at your home a few years ago and I recollect that in your amazing study crammed with historic items, there was a letter from Josephine to Napoleon if I'm right.

Andrew Roberts

Yes, that's right. It's one of the prizes of my collection.

Simon Brewer

Fantastic. Well, as I read 'Conflicts', and for those watching on YouTube, I'm actually going to hold our book, it struck me that your analysis of the seven decades of conflict following World War II, just how many of the variables discussed are highly relevant in running complex businesses today: strategy and tactics, leadership, intelligence, research and analysis, disruption in new technologies, applying lessons learned and planning for the future. So there are almost too many questions to ask, but let the barrage begin. And we'll start with you, Andrew. What were your top priorities as you embarked on this book?

Andrew Roberts

I think one of the first things that David and I agreed on was that we were going to try and put the Ukraine war into its proper historical context. As soon as it broke out, we both recognised that it needed to be seen in its military as well as its political and geopolitical context, and that's really one of the things we wanted to do. Another thing we were very keen on doing was looking at the Ukraine war and seeing whether it had very many hints and signposts about future war. And then also to have a chapter at the end on what future war would be like, which would cover things like cyber and sensors and space and robots and AI, drones, that kind of thing.

Simon Brewer

We're going to come back to those towards the end because they have absolute relevance from all sorts of perspectives. I want to turn to you, David, because I want to turn opening part to strategy because it was von Clausewitz in his 'On War' 1832 piece that I'll quote. 'The first, the Supreme, the most far-reaching act of judgment that the statesman and commander have to make is to establish the kind of war on which they are embarking.' Let's travel back to Vietnam, which is covered very thoroughly in the book. I learned an enormous amount reading it. What was wrong in the strategic thinking?

David Petraeus

Well, successive leaders first from France and then from the United States failed to do what Clausewitz counselled needed to be done, which was to understand the nature of that particular war. The truth is that the French made a catastrophically bad decision to put their forces into Dien Bien Phu thinking that that would be great. The North Vietnamese would gather there, and they could clobber them, and it turned out that the opposite is what happened and of course, they had to have an ignominious surrender and then withdrawal. The Americans came in and with the lesson of Korea foremost in their minds told the Vietnamese, well, don't worry about this small war that you're telling us that we should be worried about, the insurgency in the villages. What you need is forces that look like ours, that defeated or at least got back to the 38th parallel in Korea. And so we helped them design a number of divisions that looked remarkably like ours, including even in some of the equipment even though the diminutive Vietnamese in all cases couldn't necessarily shoulder at all. We just failed to get the big ideas right, which is the first task of a strategic leader. And we had a succession of strategic leaders on the battlefield in Vietnam, ultimately with General Westmoreland there for four years who really didn't quite get what the nature of this war was and tried to make it into what we, in a sense, wanted it to be, a big war, big units, and so forth, against the North Vietnamese regular forces. And there were some of those, but the real war that was going on was the war in the villages, in the hamlets, which was going terribly. And again, there were a number of other factors here. The partners that we had were far from perfect. There were a number of other challenges. The nationalism that of course the North put forward had some appeal to those in the South, etc. But again, we did not get what was right in terms of the big ideas for far too long. By 1968, General Abrams came in, did really get it right. He did put forward the right big ideas. The problem was by then, domestic public opinion in the United States had eroded to the point where there was going to be a drawdown regardless of the situation on the battlefield. And we see this in a number of different cases throughout the chapters that we recount. Again, the biggest of the big takeaways for us, and we went back and really rewrote the beginning to emphasise this, was how important strategic leadership is, and as you notice, crucially important in business too. Starting off, there are four tasks and the most important one is the first one. You have to get the big ideas right, then you have to communicate them effectively, then you have to oversee the implementation of the big ideas, then you have to determine how to refine them to do it again and again and again. But if you don't get the big ideas right, everything else is building on a shaky foundation. It doesn't matter how compelling your leadership capabilities are, your example, your energy, your eloquence, all the rest of this. If you don't get that strategy right up front and then if you don't keep it right, you are not going to succeed. And that's a common theme that comes throughout this. We see cases where this was done magnificently. Malaya is

a great example. Actually, Oman is an overlooked example where you had the Sultan of Oman goes to Sandhurst, overthrows his father, then leads a brilliant counterinsurgency together with his British counterpart, one of whom was Brigadier John Akehurst, who later wrote a modestly titled book 'We Won a War', and who I knew when he was the Deputy Supreme Allied Commander Europe and I was writing for the SAC year. You see it with Maggie Thatcher and the military leaders in the Falklands. You see it with President George HW Bush and the military leaders of the Gulf War, starting with his very first pronouncement essentially at the first meeting of his war council, his National Security Council, where he says this will not stand with respect to Saddam Hussein's invasion and occupation of Kuwait. That's a big idea, military can take that, we understand what we need to do, and they go about and do it and did it very impressively as well there with General Powell and General Schwarzkopf.

Simon Brewer

Thank you because my next point to stay with strategy is to look at Iraq too and Afghanistan. I guess, how do you each weigh up the ultimate outcomes versus the objectives?

Andrew Roberts

With both of them really, it was difficult to define objectives right from the word go. And I think that policymakers were in an extremely difficult position in the days after 9/11 to know exactly who to hit when and where and under what circumstances. I think it's very important in history in general to try to put yourself in the shoes of the people who were making these decisions. Tremendously pressurised ones, needless to say. Not all of them were correct. But nonetheless, it is tremendously easy, especially as a historian obviously, to use 2020 hindsight in judging people who had little intelligence knowledge of what exactly was going on.

David Petraeus

Let me build on that a little bit if I could because what you really have in both of these wars are several different campaigns, if you will, and you have a brilliant campaign in Afghanistan to topple the Taliban and to displace the Al Qaeda sanctuary in which the 9/11 attacks were planned and the initial training was conducted. Of course, that probably took some wrong lessons from that with respect to Iraq where we probably slimmed the forest down too much based on the success in Afghanistan. The problem then was that we shifted focus very quickly from Afghanistan to Iraq and really never came back to it until after the success of the surge in Iraq enabled us to start shifting focus and resources back to Afghanistan. And the result was that it took us nine years in Afghanistan from late 2001 of course when we went in and toppled the regime, the Taliban regime, with a handful of special forces on horseback CIA officers with money in these surrogate forces, these warlord elements that forced the Taliban to mass and then we clobbered them with airpower. Nine years to get the inputs right. And by that, I mean not just the big ideas, not just the strategy, but also the organisational architecture, which is not trivial, the level of resources, military, diplomats, spies, development workers, rule of law, etc., the right preparation of our forces, the right leaders, all of this. And so we really wasted nine years in effect that could have been used so much more effectively. The level of violence in Afghanistan was much, much less than that in Iraq for many, many years because the Taliban had been shattered, had to regroup in Pakistan. But ultimately, actually, Afghanistan, I predicted in fact in 2005 doing an assessment there for Secretary Rumsfeld as a three-star on the way home from Iraq, would be the longest of the long wars. The challenges there were much more considerable than those in Iraq. And I provided a compare and contrast for him at that time, and that sadly proved irrelevant. At the end of the day, we did get the inputs right, but we kept them right only for about six months from about late 2010 into the summer of 2011, and began a drawdown even if the conditions did not always warrant such a drawdown, and then we lacked the strategic patience at the end when there were alternatives. We could have kept 3500 troops there, add some more drones. It was an unsatisfactory situation, but I would contend it was far better than what has followed, our withdrawal and the collapse of the Afghan government that we sought to support. And then with respect to Iraq, again, this very successful

invasion and fight to Baghdad. I was a two-star general at that time, remember it well as the commander of the 101st Airborne Division. But then we made some very bad decisions very early on firing the Iraqi military without telling them their future and then firing the Ba'ath Party without having an agreed reconciliation process. And this began the cleavage of society in Iraq between Sunni and Shia. And it really was not brought back together again until the surge in Iraq in 2007, 2008 when the big ideas, and I was of course the commander of that, were literally 180 degrees different from what we've been doing prior to that in 2006, let's say. So once again, the importance of big ideas is just supreme, and you must get those right. If you don't, again, it doesn't matter how much you do all the other tasks well, you're not going to succeed generally.

Andrew Roberts

We see that a lot also in the big wars immediately after the Second World War. When the Second World War ended, everybody hoped that there would be peace for generations. That clearly didn't happen. But in the two big wars, the Chinese Civil War in which some 6 million people died, and then in the Korean War, which was also hugely expensive in terms of blood and treasure, the people who got the big ideas wrong, lost. You see that again and again in history, and it's one of the really strong aspects of this book is to drum that home really.

Simon Brewer

What I liked as well, and I'm going to quote from the part on Afghanistan where you write, 'by losing the conflict, allowing the country to become an extremely safe haven once again and condemning some 40 million Afghans to a future of repression, deprivation, severely circumscribed opportunities, and very likely continued violence.' So I think the candour came through, which I salute to you for. Now, if strategy is clear, leadership is absolutely behind it. You have explained that strategic imperative, and the ability to inspire and lead and have stamina obviously is paramount. I will jump forward now to Ukraine. President Zelensky has been dubbed by either one of you or somebody, [as] 'Winston Churchill with an iPhone.' And you say in response to, I think, the moment at the beginning when he was given the opportunity to escape, his words were, 'The fight is here. I need ammunition, not a ride.' You said it coined a ringing battle cry of the 21st century. Andrew, how has leadership been essential in stiffening Ukrainian fortitude?

Andrew Roberts

Absolutely essential. That moment when he said that he needed ammunition and not a ride was a rallying cry not just to Ukrainians but to the rest of the world as well. Instead of behaving like the president of Afghanistan did, which was to get out as quickly as he possibly could, taking as much money with him on his private jet, here was a man who was going to stay in his capital, fight to the end, stay with his wife and children who were going to stay there as well, which showed absolutely Churchillian leadership. We've seen the same thing not just from him in fact, but David and I went to Kyiv three or four months ago and he's been back there since meeting Zelensky. And all the people under Zelensky, the generals, the ministers that we met, were all equally superb when it came to personal leadership.

David Petraeus

Andrew has some agency here because I don't think you mentioned what I believe is his greatest book ever, which is regarded as the best single-volume biography of Churchill, which was 'Churchill: Walking with Destiny'. In fact, we did a number of events together on that. So when Andrew says that Zelensky has been positively Churchillian, I think that's quite significant. And I think he has. Again, think of the big idea, the very first big idea. I don't want a ride, I want ammunition, I'm going to stay in Kyiv, my family is going to stay in Kyiv, all men in Ukraine are going to stay in the country, and that sets the tone right away. But these are serious strategic big ideas because there was an expectation that he might have to withdraw to the western part of the country to leave. That was the ride that was offered and so forth, and instead, he chose to stay and fight. And that was not just a metaphor for what took place. That was reality. And you saw then the people rally to this. And what's

remarkable is, to be frank, his first two and a third years in office saw modest achievements, but not the kind of, again, Churchillian leadership that he has demonstrated since then, and that's proven hugely valuable. By the way, contrast that with Putin's leadership. Putin clearly got the big ideas wrong. He totally overestimated his own force's capabilities. He completely underestimated the Ukrainian will to fight. He thought that he was going to make Russia great again. What he has done is make NATO great again. Now, this is by no means over. He still does retain 17%, 18% of Ukrainian territory. Very tough fight in the South. It's evolving in terms of the drone wars that are being pursued by each side. But I think it's a very interesting case, again, a case study to compare the strategic leadership of two significant leaders and also, by the way, by their military subordinates. And you've seen a revolving door in Russia in that regard, whereas General Zaluzhnyi, the Commander-in-Chief of Ukrainian forces, a very steadfast figure with a number of others, Syrskiy and others, who are the battlefield leaders.

Simon Brewer

So if the strategy is understood, if the inspirational leadership is there, execution can be either assisted or undermined by the quality of the intelligence. Now, lots of examples in your book, but I'd like to shine the spotlight onto two campaigns, the Yom Kippur War in '73 and the Falklands in '82, probably unlikely bedfellows. But you write, 'The Yom Kippur War was the most extensive investigation of a foreign war ever undertaken by US armed forces and there are no fewer than 37 separate studies into various aspects, some of which still remain classified.' Andrew, why are Americans so eager to do such detailed analysis?

Andrew Roberts

Well, because it's a war in which a surprise attack takes place right at the beginning. Of course, it only came seven years after the Six-Day War in which the Israelis mounted the surprise attack. It's said by Paul Wolfowitz that it's surprising that we're still surprised by surprises considering how many there are in history. And so what you see in the Yom Kippur War is initial defeat by the Arab governments against Israel, and then the moment when Israel turns the war around and ends up winning a stunning victory. And it also seemed to highlight the moment when tanks moved from being a great asset into being a dangerous liability because of the use of anti-tank weaponry. And so one could understand why the Pentagon at the end of that war wanted to learn everything they possibly could about it, and they did. And they put what they had learned to great use only a few years later, 17 years later, in the first Gulf War.

David Petraeus

And in the Cold War, of course. Of course, this is a period of transition for the United States from the jungles of Vietnam, where we'd been for well over nearly two decades actually if you start in the mid-1950s, to this major front in the Cold War, the standoff between NATO and the Warsaw Pact, which very significantly featured tanks, infantry fighting vehicles, artillery, and so forth. And so learning everything we could about the anti-tank guided missiles that were on this battlefield provided by the Soviet Union against the Israeli tanks which we could face on the inner German border was very, very important.

Simon Brewer

And if we turn to the Falklands, you write, 'The first naval war since the 1940s is to be studied so carefully by the US Navy.' And you also write, 'Next to the quality of the personnel, the most important factor in the Falklands War was intelligence.' And I wonder whether both of you could comment on how that intelligence gathering process is made and put to good effect. Because one thing gathering, it's a bit like us in the investment business, we gather all this data. How do we actually push it through and make sense of it?

Andrew Roberts

Okay, it was David who was director of the CIA. I think he should probably answer this one first before me.

David Petraeus

To use very general terms, it's essentially the fusion of intelligence. You get various sources of intelligence and now you have just an avalanche of data and so forth. In fact, the unique aspect of the Ukraine war is that it's the most transparent in history. Everyone has a smartphone, access to the internet and social media and websites under which you can upload video and so forth. That did not exist obviously back then, but there were nonetheless all of the different means. There was imagery intelligence, there was signals intelligence, there's human intelligence. The trick is to fuse it, to bring it together. And this is what has advanced very dramatically over the years with a huge breakthrough actually in Iraq during the surge that I could describe. But in the case, again, of the Falklands and these other wars, if you put that together, if you understand it, if you get that right, you can conduct a campaign that has a reasonable chance of success. If you're surprised by it on the other hand, as was the case in the Yom Kippur War, obviously, the early days could be very rocky indeed. It was really somewhat miraculous what the Israelis did do ultimately having been so surprised by the onset of this war launched by Egypt across the Sinai.

Simon Brewer

And it was also I think what I took from the read is it was the notion of the power of a small state being able to overcome large rivals that both created concern but also the urgency to understand I guess the vulnerability that the US was concerned about from an unexpected quarter.

David Petraeus

I don't know that it's the size. I mean, certainly, if you're small relative to your enemies, you better get intelligence right. I mean, Israel has done a magnificent job of this over the years, just brilliant. And they continue to do so. They're on the cutting edge of not just all kinds of sources of intelligence but also the fusion of them. Again, it's the fusion that is so challenging these days. You have beyond mountains of data. You have continents of data from which you need to pull a digital needle to identify if you're in the manhunt business or identify what is going to happen in certain respects. On the other hand, sometimes you have very plain facts, but people don't always believe those facts. One of the other unique aspects of Ukraine was that the United States chose to release, to launder if you will, highly classified intelligence into publicly releasable statements about the fact that Russia wasn't just massing all these forces on Ukraine's borders with Belarus and Russia, but that it was going to invade. And in fact, many individuals were in denial about that. You could argue that some in Ukraine were in denial about that because they really didn't do the full mobilisation until about 24 hours before the actual invasion. So again, it's one thing to have the intelligence, the data, and so forth. It's another to be able to fuse it, to analyse it, and then to present it to decision-makers. And it's yet another for decision-makers, policymakers to actually make decisions on the basis of what it is that they've been provided.

Simon Brewer

So you have this intelligence, you have the strategy, you have the leadership. But gauging morale is another thing altogether. And you refer to Max Hastings in his book on the Falklands War. He says the Argentinian problem was not tactics or logistics, it was morale on the ground among the troops on the mountains. It was worse than the British ever dared to imagine.

David Petraeus

Some of that brought about by the actions of the British. Morale is a relative sport. There's two sides to morale. The side that seems to have the vigour, the determination, the skill, all of that, can bring about quite a plummeting situation of morale in one's adversary.

Andrew Roberts

Yes. And we saw it obviously with the Argentinians. They were very poorly led, they were poorly fed, they were badly equipped, they were freezing cold. There was a culture, a vicious culture of hazing in the Argentinian military, and so all in all, things that could have been done to increase morale. This is amongst their army. Actually, their air force had very high morale and extremely good fighter pilots and so on, and bombers. But morale was rock bottom even before the first shot had been fired in the Falklands. And so, yes, we do talk about morale a lot in this book because we see again and again, to go back to the Chinese Civil War, the morale of the Kuomintang army was so much weaker than the Maoist communists. And even though Chiang Kai-Shek started that war with almost all of the cities and with a far larger army and with a lot of equipment, they lost it.

Simon Brewer

So I'm going to talk from morale to morality. You have a section on Algeria which I think most people will be fascinated with, the war of independence in 1962. As you say, in the course of the war, more than a quarter of a million Algerians died on both sides, and it was the widespread torture that convinced most French people that the cause was fundamentally flawed. You quote Teitgen as saying, 'All our so-called civilisation is covered with a varnish. Scratch it and underneath you find fear. The French are not torturers by nature, but when you see the throats of your comrades slit, then the varnish disappears.' David, how do commanders keep to recognise standards in the face of onslaught?

David Petraeus

It's really quite straightforward. Again, you have to get the big ideas right. And the big idea in this world is adhere to the Geneva Convention, observe the laws of land warfare. For what it's worth, as a two-star general in Iraq, we were up in Northern Iraq, we actually were taking detainees. We couldn't send them higher. We didn't have the training or the personnel to actually hold detainees. So we had to do this all in a makeshift manner. And I sat down with my staff, Judge Advocate and I said, what should our rules of engagement be here? Because there were words that we knew that there were enhanced interrogation techniques being used elsewhere and so forth. And we quickly decided, you know what? We've studied for decades of our military careers the Geneva Convention and the laws of land warfare. It's a required training every year. Why don't we just adhere to that? And we did, even though it wasn't officially a war, they weren't officially prisoners of war, a legalistic determination, really. The truth is not all did that. And some others succumbed to some very basic instincts and so we had Abu Ghraib, which was a terrible tragedy. These images are never going away. They're non-biodegradable and did tremendous damage to our image. I contend, when I took over the CIA, I pledged to Congress that certainly we would not ever again do enhanced interrogation techniques. I was against them at the time. I believed fundamentally that if you can get someone to talk, they likely will not give you the absolute truth, even if you get them to talk again through some means like torture or what have you. It is very unlikely to be more valuable than the damage that is caused when this comes out, and it will come out. And so we, in the court of world opinion, enhanced interrogation techniques and black sites and so forth very much played against the United States. That's something that again is indelible, and the value that we got for that I think is very, very arguable. People have tried to make a case that this produced some kind of information that was helpful in the war on terror. As a former CIA director, having looked at that, I don't necessarily agree with that. So the moral aspect here does matter. We see, by the way, Russia embracing a culture actually of war crimes, essentially. Andrew and I went to Bucha. We saw the images, we saw what took place there North of Kyiv. Terrible. Again, torture, murder, rape, and so forth and then trying to cover it up. It is almost as if the culture of Russian forces is to commit these actions rather than a culture of, again, adhering to the accepted norms of warfare captured in the Geneva Convention.

Andrew Roberts

I think that's absolutely right. And when you look at Algeria in particular, General Massu, who was the Commander-in-Chief of French forces in Algeria, and also the governor, so he was the military and political

commander at the same time, actually overtly okayed the use of torture. So because this was directly antithetical to what France, what the French Republic was all about in its foundation at the Declaration of the Rights of Man in 1789, it really went to the heart of the French domestic population about what kind of people they were. And if you can't feel good about what kind of person you are, you're not going to win a war.

Simon Brewer

Many things sprung to my mind as I went through this book, and one was related, which was society's capacity for death and duty. And if I refer actually because I knew I'd had the book and so I went and dug it out of my bookshelf, Max Hastings in 'Bomber Command', he says, 'As for those bomber crews,' and I'm going to quote, 'it was deeply moving to sit through long evenings listening to very ordinary middle-aged men describing quite extraordinary things they did as young aircrew over Germany. I am grateful that my generation has been spared the need to discover whether they could match the impossible sacrifices that were made.' Do authoritarian regimes have an advantage over democracies?

Andrew Roberts

In the first two days, they do. No, they don't. One of the reasons for that is because the decision-making process in democracies tends to be so much more rational and more evidence-based, whereas in dictatorships, it's the whim of the person in charge. Again and again, in history, you see democracies winning out as a result.

David Petraeus

You do see Putin seemingly oblivious to the catastrophic losses that his forces have sustained. It's believed, for example, that Russian forces lost 25,000 soldiers, lost, not wounded but killed in action, just to take this small village of Bakhmut during the winter offensive, the only objective they actually seized. This is 10,000 more give or take than they lost in 10 years in Afghanistan, and yet it seems to be sustainable for the time being. Of course, you never know, and this is one of these cases where the inconceivable, the toppling of Putin is inconceivable up until it's not, and it looks back and you say it was inevitable. But there does seem to be a capacity on the case of Russia to take horrific losses, albeit he's doing it in a way that doesn't touch Moscow and the Moscow elite in as much as it touches those in the more outlying areas of this Russian Federation.

Simon Brewer

And to a certain extent, this is where we move to disinformation and cyber and the opacity that is introduced. Now, again, there's a very compelling paragraph in your book. On February 21st, '22, you say President Zelensky was with a Polish president who was on a visit to Kyiv, and Zelensky said Russia would invade within hours, adding that the Russians think we won't fight back but they are gravely mistaken. 'Andrzej, this might be the last time we see each other.' Just help us understand what was going on at that point in Putin's mind.

David Petraeus

Well, again, Putin had overestimated the capacity and capabilities of his forces and totally underestimated the Ukrainian, and by the way, I would contend the American and Western response as well. If you think about the factors that may have led him to this in addition to his grievance-filled revanchist and revisionist view of history and Ukraine's not having a right to exist, that it should rightly be part of the greater Russian Empire Federation. In addition to that, he could look at Afghanistan and see that the Americans didn't have the strategic patience and determination to stay with that even though we hadn't lost a soldier in 18 months until that tragic suicide bombing at the gate of the airfield during the withdrawal. He saw the way that was conducted. It was quite a chaotic affair of course. He saw a red line years earlier in Syria that turned out not to be a red line, so a tepid response to Crimea and Donbas and so forth. And I think again completely misunderstood how President Biden, Prime Minister Johnson and others would respond. And that response has really been very, very impressive. You can argue that certain decisions should have been taken more quickly, and I would, but if you look at \$44 billion

of US security assistance alone, and we believe now that European pledges actually may exceed that, people are doing the numbers literally, that is just staggering. The US contribution alone in the first 19 months is \$10 billion more than the entire annual Italian defence budget, to give it some perspective. So he made all of these miscalculations, then also has just rotated, fired commanders one after another. The irony right now is that General Surovikin, for whom the defensive lines are named in southern Ukraine that have proven to be so formidable, so frankly impressive in terms of defensive fortifications, is not commanding the forces that are actually defending it. He was fired some months ago over some reason that Putin had. So again, it comes back to strategic leadership again and again and again, and whether that strategic leader assesses the situation correctly, understands the context and the various factors at play, and ultimately decides on the right big ideas.

Andrew Roberts

And also, of course as David alluded to, Putin gave us an extraordinary insight into his thinking in this 6500-word essay that he published in the August before the invasion on the historical unity of the Ukraine and Russia, which was the title of this sort of rambling, historically very badly researched, frankly, essay. He wouldn't have got an A plus for his story.

David Petraeus

Not from Professor Roberts or Professor Petraeus for that matter.

Andrew Roberts

In the course of that, and when I was reading it, I was adding it up. In the course of it, he mentions Lithuania no fewer than 17 times. And so the West has to win in Ukraine, because if not, it's clear from his own writings, Lithuania is next.

Simon Brewer

So you also quote General Gerasimov, and I'm not sure I've understood it, which is why I'd like some colour on this, which is the role of non-military means of achieving political and strategic goals has grown, and in many cases exceeded the power of conventional weapons.

Andrew Roberts

Yes. This is the now famous Gerasimov doctrine, which didn't actually last terribly long, did it?

David Petraeus

No, no, no. It's had a short half-life.

Simon Brewer

Okay, because we're now going to move into the other forms of warfare and the changing nature of warfare. You quote Peter Singer who has said wars are testing grounds or laboratories. And you've also illustrated everything from the virus that was sent into Iran from Israel to infect their computers through to what Niall Ferguson has described as a 20th-century invasion being checked by a 21st-century defence. Give us a sense of some of these technological revolutions that are in play right now.

David Petraeus

Well, first of all, we should recognise that Ukraine is both a throwback to earlier wars and has glimpses of the future of war, which is the essence of your question. But let's not forget that this is also World War One. Look at the defensive positions, the depths of the minefields, the tank ditches, the concertina wire, the trenches full of soldiers, dragon's teeth, all of this. But you also have the Cold War. Many of the vehicles, the weapon systems, the tanks, the infantry fighting vehicles, the artillery are essentially what we were planning to use had we had to

defend Western Europe against the Russian systems that are actually being used here as well back in the late 1980s, when again, I was a major in a brigade on the inner German border. But then you do have these advances. You see increasing use of unmanned systems, and not just in the air, but also on the surface of the sea, perhaps some below the surface of the sea. And increasingly, they're not just remotely piloted, they are piloted by algorithms, if you will, and so forth, where the human in the loop is the person that actually designs the program that the computer in this unmanned system executes. And that is likely the future of war. I think that war over time, because of the ability to see everything- in fact, back in the Cold War, there was an adage that said, what can be seen can be hit, what can be hit can be killed. The truth is, we couldn't see all that much, we couldn't hit it all that well, especially if it was moving, and therefore, you couldn't kill it all that well. So it was mostly you're going to be the fight at the frontlines. We tried to extend the depth of the battlefield. That was the essence of air-land battle, but with a modest ability to do so. We can now very much operationalise that adage. If you think of an Indo-Pacific theatre, we can see everything. The intelligence surveillance reconnaissance capabilities are extraordinary. There are networks that communicate that information throughout the command-and-control system. You can tie them very quickly to the shooters and you have dynamic targeting and so forth. And some of the systems will be at hypersonic speed with manoeuvre during the final descent, etc. So again, you can very much see everything, you can hit it, you can kill it. So we have to transition, really transform our forces from a very small number of very large platforms that are incredibly capable, heavily manned, incredibly expensive, to a much larger number, vastly larger number of much smaller systems, most of which will be unmanned and many of which will not just be remotely piloted but will be, again, algorithmically piloted with AI and machine learning helping this whole process. You see hints of that on this battlefield. You're starting to see swarms of drones. You're seeing suicide drones. You're seeing drones going considerable distances. You're seeing maritime drones that have hit Russian ships not just in the ports in Crimea, but also in Russia proper, going after air bases, the North Black Sea Fleet headquarters itself and so forth. So these are the signposts to the future of warfare, noting that frankly, the Ukrainian and even the Russian systems are nowhere near as sophisticated as those that the US and other Western countries and presumably other adversaries have.

Simon Brewer

And I noted in your book, Elon Musk's Starlink satellite system allowed the Ukrainians communications when the Russians had knocked it out. We have Palantir being part of the, I guess, intelligence.

David Petraeus

Big data analytics and all the rest of that, because again, the key here is not collecting all of this data, which has expanded in exponential terms and dimensions. It's the analysis of it, it's the fusion of it, it's bringing all of it together. And now it includes increasing amounts of cyber, that which is on the internet. The transparency of this war, as I mentioned earlier, because of smartphones, Internet access and social media is unequalled. It's truly unique.

Simon Brewer

Is the private sector, courtesy of the technologically eminent companies that we all know in the West, actually becoming more integrated with the public sector in this domain in a way that it hasn't been?

Andrew Roberts

Undoubtedly it is, and that's been a good thing in the West because the West tends to be much more innovative than its opponents. That's a key aspect of it. To be able to harness the drive and the genius of capitalism essentially has been something that's been invaluable. Of course, there are occasional hiccups. The classic one of course being Mr. Musk deciding not to allow the Ukrainians to use Starlink over Crimea, which was a controversial decision needless to say. It's difficult to think of that many historical examples of a private

individual being able to affect the outcome of a military operation to that degree. So that's an aspect of course that needs to be factored in, but overall, we're incredibly lucky.

Simon Brewer

And for those who read your book, I'm just going to again just extract one paragraph as everybody is trying to understand the ramifications of AI. You say fighter jets piloted by AI tend to beat humans in simulated dogfights, not least because they can instantaneously identify patterns of contact that an adversary did not plan or notice, then recommend methods to counteract them.

David Petraeus

Very true. And not only that, of course, the machine doesn't get as crushed by G forces. Having actually been in an F/A-18 that took off in a carrier and landed on it and actually pulled Gs until you literally begin to black out, the machine can keep on functioning. Of course, the machine doesn't get tired. It might run out of batteries or something like that. But again, the advent of these machines is going to absolutely transform the battlefield. And the dilemma is that we, for ethical reasons, want to keep a human in the loop always. I think the reality is going to be that the human in the loop will be the individual who programs it, who develops the algorithm, who establishes the conditions that the machine meets through a variety of means whether it's facial recognition, gait recognition, voice recognition, other imagery recognition or what have you. And the machine is going to have to make the final decision on those conditions. You might actually press a button that says you may now do that. But if you hold on to the trigger with a human in the loop, your machine probably will be slower than the other machine and your machine will lose.

Simon Brewer

And you have that quotation which just stayed with me, which was when a robot dies, you don't have to write a letter to its mother.

Andrew Roberts

Equally, when a robot is in charge, it shows no pity, no remorse, no mercy. When it's factored into its algorithms to win, that's what it's going to do. So that's another aspect of war that will be different.

David Petraeus

Having written so many letters of condolence to America's mothers and fathers, the battlefields in Iraq and Afghanistan, we don't write a letter of condolence to the mother and father the machine, yet another dynamic that changes as machines become much more ubiquitous than do manned systems. And it changes again the dynamics especially, candidly, for democracies that rightly, understandably, are very concerned about human loss. It's a huge factor in the ability to sustain these campaigns. Let's just recognise, for example, that we've been in Korea for 75, 80 years, whatever it is now. Most Americans are unaware that we have tens of thousands of soldiers there or even more in Japan, again, in a sense, leftover from World War Two but obviously there now for other reasons. Whereas if you have a loss on a battlefield somewhere else, that is obviously a very, very prominent, very significant development. And it can undermine depending on the importance of that particular mission in the eyes of domestic populations, that can become a very significant factor obviously in the ability of a country to continue a particular campaign.

Andrew Roberts

David's mention of Korea reminds us of course of the central issue about strategic command because Douglas MacArthur, for all his many attributes, did not show that in Korea, whereas Matthew Ridgway did. And the results of the war very much alter between one and the other.

David Petraeus

MacArthur colossal miscalculation believed that China would not come into the war even if we went all the way to the Yalu. Obviously, they did. It changed the character of that war dramatically, pushed all the way back down almost off the peninsula. MacArthur ultimately fired for insubordination, Ridgway comes in and studies the forest, provides the right big ideas and essentially gets us back to the 38th parallel in a very inspirational manner. In addition to getting strategic leadership right in terms of the big ideas, he also provided an extraordinary example in energy and drive and so forth. Really a very admirable figure, one of the very few in history, by the way, who was successful on the battlefield, various battlefields of World War Two as the commander of the 82nd Airborne Division in particular, and then succeeded as a strategic commander, as an actual campaign commander of an actual theatre of war. And again, there are very few throughout history who have demonstrated the ability to do both.

Simon Brewer

The peace dividend that we all celebrated it seems like yesterday is well behind us. And you write, 'A recurring theme of this book is that money spent on deterrence is seldom wasted, especially when considered against the costs incurred when deterrence fails.' As an investor, what comes out is we're in a secular uptrend for the armaments industry and various components of it. Where do you think more of the money will be spent?

David Petraeus

Well, I hope that it is spent transforming our forces as I have described is necessary again from a small number of large platforms to a massive number of small, unmanned, increasingly algorithmically run platforms. That's what we should do. But of course, there are many forces that will compel us to continue to invest in what are termed legacy systems, and they have huge value. I loved having two aircraft carrier task forces in the greater Middle East when I was the commander of US Central Command. But that's not necessarily what you may want to have in some future combat where you can see everything, hit everything and kill everything and it's very difficult to defend some of these systems, although certainly not impossible. But we do see this secular trend. We do see Germany. So you see the number two economy in the world, Japan, is dramatically increasing its defence spending over a period of about five years. You see continued very high US defence spending. It will continue to go up. Many of us would love to see it go up even more. But again, that will be very substantial. And then you see the number four economy in the world, Germany, going from below 1.5% to a commitment at the very least of 2% of GDP on defence. And then many other countries in Europe, but also in the Middle East and in Asia, responding to the actions of Russia, responding to threats elsewhere in the world. The interesting dynamic right now is that I would contend that the US and its Western allies and partners are keeping more plates spinning around the world and at any time at least since the end of the Cold War if not the end of World War Two. You don't just have, again, what Russia is doing. You still have North Korea, obviously, you have China, which is the biggest of the plates, it's an overall relationship. That is what matters there. You've still got Islamist extremist groups in various locations. You have Iran with various different threats, maybe even different plates, if you will. There are cyber threats, there's domestic populism in various places that can undermine and create challenges. So you add all of this together, and then on top of that, you add the effects essentially of climate change, the extreme weather, fires, storms, and so on, and you have a very, very challenging landscape.

Andrew Roberts

Especially with China. China has increased its defence spending by 16% over the last two years. They're building aircraft carriers which have no strategic sense if they're defensive. You don't need aircraft carriers in defence. And so it is obviously an offensive capability that they're attempting to build up. They want to expel the United States from Southeast Asia. The United States is not going to allow that to happen, so clearly, defence spending is going to go up all around the world. We've got an actual war in Europe. I think being in defence industry at the moment is a pretty safe bet.

Simon Brewer

Now, as you look forward in the book towards the end, obviously, Taiwan is front and centre stage as a discussion for everybody. What are the implications of this Russo-Ukraine war for China-Taiwan?

David Petraeus

Well, one hopes that this is a cautionary tale for China. One hopes that every single morning leaders in Beijing wake up and say not today. And of course, we have agency in this, the US and our Western allies and partners. If we transform our capabilities properly, we shore up the elements of deterrence, which are essentially a potential adversary's assessment of your capabilities. On the one hand, that's our forces and so forth. And then our willingness to employ them on the other. We have to be very conscious of what we do around the world. I think it's hugely significant that what takes place in Ukraine does echo not just in terms of the hardware and the battlefield and so forth, but just the US and Western determination to support a country that has been brutally invaded without provocation, a fellow democracy, however imperfect that may be. And again, as we think about the quote 'opportunity cost' between the Indo-Pacific and Ukraine, if you don't get Ukraine right, you undermine deterrence in the Indo-Pacific. And we should make no mistake about that. Again, the decision to withdraw from Afghanistan and the way it was conducted was seized on by leaders in Beijing. President Xi said, see, can't count on the Americans. Look at how that went, they're a great power and decline. So we have to be very conscious of what we do in other places in the world. If you declare a red line and then it's not a red line, that reverberates. I remember being in Southeast Asia in fact when that happened in Syria, and the prime minister of a very important US partner, said, you know, that stuff reverberates out here, and he's exactly right.

Simon Brewer

Andrew, you made the important point earlier on that in the world of Russia and the US, there was no economic impact because Russia was immaterial, but China of course is very different. If pushed, how might you think this evolves?

Andrew Roberts

I hope that President Xi recognises that there are many more US interests at play in Taiwan than there were in Ukraine. The semiconductor industry of Taiwan is in and of itself so important that the Americans can't really allow an invasion of Taiwan to stand. And so it's a much more nuanced decision for Xi than it seems to have been for Putin.

Simon Brewer

I've asked you the easy questions. Your peers have asked some questions, so I'm going to just toss a few of these in. Peter Frankopan, who you both know, author of 'The Silk Roads', says, 'Does more automation make the chance of conflict greater?' I'm looking at you, David.

David Petraeus

Yeah, it's a tough question, actually. Again, as we've mentioned earlier, the fact that it's machines that might be dying rather than humans, that's a bit easier to accept. Nonetheless, the damage that can be wrought by machines, even without humans, is still so substantial that I think you have to weigh the balance here. I'm not sure that I have a definitive answer one way or the other. I think what we have to be keenly aware of is that actions by machines, and by the way, these are machines not just in the air, on the ground, or on the surface of the sea, but these are sub-sea, they're in space, they're in cyberspace essentially, if you will, cyber capabilities, and there's a war going on there almost every day. But they have enormous potential as well and we have to be very careful not to underestimate the results of actions in any one of these domains nor to underestimate the reality that if there is significant conflict, it will be in all of these domains simultaneously.

Andrew Roberts

Peter has got a very good question here. The advancement of machines must increase the likelihood of an accidental war breaking out.

Simon Brewer

Niall Ferguson asks the apparently innocent question, 'How and when does the war in Ukraine end?'

Andrew Roberts

When both sides want it to, or at least one side wants it to. And at the moment, neither side thinks that it's going to lose, and so it's not going to end anytime soon, I think.

David Petraeus

If I could hear, I think what this really implies for us is that we need to continue to do everything that we possibly can to enable Ukraine to convince Vladimir Putin that this war is unsustainable on the battlefield. And then together, all Western nations need to do the same when it comes to tightening the sanctions, the financial, economic and personal sanctions and export controls, and the enforcement of those so that sanctions evasion is clamped down on as well.

Simon Brewer

And then General Nick Carter, who has also along with others been a guest on the show said, 'Has the West lost almost all the wars it's fought since '45 because the political objectives never matched the military objectives?'

Andrew Roberts

I don't think it has lost all the wars since 1945 at all. Nick, who has read this book actually has taken away a slightly different takeaway.

David Petraeus

I think it's really a provocative question, actually.

Andrew Roberts

You can say that again.

David Petraeus

And by the way, he was a superb battlefield commander. I believe it's accurate, that he commanded more American forces when he was a two-star general in Kandahar, he had Kandahar and Helmand, than any British General at least since World War Two, and arguably, maybe even including that. And then, of course, was a magnificent deputy commander in Afghanistan before being the Chief of the General Staff and eventually the Chief of Defence Staff. But I think he does present something that is eating a bit at Western military leaders, which is, is there the capacity, is there the will to carry out tough campaigns? And ultimately, of course, in the case of Afghanistan, that was not there, even though again the cost in blood had been very little over the final 18 months of that and the cost in treasure was quite sustainable as well. You can argue that there was a sustainable commitment that could have been sustained, and yet we chose to withdraw.

Andrew Roberts

Wasn't that true of Vietnam as well by 1973? Wasn't there a way in which the South Vietnamese could continue with American support but not a massive number of American boots on the ground?

David Petraeus

Certainly, it's arguable that it could have been, that the airpower might have, as it did a couple of years earlier, tip the balance in favour of the South, but the US will continue just that support, much less boots on the ground, had evaporated.

Simon Brewer

And Simon Sebag Montefiore's question was, 'Who was the greatest general of the 20th century, General Giáp, Marshal Zhukov, Moshe Dayan, Marshall Lin Biao, and why?'

Andrew Roberts

Well, actually, funnily enough, I'm glad that Simon mentioned Giáp, because of course, Giáp did win against the French in Indochina.

David Petraeus

And the Americans. He was the great strategic leader of Indochina and then of the Vietnam War.

Andrew Roberts

Exactly. I'd give him a big tick, I'm afraid.

David Petraeus

Okay. But then what about some World War Two figures as well? I think you have to look at some of the great leaders of that time.

Andrew Roberts

Sebag really should have concentrated on the same period as our book, 1945 to Ukraine.

Simon Brewer

Now, as I move to a conclusion, George Soros, the great investment manager, hedge fund manager, always taught us, discount the obvious and expect the unexpected. And you have actually written in this book, 'The Falklands reminded the West that conflicts can emerge suddenly from out of what seems like a clear blue sky.' As this book has shown, surprise attacks are surprisingly common. Where's the surprise?

Andrew Roberts

I'm quite surprised by what's happening in Kosovo at the moment. I thought that that was pretty much dealt with, over and done with, but it seems that there are lots of indications that that might flare up again, which would be of course absolutely tragic.

David Petraeus

There's still possibilities in the Middle East. Iran is carrying out a number of threatening activities throughout the greater Middle East in fact. And then, obviously, the potentials in the Indo-Pacific, which I think we all recognise very clearly and believe that it would be very, very unwise for conflict to break out, but it's something that cannot be discounted. And I think that one of the big revelations of Ukraine, among many that we've already discussed, is also the fact that our military industrial bases are just inadequate. The sheer consumption of munitions in Ukraine has been staggering and there's a very broad recognition in the US and Europe that we have to dramatically ramp up our production of munitions in case this kind of war is repeated elsewhere.

Simon Brewer

So I've taken up a lot of your time. It's been absolutely terrific. We haven't discussed the other parts of the book properly, Korea, Indochina, Malaya, Iran versus Iraq, Somalia, the Balkans. War is everywhere and forever. So we will be putting all the links on the show notes to conflict. This is a seminal work, gentlemen. I think it will reverberate for a very long time. I've taken two specific things from listening to you today. And one is that technology is at the epicentre of so much of tomorrow's warfare, with implications that most of us haven't even been able to process, but that at a human level, strategy is paramount. If you don't get that right, then good luck.

David Petraeus

Got to get the big ideas right in business as well as in conflict.

Simon Brewer

Andrew, thank you very much.

Andrew Roberts

Thank you very much, Simon.

David Petraeus

Great to be with you again, Simon.

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