# Australian Journal of
# Defence and Strategic Studies

# Australian Journal of Defence and Strategic Studies

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## Acknowledgements

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**Reviews**

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# Welcome

Welcome to the first issue of the Australian Journal of Defence and Strategic Studies (AJDSS). On behalf of the Editorial Review Board, I am pleased to launch the AJDSS as another step in the ongoing tradition of the Australian Defence Forces' support for informed debate and encouragement of professional and intellectual engagement on defence issues and concerns.

Australia is currently experiencing significant changes in its strategic circumstances that are affecting how we see the future of our nation and the role of the Australian Defence Force and the wider Department of Defence.

Despite these changes, there is still continuity. Recurrent challenges persist in our study and practice of the profession of arms. War remains an enduring part of the human condition and states will continue to seek to protect their sovereignty through national military forces. These military forces, if they are to be effective must anticipate a broad spectrum of requirements, possess excellent institutional leadership, and cultivate an intellectual edge.

Since the publication of the very first professional journal by the Australian military in 1948, generations of leaders have honed their intellect through writing, critiquing and reading about the many and varied aspects of their profession. The new AJDSS builds on this tradition. It will provide insights and analysis that stimulate critical thinking and be a platform for addressing issues relevant to Australia's defence and strategic interests.

If we are to push the boundaries of knowledge critical to building a cohort of diverse, creative and collaborative Defence and national security professionals then robust and contextually driven conversations are essential. These must be inclusive debates that also seek input from leading academics and experts, industry partners and interagency professionals. Such conversations will drive adaptation in the defence and national security environment, focusing our attention on the

intellectual, moral, technological and human components that make conflict and strategic competition a complex national endeavour.

The AJDSS is committed to publishing high-quality professional discourse and peer reviewed scholarship that contributes to national, regional and global defence and national security dialogue. It should be a leading source of contemporary defence and strategic thinking and practice, which nurtures the desire in military and civilian personnel to achieve individual, and collective, professional excellence.

**MAJGEN Mick Ryan, AM**

Chair, Australian Journal of Defence and Strategic Studies
Commander, Australian Defence College

# Editorial

Welcome to the first issue of the *Australian Journal of Defence and Strategic Studies* (AJDSS). We hope this is the first of many that will inform you of the current strategic and defence issues concerning us now and in the future.

The aim of the journal is to encourage and raise the level of intellectual thinking among our defence forces. In order to do this, the journal encourages the submission of quality papers—and this issue offers the reader an early snapshot of what you can expect going forward. Our contributors discuss a myriad of topics from civil-military relations, to AI, to irregular and land warfare.

It is an honour to publish Dean Eliot A. Cohen of Johns Hopkins University in our first edition. His recent trip to Australia as the Professor Jeffrey Grey Distinguished Visiting Chair for Defence Studies culminated in the J.G. Grey Oration at the Strategy and Future of War Conference held in Canberra on 21 August 2019. Dean Cohen a world expert in civil-military relations and a personal friend of the late Jeffrey Grey was a fitting inaugural Chair and his oration 'Civil-Military relations in a disrupted world' opens this issue.

Our chairman and commander of the Australian Defence College, Major General Mick Ryan, builds on his expertise in artificial intelligence and developing an intellectual edge as he considers how militaries can gain a competitive advantage in an era of acceleration in 'Extending the intellectual edge with artificial intelligence'. Sasha Dominik Bachmann, Andrew Dowse and Håkan Gunneriusson strike a warning to policymakers to not dismiss the similarities of China's tactics in the South China Sea to those used by Russia in Ukraine and the potential risks this may imply in their article 'Competition short of war—how Russia's hybrid and grey-zone warfare are a blueprint for China's global power ambitions'. In 'The Achilles effect and preventing armies from becoming mobs', Brigadier Christopher Smith argues that military

regimentation, often dismissed as anachronistic in today's world, serves a vital purpose in inoculating armies against war's corrosive effects.

This article is followed by our commentary section in which we have a reflection on the unique characteristics of a ship's crew by Chief of the French Navy, Admiral Christophe Prazuck, which raises some of the modern challenges and concerns common to navies around the world. In the Sea Power Centre–Australia introduction to this essay we are reminded 'it is ultimately the people who matter'.

In 'Is strategic studies at risk?' Ahmed S. Hashim considers the development, definition and critiques that have been levelled at the academic field of strategic studies. What differentiates strategic studies from security studies, or from international relations? And how did the historic preoccupation of Western academics with the Cold War influenced studies of conflict in the Global South? This is followed by Professor Michael Evans' reflections on the life's work of American strategist and head of the ONA for 40 years, Andrew Marshall, who died earlier this year; 'the most influential man you have never heard of'.

In the wake of the publication of Hugh White's new book, *How to Defend Australia*, two respected thinkers, James Goldrick and Brendan Sargeant offer their views on White's thesis and the important debates it raises. It is a book that will be discussed and debated for some time to come as Australia considers its position in a rapidly changing geopolitical environment.

In our reviews section, Ric Smith brings his personal interactions with the infamous US diplomat and 'force of nature' Richard Holbrooke to bear in his review of George Packer's insightful and entertaining biography, *Our Man–Richard Holbrooke and the End of the American Century*. The potential power and influence of social media on political narratives is examined by Michael Hatherell in his review of *LikeWars: the Weaponization of Social Media* by Peter W. Singer and Emerson T. Brooking. Kristy Campion's review of *Bring the War Home: The White Power Movement and Paramilitary America* looks at a Kathleen Belew's recent book, which is likely to become an essential resource for any student or scholar of right-wing extremism. For those interested in the practical and ethical complexities of artificial intelligence, Group Captain Mark McCallum has reviewed Amy Webb's *The Big Nine: How the Tech Titans and Their Thinking Machines Could Warp Humanity*. Finally, in Ahmed S. Hashim's review of Brendan Taylor's '*The Four Flashpoints: How Asia Goes to War*' we consider the potential fault lines of conflict in our Indo-Pacific region.

The beginning of any publication is fraught with trepidation, and the *Australian Journal of Defence and Strategic Studies* is no exception. It recognises the longstanding value of its predecessor the Australian Defence Force Journal and will build upon this legacy, but also acknowledges that it is a new journal with a different task.

Our philosophy is to bring together the wealth of knowledge within the Australian Department of Defence, academia and wider policy and security communities domestically and internationally to make this a journal that foregrounds past, present and future thinking.

We have designed the AJDSS to be inclusive of both defence personnel and academic scholarship by including peer reviewed articles, thought provoking views, perspectives and commentary, and reviews of books that contribute to the intellectual debate from a policy, academic and professional military perspective; but also by providing an outlet to respond to and discuss topics of interest or controversy. This is not a journal to speak to only one service. Our Defence contributors offer a broader view through case studies of their own service experience. Where we can, we will publish views from one service that are easily applicable to other areas of defence and strategic studies. We also appreciate that Defence personnel have a wealth of experience at the higher levels of strategic thinking that is not often heard—and this is where the AJDSS offers a forum to express those ideas.

As such, we encourage readers to respond to and contribute to the issues, debates and concerns raised in the AJDSS. Whenever possible we will publish correspondence on past issues of the journal that furthers debate and awareness.

We trust you will support the journey the *Australian Journal of Defence and Strategic Studies* is taking by reading, writing and contributing so that we can make this the journal that strategic thinkers have to have.

**Dr Cathy Moloney**

Editor

# The J. G. Grey Oration

Williamson Murray once said that war is neither a science nor a craft but rather an incredibly complex endeavour, which challenges men and women to the core of their souls. It is to put it bluntly, not only the most physically demanding of all the professions but also the most demanding intellectually and morally. From this, it is understandable why militaries and national security professionals must hone their intellectual armoury so that it is adaptable to the contemporary and future security environments.

No one embodied this intellectual investment more than Professor Jeffrey Grey. Jeff was one of the finest military historians our nation has produced. Starting with his thesis on the Korean War, over the course of three decades Jeff personified intellectual excellence in the profession of arms. It earnt him a worldwide reputation in the field and led to appointments such as the prestigious Major General Matthew C. Horner Chair of Military Theory at the United States Marine Corp University and president of the Society for Military History.

However, it is through his tutelage of thousands of midshipmen and cadets in the Department of History, and later the School of Humanities and Social Sciences at the Australian Defence Force Academy, that his legacy on the Australian Defence Force is most recognisable. Today, there is not a member of the Australian Defence Force's leadership that has not been influenced by Jeff and his teachings. Influences that not only impact Australia's military and national security discourse now but will continue to influence thinking into the future, as an inheritance like few others.

So it was not a difficult decision when a proposal was raised to establish a visiting chair in Defence Studies at the Australian Defence College to name it after Professor Jeffrey Grey. It is a recognition of his contribution to intellectual excellence in the profession of arms and an acknowledgement of Jeffrey Grey as a luminary, whose work will continue to inform and shape Australia's national security discourse for generations to come.

In this vein, it was only fitting that the inaugural Professor Jeffrey Grey Chair was Dean Eliot Cohen, noted US national security policymaker and the Robert E. Osgood Chair at the School of Advanced International Studies, Johns Hopkins University. A renowned scholar in Western security thought and, like Professor Jeffrey Grey, a teacher whose pupils today represent leading strategic and security thinkers across the world, as well as recognised strategic military practitioners and national security policymakers.

The *AJDSS* is proud to present Dean Eliot Cohen's Inaugural J.Grey Oration.

# Civil-military relations in a disrupted world

*Eliot Cohen*

Let me begin by thanking my hosts for, not only their Australian hospitality, but for the great honour of being asked to deliver the inaugural Jeffrey Grey Oration. Jeff was a wonderful scholar, a wonderful teacher, a wonderful family man and a wonderful friend.

I hope you understand that when he was elected as the first non-American president of the Society of Military History it was not just a recognition of his scholarly achievements. It was because we, the community of American historians, in many ways thought of Jeff as one of us. He was a regular feature in the United States and he was a good friend to many of us, including myself, for all too brief a period of time. But, during that time I was enriched, as so many were, by his wisdom, his generosity, and his bubbling wit and learning. We were, in fact, planning a trip to the revolutionary war battlefields of upstate New York when I learned with shock of his sudden passing.

It is something of a fashion now, perhaps more than in the past, to mock the academic life and those who live it. Jeff's career stands as a rebuke to that way of thinking. His scholarship illuminated your country's past, and it informed not merely specialists but a much larger public about your history, your accomplishments and, yes, your failings. He taught a generation of soldiers, civilians and colleagues how to approach the study of the military past, in both width and depth, and why it matters.

So, although I grieve at his loss, I am deeply grateful for the opportunity to keep his memory alive.

In a way that I hope Jeff would appreciate, I am not going to speak directly about the future but instead I'm going to take my favourite approach, which is to sneak up on it through the past. The topic is one to which Jeff gave a great deal of thought: civil-military relations, particularly in our two countries. What I want to do is tie that subject, one of the many common interests that Jeff and I shared, to our contemporary

world, a world that is being disrupted in many ways. I think there is a consensus that we are entering a world in which military power matters in a way that perhaps it hasn't done for generations—that makes it particularly important to think about civil-military relations.

When I was teaching at the Naval War College in our core strategy course, I remember a disgruntled naval officer, we had quite a few of those, come up to me and growl, 'This isn't a course on strategy. This is a course on civil-military relations'. He was then disconcerted when that became the theme of just about every lecture I gave on the course.

That's precisely the point, it's not possible to think of strategy coherently unless one also thinks of civil-military relations.

Now, I am going to start by saying a few things about some of the fundamentals of civil-military relations in liberal democracies, before going on to talk about both challenges and possible remedies to them.

## Where we have been

The fundamental fact for you here, as for us in the United States, is that liberal democracies are by tradition, and normally by instinct, wary of military power.

I'm sure you've heard the question, 'Why can't we all just get along?' My conclusion is that it's the wrong question, or rather, which is worse, it puts us on the wrong track. That is, it assumes that we should all get along. By we, I mean political leaders and senior commanders, civil society and the military, the institutions on the civilian side of government and society, and those of the military. I take the view that actually, it's often a good thing we don't all just get along.

Admittedly, this is not how many scholars have thought about the problem.

My great mentor, Samuel Huntington, in a book called *The Soldier and the State,* argued that civil-military harmony could be created by what he called 'objective control', under which the military and civilian spheres were very distinct with bright lines between their very different functions and outlooks.

His contemporary, the sociologist Morris Janowitz once contended that eventually military and civilian elites would become indistinguishable from one another. And, others like him have argued that those elites would eventually converge, and presumably have no principled differences between them.

Other scholars have talked about ensuring civilian harmony by clearly demarcating the professional expertise of the military and therefore its area of distinctive competence. And some, using the jargon of economics, talk about the *principal-agent*

*problem,* in which adequate monitoring and incentives created by the government (the principal) can control the behaviour of the military (the agent).

There is some truth and insight in all of those views. But, it does not capture or resemble life as we know it. It does not resemble the push and pull of interagency meetings and rivalries, and it most certainly does not capture the historical record as we know it.

Rather, with regard to civil-military relations at any rate, we pretty much can't just all get along. And that's not as bad as all that—so long as politicians and generals make an effort to understand where the other side is coming from, so long as average soldiers and civilians understand what makes the military unique, and so long as the necessary friction is managed with good judgement.

## Why can't we all just get along?

The first reason is deeply rooted in the nature of the United States, Australia and to some extent all republics, and that is mistrust of military institutions, plain and simple. Mistrust of the men and the women who have overwhelming reserves of physical force at their disposal. Mistrust of organisations that are built on systems of discipline that in the nature of things must be very different to the rules and norms of civilian life. Mistrust of sheer bigness—because the military is, after all, the biggest bureaucracy and its budget is the biggest budget in any government's discretionary spending. Mistrust, too, because that is our history.

In the Declaration of Independence, if you look at the 'Bill of Particulars', that long list of complaints about King George III, it says that, among other things, *He affected to render the military independent of and superior to the civil power*. Fear of that is in our political DNA, and there is nothing that can be done to change it.

A second reason has to do with the nature of war itself.

All of us in this business, sooner or later, deal with Clausewitz's dictum that *war is a continuation of policy by other means*. But what is more revealing, and indicates more clearly his radical conception of this famous statement, is in Book VIII, chapter 6b, in which he says *war is only a branch of political activity. It is in no sense autonomous*, or as he puts it a bit further on, *war has its own grammar, but not its own logic*.

If Clausewitz is right—and he is, judging by the historical record from Thucydides onward—it means that military people and political people are inexorably tangled up in each other's business. It means, to oversimplify, that the politicians have to understand and accept the grammar of war—the constraints of tactical and logistical realities—but similarly, the generals have to understand its logic, meaning its purposes

and constraints, which they will probably not be able to control, or possibly even to influence. And that has always been a lot harder than it sounds.

And that leads me to my third, and most important, reason why friction is the norm—and one that I think is increasingly informed by direct observation and not just historical study—and that is that politicians and generals are profoundly different kinds of people.

Let me tackle this first from a military point of view by reading from the memoirs of one of the very few politicians who did make a successful transition from military life to democratic political life, although not in the English-speaking world. The following is from Ariel Sharon's memoirs as he recalled entering the Israeli parliament, The Knesset:

> Like politics, military life is a constant struggle. But with all the difficulties and bitterness that may develop, at least there are certain rules. In politics there are no rules, no sense of proportion, no sensible hierarchy. An Israeli military man setting foot in this new world has most likely experienced great victories and also terrible defeats. He has had moments of exultation and moments of deepest grief. He knows what it is to be supremely confident, even inspired. But he has suffered the most abject fear and deepest horror. He has made decisions about life and death, for himself as well as for others.

> The same person enters the political world and finds that he has one mouth to speak with and one hand to vote with, exactly like the man sitting next to him. And that man perhaps has never witnessed or experienced anything profound or anything dramatic in his life. He does not know either the heights or the depths. He has never tested himself or made critical decisions or taken responsibility for his life or the lives of his fellows. And this man—it seems incredible—but this man too has one mouth and one hand.

Now think about it from the politician's point of view. When he or she sees generals, they see people who think in clear, precise and definite terms; who prefer concrete tasks and crisp conclusions. But that has never been a politician's world, which is, as Charles De Gaulle put it in a marvellous short book, *The Edge of the Sword*, a world of pretences, expedience, compromises and decisions, which can be reversed at a moment's notice without compunction.

Politicians have a completely different life experience: the higher up their go the more abuse they get; the less deference; the greater discourtesy and criticism, much of it quite unfair. Moreover, some of them have experienced the trauma of personal defeat in ways that few generals have—that is, they may have lost elections. They hate that.

Let me go still further: I could (but I won't) spend an hour on the psychological differences between politicians and generals; but I will sum them up in a way that may

sound offensive but is not intended to be so, and that is that generals often doubt politician's moral character and that politicians often doubt the general's intellectual abilities.

What I mean by this is that the military can easily conclude that the politicians do not take their duties seriously, that they're irresponsible, feckless, selfish, concerned more with popularity and re-election than they are with dealing with the bloody task at hand, or with the needs of the country, even in crisis.

Conversely, the politicians can easily conclude that the generals are narrow minded, inflexible, incapable of understanding nonmaterial constraints on political action, and tend to seek definite answers and outcomes when none can possibly exist. Moreover, whereas generals tend to frame loyalty in corporate terms—to the institution or to the state—politicians are much more likely to frame it in personal or party terms. And that is a profound difference.

What I have laid out is something of a caricature, I know; there are flag officers and politicians who understand each other quite well from the beginning, and there are others who eventually come to an understanding—think of Abraham Lincoln and Ulysses S. Grant, for example. But overall, each side of the civil-military divide is so much shaped by decades of life experience we should expect a certain amount of friction, perhaps a lot of it. It is not all that different from the frustrations normal human beings sometimes experience when dealing with lawyers, or engineers.

As a dean at a school of public policy, I can tell you it is almost invariably the feeling that certain kinds of historians or political scientists have about economists, or vice versa. It is why, in fact, non-academics often do a pretty poor job of running universities: they are dealing with a very different, accomplished group of people who have spent their entire lives in one kind of institution.

In all cases, we are dealing with individuals trained to a very particular way of thinking about the world that works in their professions, but perhaps not in others.

Now having said all that, it's clear that we have been living in, what is from a historical point of view, an anomalous period, in which the military in this country, as in ours, is exceptionally popular. This is not the world of Rudyard Kipling's *Tommy,* 'Making mock of uniforms that guard you while you sleep'. It's something much more substantial.

In a 2018 Pew poll, 80 per cent of Americans expressed confidence in the military; only about 45 per cent said the same thing about people in business (at a time when the economy was booming). And, you really don't want to know what they thought about politicians. The same is true in other liberal democracies. In France, for example, 84 per cent of the population showed a high level of trust in the military; fewer than half as many said the same thing about, for example, bankers.

There are a number of explanations for this, but let me put a marker down here and say that I think it has something to do with the undoubted and often demonstrated competence of our armed forces. But I will also say, it has a lot to do with ignorance of the military and even more to do with the failure of elites in other walks of life, to include business, organised religion, journalism and, most notably, politics.

## Where we are – three challenges

This moment of popularity is, I suspect, just that—a moment. It may not last and I rather suspect that it will not. It is, at least in part, a product of the last 30 years of Western military enterprise.

Let us remember that by the end of the Vietnam War the armed forces of most countries, including mine and yours, were treated much more in accordance with historical norms—suspicion and disdain. The conscripts who filled their ranks might be pitied, and they were certainly often disgruntled. Martial values were totally out of step with the social revolution of the 1960s and 1970s with respect to everything from hair length to drug use, the value placed on spontaneity versus that placed on discipline or self-sacrifice.

Perhaps, it was belated guilt for the shabby treatment of the draftees of Vietnam and recognition that the winners of that war were, in fact, totalitarian brutes. Maybe it was the dazzling triumph of the first Gulf War. Maybe it was the rush to the flag following 9/11. Perhaps it was the undeniable quantum improvement at every level in the quality of manpower at all levels in our militaries in the 1980s and beyond. Perhaps, also, it was the fact that our countries have not experienced a real military setback—by which I mean a defeat or even merely an engagement that leaves hundreds or thousands dead—since Vietnam.

> The result is militaries that have been put up on a pedestal. If I may, with due caution and respect, I would note your own Australian Defence Veterans Covenant, which reads as follows:
>
> We, the people of Australia, respect and give thanks to all who have served in our defence force and their families.
>
> We acknowledge the unique nature of military service and the sacrifice demanded of all who commit to defend our nation.
>
> We undertake to preserve the memory and deeds of all who have served and promised to welcome, embrace, and support all military veterans as respected and valued members of our community.
>
> For what they have done, this we will do.

Great Britain and Canada have similar covenants. In some ways, I suspect, they simply assuage the guilty consciences of those who have not served. It is striking to me that these covenants paint all service members as nothing short of heroes.

But, and again, I think Jeff would be one of the first to point this out, it is a misleading picture to anyone who knows there is a big difference between an infantry soldier walking point and the radar technician manning equipment. It's a misleading picture to anyone who knows, as so many in this room know, that military organisations have among them wonderful extraordinary people but that you can find egotists and liars as well.

And it contributes to a further failure to appreciate that our military organisations today are, in fact, well paid and handsomely looked after—so much so that in my own country's case, and I wouldn't be surprised if this is true here as well—we may find it difficult to afford the first-rate weapons they need.

I am the father of two officers, one of them an Iraq veteran, just to be clear where I am on all this. And I will tell you that I think it has really gone too far when healthy young men and women get boarding preference over pregnant women and 70-year-old grandparents at the airports. Some of the best and bravest soldiers I know flinch at the unending 'thank you for your service'. Although, I will confess that after my son returned from his first tour of duty in an infantry brigade in Iraq, my wife, who is much smarter than I am, dealt with the problem by saying to him: '*We can never do enough for our veterans. Now, will you kindly take out the trash?*'

Things may change. The forever wars, as some have called them, since 2001, have begun to affect the standing of the military with unease over the civilian casualties inflicted from the air and frustration at the inability to deliver palpable strategic success in wars in which we win not only the battles but virtually all of the skirmishes, yet don't seem to be able to claim victory. When a US Navy warship ploughs into a merchant ship even our reputation for basic competence is questioned. So, those rosy poll numbers may be a lagging indicator.

Moreover, as the military is used for purposes of immigration control and other domestic order functions, the chances grow that the armed forces will not be seen as defenders of territorial integrity but as a kind of police force armed with tanks and heavy artillery.

If the forever wars are one corrosive element in civil-military relations the political moment that is called the populous moment, in which liberal democracies currently find themselves, is another.

While to be sure the presidencies of Donald Trump in the United States or Jair Bolsonaro in Brazil, or Brexit, or the rise of right-wing governments in Italy and Hungary, or the surprising emergence of the Alternative for Germany in that country have different roots, they have some common features. These include a belief that the existing social elites have failed—be it the economic failures that bred the 2008

Great Recession, or the immigration crises emanating from Syria, African and Central America.

Hugo Chávez of Venezuela was really quite a different person to Donald Trump of the United States but both liked military parades, although, the former found it easier to command one than the latter. This past July 4th, the President could only get the United States military to provide four attack helicopters, two tanks and half-a-dozen fighter jets—which is not quite the same thing as a Russian May Day parade in Moscow. Even so, there were those, myself among them, who although they like military hardware and the men and women who operate it were queasy at the idea of militarising our nation's birthday.

The larger significance lies not in the show but in the way populism laps at the edges of military professionalism. Contemporary populists of the right, and sometimes even of the left, often revel in military imagery, in part because they are nationalists rather than patriots, and those are two very different things.

The armed forces are often exempted from the sharp criticism of what some supporters of President Trump refer to as the *deep state*. And, to the extent that there is an authoritarian impulse among populists the disciplined ranks of the armed forces are a tempting tool to resolve any number of domestic problems.

This popularity of the military with populist movements has other downsides. Where rank and file service members often cheer on nationalist populists, senior officers are often quietly queasy at the rhetoric, at the use of the military for domestic law enforcement, and at the dangerous disregard for law and custom that populists often celebrate.

One final challenge to the current popularity of the military rests, I believe, with technology. As conflict moves into the cyber domain, as autonomous military systems powered by artificial intelligence proliferate, people are going to worry a lot more about what the military does. To the extent that intelligence and cyber sabotage are limitlessly global, the idea of military officers prying into your email accounts, or unleashing killer robots on the world, maybe even in your own country, are no longer entirely fantastic ideas.

When the issue was simply the delivery of violence, well that was one thing: when its espionage, malicious intrusion into computer networks and deceptively delivered information—all of which fall to some extent within the military purview these days, and which I hasten to note are necessary and in some cases desirable in some circumstances—it is a different kind of world.

My argument, in short, is that the high tide of military popularity, and with it, seemingly diminished civil-military conflict has probably passed. Many of its bases are

being eroded— even the professionalisation of the military. It is striking that in recent years, after a steady decline in conscription around the world, a number of countries have either reintroduced it (Sweden for example, although on a small scale) or embraced it (the United Arab Emirates for instance) both to resolve manpower issues but also in hopes of shaping the tone of larger civil society.

If I am right, moreover, in the future as the prospect of greater power conflict rises, I think we can expect more civil-military tension. The stakes will be a lot higher: war and peace. The margin of error might be a lot less than when you're talking about another battalion or two to Afghanistan and the opportunities for the lack of understanding, I think, grow even greater.

If I am right then civil-military relations will again be disrupted, as our world is being disrupted on many dimensions. What to do about it?

One solution is the self-aware professional. In that respect, I have to say Australia has led the way. More precisely your Chief of the Defence Force, General Campbell has led the way. With one sentence addressed to the Defence Minister this past March—'*I might just ask that the military officers step aside while you're answering these kind of questions.*'—he demonstrated what professionalism with regard to civil-military relations is. I wish I knew that all of his American counterparts would have done as well, although I can tell you with certainty that many of them took note.

One great triumph of professional military education in the last half century has been the raising of military consciousness about civil-military relations in an unprecedented way. It's been reinforced by decades of complex civil-military interaction during the forever wars. And it means that at the top, at least, there are plenty of generals and admirals thinking about where the lines need to be drawn, and how to do so respectfully but firmly.

One wishes that there was comparably good news to report with regard to civilian education. As we all know, and occasionally deplore, there is no rigorous war college course for politicians, or even senior public servants, who are often innocent of any opportunity to reflect deeply on this issue.

And in a way, of course, there cannot be anything like the repeated bouts of formal education that military officers receive. Moreover, it's a lot easier to teach military officers their duties than it is to teach politicians just about anything. Indeed, there is a danger that courses of this kind would either attempt to inculcate a false doctrine of bright lines between civilian and military decision-making, or would simply be a kind of public relations exercise for the military towards its civilian masters.

It's a hard problem. Civilian institutions are unlikely to offer such instruction or to find much of a market among political leaders and public servants if they do. And

military institutions would find themselves in the awkward place of teaching their civilian superiors—because civilian authority is and must be superior to military authority—how to control them.

Perhaps the solution is a kind of tutorial system, sponsored by the military but not conducted by it. One wishes yet again that Jeff Grey were with us because he would have been just the kind of figure to do that.

Our parliaments, our courts, our bureaucracies, will attempt to deal with the difficult issues that I've raised with laws, rulings and administrative procedures. Those will be helpful in many cases, both in setting limits and providing guidelines. But in the final analysis, as Alexis De Tocqueville taught, it is customs and norms, no less than the laws, that keep free peoples free.

So too with civil-military relations. There is no legal or administrative substitute for the thoughtful professional and the thoughtful politician, and for the informed debate between and around both. To take only one example: we still wrestle in the United States with the role of retired general officers in political debate. No law prevents them from staking out partisan political positions or endorsing candidates for the presidency. But it is a deeply contested issue whether that is appropriate, and on the whole a salutary norm has developed that it is not—admittedly, a norm that is occasionally, more often than one would wish, observed in the breach.

Jeff would have understood all that and would have taught us that the study of history can be a great gift in that regard.

For the truth is that the history of civil-military relations in free countries has always been fraught. We have had serving officers in parliaments, even running for President; we have had open denunciations of officers by ignorant politicians and of politicians of equally ignorant officers. We have had spectacular firings and equally spectacular resignations. We have known complete and open breakdowns of trust and, more commonly, covert subversive behaviour. There really is nothing new under the sun.

Which brings us back to the study of military history, and with it to the man we are honouring this afternoon, Jeff Grey. He spent his career probing the ways in which history is used and abused. He knew, perhaps better than any other Australian military historian, the ins and outs of civil-military conflict during the war whose centennial we have just finished commemorating. He was a civilian and a citizen who because of his upbringing and his own profound good sense and study loved his country's armed forces wisely and therefore not too well.

Jeff embodied, if I may, the historical mind. The historical mind is a well-travelled mind. It knows the variety of things that occur to people. The historical mind is a

sceptical mind—it knows the first interpretation of events is almost always wrong, and that decades or even centuries later new versions are possible. The historical mind is a story-driven mind that thinks in terms of narrative rather than analytic categories or the correlations of big data.

That kind of mind is invaluable in preparing soldier and civilian alike to adjudicate their relationships in a world in flux. It is one of the reasons we have professional as well as personal reasons to miss Jeff. But it is also, I believe, why we should be thankful for his teaching, his scholarship, and for his example.

*The inaugural J.G. Grey Oration was delivered at the Australian Defence College's Strategy and the Future of War Conference, held at the Adams Auditorium, Australian Defence Force Academy on 21 August 2019.*

# Extending the intellectual edge with artificial intelligence

*Mick Ryan*

We will never again think or work as slowly as today.[1]

This statement is representative of the pace of change in the world at present. It is no exaggeration; indeed, it may underestimate the impact the acceleration of change is having on the strategic environment.

The world now sits at the precipice of an era in which humans and machines will be able to collaborate in a much more symbiotic way. The rapidly evolving capabilities of artificial intelligence (AI) will enable better and faster decision-making by military leaders. The human councils of previous times will likely be replaced with AI decision-support tools. In as little as a decade, it may not be possible to generate advantage at most levels of the military, or in many other human endeavours, without assistance from some form of AI. It is therefore necessary for military institutions to anticipate what this means for their organisations, their ideas and the development of their leaders, lest they join the long line of military forces whose failure to anticipate change has seen them suffer catastrophe.

In his book on military innovation, Dima Adamsky describes how a military institution needs 'to figure out the tools of war (the hardware) and anticipate their application (the software). The task with regard to software will be much more demanding.'[2] This domain of 'military software'—the formulation of concepts, innovative structures and processes; and, the intellectual preparation of military leaders for the task of 'figuring out' the tools of war at their disposal—is where wars can be won and lost before a shot is fired. But insufficient attention in this area can result in a capa-

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1 Statement from a representative of a 'big tech' company during the author's visit to San Francisco, Silicon Valley and Seattle in June 2019.

2 Adamsky, D., *The Culture of Military Innovation: The Impact of Cultural Factors on the Revolution in Military Affairs in Russia*, the US and Israel, Stanford Security Studies, 2010, p. 142.

bility gap in military organisations, which may be difficult to perceive by those inside and outside of those institutions.

This gap (which I have described elsewhere as a *military software gap*[3] ) can result in a failure of imagination, a failure of anticipation, and a failure of adaptation.[4] It is a gap that has caused military failure from antiquity through to modern times. Therefore, this article will examine how military forces, as well as the broader national security community, might apply knowledge of advanced technologies to build an evolved *intellectual edge* and thereby prevent the formation of this software gap. I will argue this by first examining the rapid changes in technology, demography and geopolitics that are affecting our strategic environment. This will be followed by a review of how nations generate strategic advantage, and why an intellectual edge must be a strategic focal area. Finally, the article will assess how the application of AI may assist institutions to build an intellectual edge for leaders in this evolving strategic environment. This is an important question given the principle issue driving change in our current milieu: speed.

## The era of accelerations

We're entering an age of acceleration.[5]

Changes in the global environment—in geopolitics, demographics and technology—are occurring against the backdrop of what Klaus Schwab has described as the Fourth Industrial Revolution. This revolution is underpinned by connectivity, biotechnology and silicon-based technologies that include AI.[6]

But these developments possess many historical precedents. The first Industrial Revolution led to a proliferation of technology and manufacturing on a scale not witnessed before.[7] It was followed by another industrial revolution, from the late 1800s to the early 1900s, which resulted in motor cars, airplanes, wireless communica-

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3   Ryan, M., 'An Australian Intellectual Edge for Conflict and Competition in the 21st Century', *Centre of Gravity Paper No. 48*, Coral Bell School, Australian National University, March 2019.

4   These themes are examined in a range of sources. Among the best are: Cohen, E., and Gooch., J., *Military Misfortunes: The Anatomy of Failure in War*, Vintage Books, New York, 1990; Murray, W., and Millet, A., (Eds), Military Innovation in the Interwar Period, Cambridge University Press, 1998; See Rosen, S., Winning the Next War: Innovation and the Modern Military, Cornell University Press, 1994; and, Biddle, S., Military Power: Explaining Victory and Defeat in Modern Battle, Princeton University Press, 2006.

5   This term was first used by Kurzweil and Meyer in an article titled 'Understanding the Accelerating Rate of Change'. Kurzweil, R., and Meyer, C., 'Understanding the Accelerating Rate of Change', Perspectives on Business Innovation, 1 May 2003. Source: https://www.kurzweilai.net/understanding-the-accelerating-rate-of-change

6   Schwab, K., *The Fourth Industrial Revolution*, Crown Business, New York, 2016, p. 91.

7   In the decade prior to 1760, Britain exported 4.7 million pounds worth of textiles and 424 thousand pounds worth of steel and iron. In the decade to 1830, it exported 37 million pounds worth of textiles and 2 million pounds worth of steel and iron. Mathias, P., *The First Industrial Nation: An Economic History of Britain*, Methuen and Co., London, 1969, p. 466.

tions, assembly lines and widespread electrification. Some have characterised this second revolution as the greatest technical discontinuity in history.[8] Finally, in the last three decades of the twentieth century we have witnessed the birth of space travel and the explosion of cheap computing and connectivity, this has been described as the Information Revolution.

What distinguishes the current era, the emerging 'Fourth Industrial Revolution', from its predecessors is the pace of change. Max Boot has written that 'innovation has been speeding up. It took over 200 years for the gunpowder revolutions to come to fruition, 150 years for the first Industrial Revolution, 40 years for the second Industrial Revolution and 30 years for the Information Revolution. Keeping up with the pace of change is getting harder and the risks of getting left behind are rising'.[9] This acceleration is also a theme in the 2017 US National Intelligence Council report on global trends,[10] which notes that 'artificial intelligence and robotics have the potential to increase the pace of technological change beyond any past experience, and… may be outpacing the ability of economies, societies, and individuals to adapt'.[11]

The pace of change in technology is well examined in a range of publications. As one author recently noted, 'transformative technology is as old as the sundial'.[12] There are many examples that illustrate this point but one in particular stands out: the Apple iPhone. The iPhone 6S, released in 2015, could process information about 120 million times faster than the mainframe computer that guided Apollo 11 astronauts to the Moon. In 2017, it was superseded by the iPhoneX which had two to three time times the speed of the iPhone 6S; in just two years the increase in computing power had doubled that of the previous 46 years.[13]

The increasing pace of change is not just a technological phenomenon; it is a demographic and societal one. Rapid change is occurring in many other areas, such as urbanisation. The movement of people towards cities has accelerated in the past 40 years, particularly in less-developed regions. For instance, in 1960 a third of the world's population lived in urban areas but by 1999 that proportion had increased to

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8   Vaclac Smil uses this phrase in this examination of the era that covers the 2nd Industrial revolution. See Smil, V., *Creating the Twentieth Century: Technical Innovations of 1867-1914 and Their Lasting Impact*, Oxford University Press, New York, 2005, p. 4.

9   Boot, M., *War Made New: Technology, Warfare and the Course of History 1500 to Today*, Gotham Books, New York, 2006, p. 16

10  National Intelligence Council, *NIC Global Trends 2017: Paradox of Progress*, 2017, p. 15, 17.

11  National Intelligence Council, *NIC Global Trends 2017: Paradox of Progress*, 2017, p. 177.

12  Baldwin, R., The Globotics Upheaval: Globalisation, Robotics and the Future of Work, Oxford University Press, New York, 2019, p. 187.

13  Baldwin, R., *The Globotics Upheaval: Globalisation, Robotics and the Future of Work*, Oxford University Press, New York, 2019, p. 90.

almost half, approximately 2.8 billion people.[14] Between 1960 and 1980, the world's urban population increased by 5.5 per cent. In the following 20 years (1980–2000), this percentage increased by 7.4 per cent. From 2000 to 2020, the urban population of the world has been estimated to have increased by 9.5 per cent.[15]

For military leaders, it is in the security environment that acceleration is most pressing. Over the past two decades, most contemporary leaders have witnessed profound changes not only in the pace at which they must undertake operations but also in the increasing speed with which they have to adapt between mission sets. They must also contend with the speed at which the media (and higher headquarters) are able to gain visibility of military actions at almost every echelon. And, this pace of change will only continue to speed up. Renowned academic, Michael O'Hanlon recently wrote that:

> technological change of relevance to military innovation may be faster and more consequential in the next 20 years than it has proven to be over the last 20. Notably, it is entirely possible that the ongoing, rapid pace of computer innovation may make the next two decades more revolutionary than the last two.[16]

And, as United States Chairman of the Joint Chiefs, General Dunford, recently stated, 'the accelerated speed of war ensures the ability to recover from early missteps is greatly reduced.'[17]

But perhaps the most profound implication is that, regardless of the industry, the generation of a competitive advantage is becoming more difficult. Moreover, when an advantage is generated it is likely to be more fleeting than in previous eras. Rita McGrath has recently written that we now exist in an era of transient advantage. [18] And, if institutions are to be successful they must spark continuous change and avoid the rigidity that leads to failure. It is through this lens of constantly evolving sources of advantage that nations must look to develop and pursue strategies that harness all aspects of national capacity, including their military power. A key element will be the development of a more advanced intellectual edge.

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14 Source: United Nations Educational Scientific and Cultural Organization, http://www.unesco.org/education/tlsf/mods/theme_c/popups/mod13t01s009.html

15 These figures are drawn from the data sets that are part of the United Nations Population Division report, World Urbanisation Prospects 2018, available at https://population.un.org/wup/Country-Profiles/

16 O'Hanlon, M., *Forecasting Change in Military Technology, 2020-2040*, Brookings Institution, Washington DC, September 2018, p. 4.

17 Dunford, J., speech quoted at Garamone, J., 'Dunford: Speed of Military Decision-Making Must Exceed Speed of War' U.S. Department of Defense, 31 January 2017. Source: https://dod.defense.gov/News/Article/Article/1066045/dunford-speed-of-military-decision-making-must-exceed-speed-of-war/

18 The term transient advantage is used in her 2103 article on competitive strategy, in McGrath, R., 'Transient Advantage', *Harvard Business Review*, June 2013.

## Generating advantage and the intellectual edge

An essential purpose of military institutions is to seek to generate advantage over known and potential adversaries. Historically, there have been four key sources of this advantage: geographic, technological, mass and intellectual.[19]

Geography has long played a central role in nations building a competitive advantage. As Gray has written, 'Geography is the most fundamental of factors which condition national outlooks on security problems and strategy solutions'.[20] However, the advantages of geography are not what they once were. The speed of connectivity in the contemporary world, long-range sea and air transport capabilities and the ability of individuals to move almost at will to any point on the globe means that geography no longer guarantees sovereignty.[21] And in the emerging domains of space and cyber activities geographic constraints or advantages are yet to have a significant role.

A second source of historic advantage has been technology. From Greek Fire[22] to crossbows, tanks to jet aircraft, the enigma machine to contemporary high-capacity computing[23], military institutions throughout history have sought a competitive edge through possessing better technology than their adversaries. Advanced technology has provided an edge for Western military forces for generations but the advantages it now generates are smaller than in the past. As recent publications, such as the 2018 United States National Defense Strategy Commission[24], have described, the technological edge that has been the preserve of Western military institutions for several centuries[25] has declined. Complicating this situation, as mentioned above,

19 Ryan, M., 'An Australian Intellectual Edge for Conflict and Competition in the 21st Century', *Centre of Gravity Paper No. 48*, Coral Bell School, Australian National University, March 2019.

20 Gray, C., *War, Peace and Victory: Strategy and Statecraft for the Next Century*, Simon and Schuster, New York, 1990, p. 14.

21 As the recent US National Defense Strategy notes, 'the homeland is no longer a sanctuary'. U.S. Department of Defense, Summary of the 2018 National Defense Strategy of the United States of America, 2018, p. 3. In 2000, the Australian Defence White paper noted that 'Australia is a secure country thanks to our geography…'. This phrase was absent in the 2016 edition of the same document. Commonwealth of Australia, Defence 2000: Our Future Defence Force, Canberra, 2000, p. 23.

22 Greek Fire was a napalm-like substance fired by ships of the Byzantine Empire. Used between the 7th and 12th centuries, its exact composition has been lost to history. Condliffe, J., 'Lost Treasures: The Napalm of Byzantium', New Scientist, 1 February 2012. Source: https://www.newscientist.com/article/mg21328502-400-lost-treasures-the-napalm-of-byzantium/

23 High capacity computing is the aggregation of computing power to deliver greater performance than traditional computers in order to address scientific or engineering problems. 'What is high performance computing?' Inside HPC. Source: https://insidehpc.com/hpc-basic-training/what-is-hpc/

24 United States Institute of Peace, *Providing for the Common Defense: The Assessment and Recommendations of the National Defense Strategy Commission*, Washington DC, 2018, p. viii.

25 This is examined in Morris, I., *Why the West Rules— for Now: The Patterns of History, and What They Reveal About the Future*, Farrar, Straus and Girroux, New York, 2010.

although nations might generate technological advantages these are likely to be more transient than in previous eras.[26]

A third source of historical military advantage has been mass. Generating a larger force than an adversary has long been the aspiration of military institutions. Whether to provide the capacity to concentrate forces and achieve local overmatch at the tactical level or used to provide the scale necessary to operate across many different parts of the globe, mass has played a crucial role in historical military success. Sun Tzu wrote that 'if we are concentrated into a single force while the enemy is fragmented into ten, then we attack him with ten times his strength'.[27] Clausewitz wrote that 'in tactics as in strategy, superiority of numbers is the most common element in victory'.[28] And, Jomini included mass in his 1838 *The Art of War* as a principle of war. Therefore, the doctrine of massed forces has influenced generations of military leaders. It remains a principle of war in the US military, most recently reinforced in the 2018 Joint Doctrine publication on operations.[29]

This conception of a larger military force however, does not include just the number of people in uniform.[30] As the US Civil War and two world wars demonstrated, successful military mobilisation also require efficient mass industrial mobilisation. In the first half of the 20th century, the US and the USSR[31] developed the capacity to mobilise large numbers of people but it was ensuring that industry could keep them adequately equipped, fed and supplied that became the acme of military skill.[32] However, these types of mass mobilisation and engagements also led to mass casualties. When the Soviets achieved nuclear parity with the US in the 1970s their overwhelming superiority in conventional forces was also a factor that led Western forces to focus on precision and economy of force through the Second Offset

26  The term transient advantage is borrowed from a 2103 article on competitive strategy, in McGrath, R., 'Transient Advantage', *Harvard Business Review*, June 2013.

27  Sun-Tzu, *The Art of War*, translated by Sawyer, R., Westview Press, Boulder, 1994, p. 192.

28  Von Clausewitz, C., *On War*, Book 3, Chapter 8, Superiority of Numbers, (Trans), Princeton University Press, Princeton, 1976, p. 194.

29  *US Joint Doctrine – Operations 2018*, US Department of Defense, Washington DC, 2018, p. ix.

30  At the start of the First World War, most European states had large conscripted armies. Keegan, J., *A History of Warfare*, Alfred Knopf, New York, 1993, p. 234.

31  Harrison, M., 'Resource Mobilization for World War II: the USA, UK, USSR and Germany, 1939-1945', *Economic History Review*, 41:2 (1988), pp. 171–192. The formation of the Red Army in the 1920s was founded on the ideas of Soviet military theorist and leader Mikhail Frunze, who authored a unitary military doctrine in 1921, which also included mass warfare that embraced the total mobilization of the state and peacetime compulsory military service. Rice, C., 'The Making of Soviet Strategy', Makers of Modern Strategy, Princeton University Press, Princeton, 1986, p. 655.

32   The United States military has recently re-issued its doctrine on military mobilization, in U.S. Joint Staff, Joint Publication 4-05, *Joint Mobilization Planning*, 23 October 2018.

strategy.[33] Coupled with post–Cold War draw downs,[34] Western nations now possess numerically smaller forces than their potential adversaries. They also have a significantly reduced capacity for large-scale industrial mobilisation to build military hardware [35]—at least at the start of any conflict.

Hence, Western military organisations face challenges to the three macro-sources of traditional military advantage. Sovereignty can no longer be guaranteed by geography, the advantages of technological are declining and Western militaries lack the mass of potential adversaries. Military organisations must therefore increase investment in the only remaining source available to offset the competitive advantages of potential adversaries by cultivating an *intellectual edge*.[36] It not only provides a source of strength and addresses the *software gap* but can also be used to bind other marginal sources of strength into a greater whole. This clever application of military forces (within a smart use of all aspects of national power) is built on the possession of the best ideas that are applied to tactics, operational concepts, strategy and organisations.

This intellectual edge manifests in two different but interconnected ways; the individual and the institutional.[37]

For an individual, the intellectual edge is the capacity to creatively out-think and out-plan potential adversaries. The intellectual edge is founded on the broadest array of training, education and experience that can be provided by institutions, as well as by a personal dedication to continuous self-learning, over a long period of time. Increasingly, an individual's intellectual edge will be underpinned by cognitive support

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33  In the 1950s, the US built a large nuclear force to 'offset' the Soviet advantage in conventional forces. However, when the Soviets achieved nuclear parity in the 1970s, the US needed to find another source of military advantage. Thereafter arose what became known as the 'Second Offset'. While the US could not afford to match the Soviets tank for tank, it could field smaller numbers of extremely capable, high-quality equipment, leap-ahead technologies, and associated operational concepts. Grant, R., 'The Second Offset', *Air Force Magazine*, The United States Air Force Association, July 2016, p. 32–33. Source: http://www.airforcemag.com/MagazineArchive/Documents/2016/July%202016/0716secondoffset.pdf

34  For example, in just the first decade after 1989, the US Army was reduced in size from nearly 800,000 regular soldiers to just under 500,000 soldiers. Kapp, L., and others, *How Big Should the US Army Be? Considerations for Congress*, Congressional Research Service, Washington DC, 2 September 2016, p. 2. Source: https://fas.org/sgp/crs/natsec/R44612.pdf Since the end of the Cold War, the US Navy has reduced from 592 active ships (including 14 carriers, 137 submarines and 214 cruisers, destroyers and frigates) to the force in 2016 of 275 active ships (including 10 carriers, 70 submarines and 93 cruisers, destroyers and frigates). 'US Ship Force Levels', US Naval History and Heritage Command. Source: https://www.history.navy.mil/research/histories/ship-histories/us-ship-force-levels.html#1986

35  This is discussed in Whitlock, J., 'The Army's Mobilization Problem', War Room (online), 13 October 2017. Source: https://warroom.armywarcollege.edu/articles/armys-mobilization-problem/; and Kepe, M., 'Preparing for the NATO summit: Why military mobility should be on the agenda', The RAND Blog, 26 February 2018. Source: https://www.rand.org/blog/2018/02/preparing-for-the-nato-summit-why-military-mobility.html

36  Ryan, M., 'An Australian Intellectual Edge for Conflict and Competition in the 21st Century', *Centre of Gravity Paper No. 48*, Coral Bell School, Australian National University, March 2019.

37  Ryan, M., 'An Australian Intellectual Edge for Conflict and Competition in the 21st Century', *Centre of Gravity Paper No. 48*, Coral Bell School, Australian National University, March 2019.

through human-artificial intelligence teaming. This has been described as 'System 3' thinking by Dr Frank Hoffman.[38]

The second manifestation of the intellectual edge is institutional. While the intellectual edge in individuals is vitally important, so too is a collective, institution-wide intellectual edge. This comprises an organisation's capacity to effectively harness the disparate and diverse intellects of its individuals to solve complex institutional problems in the short, medium and long term. This institutional intellectual edge must be applied to the challenges of force design, operational concepts, integration of kinetic and non-kinetic activities, personnel development and talent management. This institutional manifestation also demands excellent leaders.

## The intellectual edge and artificial intelligence

Nations are challenged in the shifting security environment to build, sustain and adapt the intellectual edge in individuals and organisations. This is not a new challenge. What compounds the challenge, however, is the current historically unprecedented speed of change in the environment. This era of acceleration means nations must develop the ability to recognise change more quickly, develop or evolve their strategies more rapidly and do this continuously.

But how is this to be achieved? Against this background, it seems likely that traditional methods of training and educating even the most talented and dedicated individuals will not be able to keep pace. The relentless speed of change and the complexity of the strategic environment militaries will increasingly be required to operate in defies human capacity to adapt.

Given the enormous complexity of this problem, enhancing biological sources of the intellectual edge with silicon-based intelligence—AI— appears to offer one pathway to an enhanced advantage for nations in the 21st century as it brings together the macro-sources of technology and intellectual advantage.

This AI support promises to augment the creative and contextual abilities of humans, not displace them. One recent article has proposed that 'a human's *coup d'oeil* might be augmented by a data-fused *cyber d'oeil* that supports human decision-making'.[39] It will be an increasingly fundamental approach to master if humans are to retain a full measure of decision-authority in an environment of rapidly increasing tempo in military operations.

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38  Hoffman, F., 'Healthy Scepticism about the Future of Disruptive Technology and Modern War', *Foreign Policy Research Institute*, 4 January 2019, source: https://www.fpri.org/article/2019/01/healthy-skepticism-about-the-future-of-disruptive-technology-and-modern-war/, accessed 7 January 2019.

39  Hoffman, F., 'Healthy Scepticism about the Future of Disruptive Technology and Modern War', *Foreign Policy Research Institute*, 4 January 2019. Source: https://www.fpri.org/article/2019/01/healthy-skepticism-about-the-future-of-disruptive-technology-and-modern-war/

Arguably, there are two foundational theories that may assist in the development of approaches in the use of artificial intelligence to assist human cognition. First, the foundational theory of the extended mind, which explores how human cognitive processes are extended in the world. It provides a framework for understanding how artificial intelligence could support human decision-making because it proposes that tools (even simple tools like writing utensils) outside of human biology can serve as extensions of human cognitive states and processes.[40] The second theory is that of AI-extenders. This is a nascent approach that explores how artificial intelligence can be applied to supporting human cognition (including decision-making and other capacities).[41]

## Extending human cognition

In recent decades, the extended mind thesis has gained traction in cognitive science, the philosophy of mind, and epistemology. This thesis denies that cognition is limited to individual minds or brains.[42] A number of authors have argued that an individual's cognitive processes spread beyond biological boundaries but the provenance of the extended cognition thesis is commonly credited to Andy Clark and David Chalmers, 1998 paper, *The Extended Mind*.[43]

Their thesis describes how the tools that humans use to assist them to complete cognitive tasks can become seamlessly integrated into their biological capacities. The key idea is that tools and biological intelligence together play an indispensable role in bringing about human cognitive functions. One example is the important role that a pen and paper play for a mathematician in solving complex equations. The pen and paper function as part of a process that, if it were done in the head, would be recognised as part of the cognitive process. Tools such as GPS and computers provide similar functions for military personnel. These cognitive tools are more than just tools, they are incorporated as part of the mind.[44]

The extended mind thesis therefore offers a simple, useful and explainable theory for improving human cognition.[45] The use of technology could allow humans to extend beyond their biologically-based cognitive capabilities. This might permit humans to

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40  Clark, A., and Chalmers, D., 'The Extended Mind', Analysis 58.1, January 1998, p. 7–19.

41  Hernandez-Orallo, J and Vold, K., 'AI Extenders: The Ethical and Societal Implication of Humans Cognitively Extended by AI', Association for the Advancement of Artificial Intelligence, 2019.

42  Arnau, E., Estany, A., González del Solar, R., & Sturm, T., 'The extended cognition thesis: Its significance for the philosophy of (cognitive) science', Philosophical Psychology, 27:1, 2014, p. 1.

43  Clark, A., and Chalmers, D., 'The Extended Mind', Analysis 58.1, January 1998, p. 7.

44  Hernandez-Orallo, J and Vold, K., 'AI Extenders: The Ethical and Societal Implication of Humans Cognitively Extended by AI', Association for the Advancement of Artificial Intelligence, 2019, p. 1.

45  Vold, K., Overcoming Deadlock: Scientific and Ethical Reasons to Embrace the Extended Mind Thesis, Philosophy and Society, Vol. 29, No. 4, 2019, p. 489.

be more capable and better at a range of different functions, if this external technology is appropriately and ethically integrated. 'Appropriate integration', for Clark and Chalmers, requires that information in these external technologies is highly accessible, reliable and constantly available. Meeting these conditions, it is argued that external tools can provide humans with extended or even novel cognitive capacities.[46] The construct of AI-extenders applies this notion of cognitive extension to more sophisticated tools that are imbued with artificial intelligence capacities.

## AI-extenders

In a 2019 paper, Jose Hernandez-Orallo and Karina Vold[47] proposed that artificial intelligence might allow for the extension of human cognition to new capabilities not conceived when Clark and Chalmers published their article in 1998. This extension of human cognition with artificial intelligence is distinct from fully externalised use of artificial intelligence.[48] There is no autonomy for the artificial intelligence involved. It is truly an extension, rather than an independent agent.

There are a broad spectrum of functions where artificial intelligence may be used to extend cognition and permit the development of an AI-enhanced human intellectual edge. Hernandez-Orallo and Vold have proposed a range of different elements of human cognition that might benefit from AI-extenders. These would augment existing, biological cognitive processes to permit humans to think through problems and develop solutions in a way that would not be possible otherwise. Hernandez-Orallo and Vold offer a diverse set from which military and national security planners might draw examples for the institutional implementation of human-AI teaming.

Noting the imperfect understanding of how human cognition might be extended with AI, I would propose that our first steps into this new world should be with the most basic of cognitive functions that our people and our leaders apply routinely. There are five: (1) enhanced memory, (2) attention and search, (3) comprehension and expression, (4) planning and executing activities and (5) metacognition.

**Enhanced memory:** Recently, researchers at the University of Pennsylvania have shown how machine learning algorithms might be used to stimulate, decode and

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46  Hernandez-Orallo, J and Vold, K., 'AI Extenders: The Ethical and Societal Implication of Humans Cognitively Extended by AI', Association for the Advancement of Artificial Intelligence, 2019, p. 1.

47  I am indebted to Dr Karina Vold for her advice and suggestions on how AI extenders may be applied to military decision making.

48  Hernandez-Orallo, J and Vold, K., 'AI Extenders: The Ethical and Societal Implication of Humans Cognitively Extended by AI', Association for the Advancement of Artificial Intelligence, 2019.

enhance memory.[49] In a different approach, Elon Musk's Neuralink[50] is researching a 'high bandwidth' connectivity between the brain and computers to allow a 'human-AI merger'.[51] The rapid advances in this field, as well in neurotechnology,[52] indicate that the enhancement and augmentation of humans through brain-computer interfaces is possible in the short to medium term.[53] The application of AI-extenders for enhanced memory is likely to have a large range of applications in the military and wider national security circles.[54]

**Attention and search:** Humans frequently ignore or overlook objects or activities. This can often comprise information that has deep longer-term importance but lacks shorter-term context. It is only in hindsight that the importance of some information within a larger picture is recognised. There are many examples that illustrate this, including the 'failure of imagination' discussed in the United States 9/11 Commission Report.[55] AI-extenders might allow individuals or teams to examine large amounts of information through multiple live-feeds and databases in order to identify things—or bring focus to issues—that humans or humans in different sized teams may otherwise overlook, discard due to group think, or fail to appropriately prioritise.[56]

Comprehension and expression: AI-extenders may provide humans, and human teams, with a significantly improved understanding of information. Systems monitoring various activities, events, individuals and groups might be able to report probabilities of events (for example enemy actions) or quantities (an adversary's size or industrial capacity to produce precision munitions) with very short lead times. Contemporary real time analytics such as IBM Z[57] and Amazon Kinesis[58] show promise, particularly for developing real time situational awareness at the tactical level.

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49  Kahana, M., Ezzyat, Y., and others, 'Closed-loop stimulation of temporal cortex rescues functional networks and improves memory', Nature Communications No. 9, 6 February 2018. Source: https://www.nature.com/articles/s41467-017-02753-0

50  Neuralink is an Elon Musk company that aims to develop ultra-high bandwidth brain-machine interfaces to connect humans and computers. https://www.neuralink.com

51  Cuthbertson, A., 'Elon Musk Says Neuralink Machine That Connects Human Brain to Computers 'Coming Soon', The Independent, 22 April 2019. Source: https://www.independent.co.uk/life-style/gadgets-and-tech/news/elon-musk-twitter-neuralink-brain-machine-interface-computer-ai-a8880911.html

52  Hong, G., Lieber, C., 'Novel electrode technologies for neural recordings', *Nature Reviews*, 4 March 2019. Source: http://cml.harvard.edu/assets/Novel-electrode-technologies-for-neural-recordings.pdf

53  Near-term brain-computer interfaces will likely remain task-oriented. Lance, B., and others, 'Brain-Computer Interface Technologies in the Coming Decades', *Proceedings of the IEEE*, Vol. 100, May 2012, p. 1585.

54  Hernandez-Orallo, J and Vold, K., 'AI Extenders: The Ethical and Societal Implication of Humans Cognitively Extended by AI', Association for the Advancement of Artificial Intelligence, 2019.

55  Failure of imagination is examined over multiple pages in the 9/11 Report. See *The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States*, 2004, p.339–348.

56  Hernandez-Orallo, J and Vold, K., 'AI Extenders: The Ethical and Societal Implication of Humans Cognitively Extended by AI', Association for the Advancement of Artificial Intelligence, 2019.

57  Details of the IBM real time analytics at https://www.ibm.com/us-en/marketplace/machine-learning-for-zos

58  Details of the Amazon Kinesis product is at https://aws.amazon.com/kinesis/?nc2=h_m1

**Planning, deciding, executing activities:** Military organisations operate across a range of organisational levels and timescales that demand well-honed short, medium and long term planning capabilities. These processes could be significantly enhanced and potentially sped up through the application of AI-extenders that could develop models of action, testing and comparing various activities against known and projected enemy capabilities—and then comparing different courses of action for their capacity to achieve higher-level outcomes. AI-extenders may also be able to model the networks and anticipate the decisions, actions and interests of people outside of deliberate or formal planning activities. The application of AI-extenders to support this will be founded on advances in high-capacity computing and the nascent field of Generative Adversarial Networks.[59]

**Metacognition:** Metacognition describes what an individual or system knows about its own cognition, or cognition in general. It is literally 'thinking about thinking'.[60] It can take many forms and includes the use of knowledge about when and how to use particular strategies for learning or problem-solving.[61] This is important in developing leaders who can be lifelong learners though their individual capacity to learn how to learn; it is vital for the adaptive capacity of individuals. Metacognition has also been a focus of recent research into AI, in order to provide mechanisms for increasingly complex systems to recognise and diagnose failures.[62] Given the 'black box' nature of many AI systems (people don't know how AI comes up with decisions),63 the design of metacognition into next generation AI also aims to provide greater assurance to human users.

This is not an exhaustive list of the potential functions of AI-extenders. As institutions begin to apply these AI-extenders to a widening array of activities, more functions

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59  A Generative Adversarial Network a computerised model that is trained using two neural network models. One model is called the '*generator*' or '*generative network*', this learns to generate new plausible samples. The other model is called the '*discriminator*' or '*discriminative network*' and learns to differentiate generated examples from real examples. The two models are set up in a contest or a game (in a game theory sense) where the generator model seeks to fool the discriminator model. The application of this to scenario testing and wargaming friendly versus enemy actions is obvious. Marr, B., 'Artificial Intelligence Explained: What Are Generative Adversarial Networks?', Forbes, 12 June 2019. Source: https://www.forbes.com/sites/bernardmarr/2019/06/12/artificial-intelligence-explained-what-are-generative-adversarial-networks-gans/#186b870d7e00

60  Chick, N., "Metacognition", Vanderbilt University Centre for Teaching online, Source: https://cft.vanderbilt.edu/guides-sub-pages/metacognition/

61  Crowder, J., 'Metacognition and Metamemory Concepts for AI Systems', Conference Paper, July 2011.

62  Schmill, M., and others, 'The Role of Metacognition in Robust AI Systems', Association of for Advancement of Artificial Intelligence, 2008. Source: https://www.aaai.org/Papers/Workshops/2008/WS-08-07/WS08-07-026.pdf; Crowder, J., 'Metacognition and Metamemory Concepts for AI Systems', Conference Paper, July 2011. Source: https://www.researchgate.net/publication/235219069_Metacognition_and_Metamemory_Concepts_for_AI_Systems

63  This issue of AI as a black box is explore further explored in Bathaee, Y., 'The Artificial Intelligence Black Box and the Failure of Intent and Causation', Harvard Journal of Law & Technology, Volume 31, Number 2 Spring 2018; and, Bloomberg, J., 'Don't Trust Artificial Intelligence? Time to Open the AI Black Box', Forbes (online), 16 September 2018. Source: https://www.forbes.com/sites/jasonbloomberg/2018/09/16/dont-trust-artificial-intelligence-time-to-open-the-ai-black-box/#58f828fb3b4a

will be discovered. The functions provided here, however, suggest useful initial steps in exploring how an AI-extended intellectual edge might manifest in military and national security affairs. It is therefore worth exploring how the intellectual edge may be improved at the key levels of military activities, underpinned by AI-extenders.

## Application of an AI-extended intellectual edge

There are two important military decision-making layers for the intellectual edge: tactical and strategic. However, these are not the only levels of decision-making relevant to military activities. Policymaking drives military strategy yet is largely the realm of civilian leadership. Operational decision-making is another layer, resting between tactics and strategy. Nonetheless, given that tactics and strategy sit at either end of the extremes of military decision-making, they are worthy of initial attention.

## AI and tactical decision-making

At the tactical level, the intellectual edge is about success at the sharp end of military endeavours. Historically, this has been measured largely by physical actions within a complex context but it is increasingly shaped by cyber and other 'influence' activities. As artificial intelligence starts to be applied to tactical activities across the land, sea, air, cyber and space domains, it will start to change the balance of power in tactical military endeavours. Payne notes that this 'will change the utility of force by enhancing lethality and reducing risk to societies possessing AI-warfighting systems…a marginal technological advantage in AI is likely to have a disproportionate effect on the battlefield'.[64]

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64   Payne, K., 'Artificial Intelligence: A Revolution in Strategic Affairs?', *Survival*, Vol. 06, no. 5, October–November 2018, p. 23.

## Table 1: Tactical Applications of AI-extenders

| AI-extender Functions | Tactical Applications |
| --- | --- |
| Enhanced Memory | Recall of previous incidents, enemy and friendly actions, supply states and other data more quickly that can then be applied rapidly for planning or hasty operations. This function might be underpinned by data visualisation, chatbots and other new machine-human interfaces. For example, a tactical leader may use a chatbot accompanied by data visualisation to search for information and order the application of different analytics to specific sets of tactical information. |
| Attention and Search | Current and future tactical leaders rarely suffer from a lack of information. Their challenge is to find relevant information and sort through this over-abundance of information for that which is tactically useful within a relevant amount of time. Therefore, AI-extenders might rapidly sort through still-imagery, video, voice, text and knowledge sources for relevant, near-term information (based on human mission-derived parameters) and then provide decision-support cues to all relevant human actors within a defined group of units and organisations. |
| Comprehension and Expression | The defining feature of future warfare will be speed. In many cases, the speed of operations or tactical actions may be beyond the comprehension of even the most exceptional humans. AI-extenders may be used to cue tactical commanders at all levels to rapidly emerging situations that require their attention, while providing initial pathways for decision-making. Another function can include translation between different languages, as well as identifying and making sense of body language and cross-cultural cues. This could support alliances and relationship building with different populations. Initial programs, such as Google Translate,[65] Microsoft Translator[66] and Amazon Comprehend[67] are contemporary AI that are available and continue to improve in quality. Finally, Robotic Process Automation (RPA) is an emerging form of technology based on the idea of software robots or artificial intelligence (AI) workers, which undertake high-repetition mundane tasks. This could be applied to many routine tasks, freeing humans to exercise creativity. Military institutions may eventually get to the point where each human is running at least one or more 'bots' that are undertaking RPA activities. |
| Planning, Deciding, Executing Activities | Support to tactical planning, both hasty and deliberate. In particular, support to formal decision-making processes including modelling unique courses of action, probabilistic risk assessments and wargaming / simulating the potential success of these actions against known and anticipated adversary capabilities, organisations, tactics and intentions. Rapid decision-support to derive optimum solutions across a range of endeavours which may also include network deployment and assurance, as well as the conduct of information operations and logistic support. Other functions that might benefit from AI-extenders include the optimal dissemination of orders across assured networks, and the improvement of monitoring of execution of tactical activities. |
| Metacognition | The application of AI-extenders in this area may assist the rapid assessment and feedback of desired versus actual outcomes for tactical actions. Support for short- and medium-term learning and dissemination of lessons about adversary tactics and capabilities might also be improved. Application of AI-extenders may also include improving organisational self-awareness of their own capacities, making them less susceptible to self-deception, and allow the optimisation of combined arms and joint capabilities across a defined area based on previous experiences of friendly and adversary organisations, and the optimisation of the information flows and logistic support for that force. |

65  Google Translate can be found at https://translate.google.com

66  See Microsoft Translator at https://translator.microsoft.com

67  See details on the natural language processing of Amazon Comprehend at https://aws.amazon.com/comprehend/

Table 1 illustrates areas where an AI-extended intellectual edge might be used in tactical actions. AI has multiple possibilities for decision-support at the tactical application layer. A capacity to support alignment of tactical with higher aims is just the tip of the iceberg. Using *human in the loop* and *human on the loop* systems,[68] forms of AI may be applied for rapid decision-making. Other yet to be developed AI might support the integration of joint capabilities and assist in tactical planning through rapid simulation of the outcomes of multiple options.

## AI-enabled Strategy

In many respects, strategic thought as well as the development and execution of strategy represents the ultimate manifestation of the intellectual edge for military professionals and other national security practitioners. Colin Gray has written that 'the most enduring function of strategy is management of potentially lethal dangers. Strategists need to be "right enough" to enable us to survive the perils of today, ready—and possibly able—to cope strategically with the crises of tomorrow'.[69] The *era of acceleration*[70] promises many potential pitfalls for strategy developers; the pace of change can disrupt strategic plans and planning more quickly than ever before.

Regardless of the types of disruptions that might be witnessed in the strategic environment, strategy will remain a central preoccupation of military institutions and national states. But, how it is developed and the speed at which it must evolve, is being disrupted. Table 2 describes how the five key AI-extender functions might be applied to strategy development and execution in the near future. Intellectual edge at the strategic level is a function of best matching purpose to action.[71]

The tactical and strategic levels of military endeavour are just two examples of how AI-extenders might be used in organisations. There are a range of other human endeavours across society, government and business that could potentially benefit from the use of AI-extenders to provide an 'extended intellectual edge'.

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68  These forms of human-machine command and control relationships are explained in Scharre, P., and Horowitz, M., *An Introduction to Autonomy in Weapon Systems*, Center for a New American Security, Washington DC, February 2015, p. 6. Source: https://s3.amazonaws.com/files.cnas.org/documents/Ethical-Autonomy-Working-Paper_021015_v02.pdf

69  Gray, C., *The Future of Strategy,* Polity Press, Cambridge, 2015, p. 117.

70  This term was first used by Kurzweil and Meyer in an article titled 'Understanding the Accelerating Rate of Change'. Kurzweil, R., and Meyer, C., 'Understanding the Accelerating Rate of Change', *Perspectives on Business Innovation*, 1 May 2003. Source: https://www.kurzweilai.net/understanding-the-accelerating-rate-of-change

71  As Gray notes, strategy only has value when it serves as a bridge between purpose and action. Gray, C., The Future of Strategy, Polity Press, Cambridge, 2015, p. 23

## Table 2: Strategic Application of AI-extenders

| AI-extender Functions | Strategy Applications |
|---|---|
| Enhanced Memory | AI-extenders could play an important role in retaining corporate knowledge, particularly in military institutions where there is a regular turnover of personnel due to posting and operational turbulence. This will be especially important where the implementation of strategies over long periods of time is necessary. The extenders may also provide the enhanced memory function to assist personnel with previous examples of friendly and adversary strategic activities to assist in planning and adaptation, as well as provide memory support on optimal strategies for technology development, resource use in military activities and what has worked in attracting and keeping personnel in a military organisation. |
| Attention and Search | The increase in speed that is transforming tactical activities is also influencing the development and implementation of strategy. Bespoke, strategic level AI-extenders may be able to discern and highlight to strategic leaders the initial indicators of changes in the broader strategic environment. This will include the activities of competitors and adversaries but may also include cues about breakthroughs in disruptive technologies, new strategic concepts, changes in strategic logistical capacity and other resources applied to military operations. It may also provide support to strategic management, monitoring and problem-alerts in communications networks that cover space-based and terrestrial systems, and potentially uncover 'unknown unknowns' – unseen threats. |
| Comprehension and Expression | The contemporary strategic applications of influence operations, or political warfare, will play a much more prominent role in national security activities. The use of AI-extenders could assist in detecting and better understanding the linkages in a competitor's, or adversary's, political warfare activities, and discovering key 'influencers' to aid in targeting them. Conversely, AI-extenders may assist in measuring the progress, and recommending improvements, in friendly influence activities. AI-extenders may also be used in ensuring that different elements of a national security enterprise can better understand each other's motivations, priorities and key points of interaction within a larger national security construct. |
| Planning, Deciding, Executing Activities | Intelligent decision-support tools for human planners for development of a diverse array of options for dealing with strategic dilemmas—in strategic competition and conflict—might be developed. Additionally, informed and connected decision-support for the range of strategic enterprise functions—personnel management, logistics, base management and maintenance, to name a few—might be an important set of design drivers for AI-extenders in this area. For example, in personnel, existing personalisation AI such as Amazon *Personalise*[71] offer initial capability in decision-support for those involved in workforce planning activities. Another enterprise function, such as better predicting military expenditures, might be supported through contemporary AI, such as *Amazon Forecast*.[72] |
| Metacognition | Retention and enhanced sharing of lessons about strategic decision-making in the military institution, but also in allies and potential adversaries. This might extend to projections about potential strategies that could be adopted to adversaries and allies. This AI-extender function would represent an important manifestation of the intellectual edge at the institutional level, where the organisation not only continues improving its operations but also constantly learns about improving the capacity to enhance its planning, activities and adaptation at the strategic level. |

72  See https://aws.amazon.com/personalize/

73  For details of this this, see https://aws.amazon.com/forecast/

## The way ahead

Successfully achieving military and national security objectives in the 21st century will demand that military institutions realise the potential of their personnel in a way that nurtures and celebrates their intellectual edge with the support of appropriate artificial intelligence. It will require an institutional mindset that doesn't replace humans with machines but replaces some lower order human cognitive functions with bespoke AI. And, it will require a disciplined but adaptive institutional leadership to nurture and embrace organisational, conceptual and technological change. It is proposed that four areas of work will underpin this.

First, military institutions must possess an endorsed plan of how their personnel will make AI-supported decisions. In developing and executing this, there will be human and organisational barriers to overcome. While always challenging, these institutional changes can be aided by having a clear explanation of purpose for why AI will be used to support decision-making. This should form part of a more expansive view of future military capability and national security policy.

Second, military institutions will need to evolve their capacity for strategic engagement and scanning. Engagement between like-minded military institutions —between services and between like-minded nations—must embrace a greater sharing of ideas on the application of AI. Enhanced sharing—of the best-practice use of AI in developing a future intellectual edge—must be one of the cornerstones of the future approach to Western military alliances.

Third, military institutions must significantly improve their technological literacy. If military institutions are to effectively start using AI, they will need more than just deep technical experts in the development of algorithms and the design of AI for military systems. At almost every rank level, military personnel will require basic literacy in a spectrum of new and disruptive technologies, such as AI.[74] This must include knowledge of its application, how to provide a level of assurance and quality control, the ethical considerations and how to creatively combine it with new concepts and human organisations.[75]

Finally, military institutions must build 'checkpoints' to ensure that the use of AI is aligned with institutional values. The extension of human cognition with AI will pos-

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74  This must include knowledge of its application, how to provide a level of assurance and quality control, and how to optimally combine it with new concepts and human organisations at every level. Ryan, M., 'Intellectual Preparation for Future War: How Artificial Intelligence Will Change Professional Military Education', War on the Rocks, 3 July 2018.

75   Approaches to achieving this are explored in Ryan, M., *Human Machine Teaming for Future Ground Forces*, Centre for Strategic and Budgetary Assessment, Washington DC, 25 April 2018.

sess ethical challenges[76] that must be addressed in parallel with technological developments. Some elements of augmenting humans with technology may challenge traditional notions of human decision-making. So, there is some way to go before humans place their full trust in the decision-making capacity of machines. But trust that machines will operate in way that is fair and aligned with the values of their human users is an essential element of effective human-AI teaming.[77]

## Conclusion

One does not need to be an expert in all aspects of AI developments to recognise its potential for assisting military leaders with their cognitive processes. The capacity of humans to make sense of a world changing at a rapid pace is diminishing. Where we must make sense of information, and make decisions that involve life or death, some form of supplementation to human cognition is required.

The application of AI-extenders to achieve an extended intellectual edge represents the first steps that military institutions might take to improve the quality and responsiveness of decision-making by individuals and teams. These steps will also provide useful information about the micro-relationships that will form[78] between humans and AI to inform subsequent generations of human-AI teaming. This is an undertaking that will demand institutional leadership, the development of new visions of organisational purpose, [79] strategic focus, collaboration with industry and academia, and tolerance of risk and failure. But it is worth effort because it offers significant potential advantages to military decision-makers in the 'era of accelerations'.

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76   Diakopoulos, N., 'Algorithmic Defamation: The Case of the Shameless Autocomplete', Tow Center for Digital Journalism website, August 6, 2013. Source: http://towcenter.org/algorithmic-defamation-the-case-of-the-shamelessautocomplete/

77   Establishing trust between humans and machines is a fundamental aspect of human machine teaming. I explored this issue in Ryan, M., *Human Machine Teaming for Future Ground Forces*, Centre for Strategic and Budgetary Assessment, Washington DC, 25 April 2018. It is also explored in Orallo, J and Vold, K., 'AI Extenders: The Ethical and Societal Implication of Humans Cognitively Extended by AI', Association for the Advancement of Artificial Intelligence, 2019; Paul Scharre and Michael C. Horowitz, An Introduction to Autonomy in Weapon Systems, working paper (Washington, DC: Center for a New American Security, February 2015, and numerous other publications.

78   Abbass, H., 'Social Integration of Artificial Intelligence: Functions, Automation Allocation Logic and Human-Autonomy Trust', *Cognitive Computation*, Vol. 11, 2019, p. 170.

79   Builder, C. and others, *The Army in a Changing World: The Role of Organisational Vision*, RAND Arroyo Center, RAND Corporation, Santa Monica, June 1990.

# Competition short of war – how Russia's hybrid and grey-zone warfare are a blueprint for China's global power ambitions

*Sascha Dominik (Dov) Bachmann, Andrew Dowse and Håkan Gunneriusson*

## Introduction

China is set to build an empire where its economic, strategic and security interests in Asia, the Pacific, Europe and the Arctic will be safeguarded for generations to come. Using the concepts of hybrid warfare and grey-zone warfare, this article argues that the implementation of China's 2015 military strategy of active defence[1] and the territorial objectives in the 2019 Defence White Paper[2] are being informed by examples of contemporary Russian warfare approaches.

This article compares the present Chinese aggressive foreign policy approach in the South China Sea with the precedents of Russia's annexation of Crimea and ongoing aggression in the Ukraine. It concludes with a call for decision-makers in Australia and other Western democracies to learn from these lessons in order to counter such hybrid threats.

## Hybrid warfare—what's in a name?

Hybrid war is an evolving and debated notion in international war and conflict studies. It refers to the use of nonconventional methods, such as cyber warfare, as part of a multidomain warfighting approach to disrupt and disable an opponent's actions without engaging in open hostilities. The concept is almost 20 years old and has its origins in US military approaches to future warfighting. Coined by USMC General Mattis during a trendsetting speech at a US Naval Institute conference in

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1    For an English translation of China's Military Strategy of 2015, see http://eng.mod.gov.cn/Press/2015-05/26/content_4586805.htm (accessed 07/07/2019).

2    For an English translation of the 2019 Defence White Paper, China's National Defence in the New Era, see http://www.xinhuanet.com/english/2019-07/24/c_138253389.htm

2005—and drawing from work by USMC LTC Dr Frank G Hoffman[3] and USMC Colonel Bill Nemeth[4]—it has become a concept that continues to evolve (perhaps beyond its original scope and meaning) and to shape how an adversary's actions are characterised and countered.[5]

Only recognised in military literature since 2007 with Hoffman's seminal work,[6] the effects and outcomes of hybrid threats are often in the headlines. Russia's military action in both Ukraine and Crimea; the election interference in both the UK and USA since 2016; and the use of social media and online news services (such as Russian TV) as part of a concerted Stratcom/InfoOps approach are all examples that may fall under the umbrella of hybrid warfare, depending on the definition used.

The term hybrid warfare has evolved over the years. Originally, it referred to both state actors and nonstate actors with advanced military capabilities. Then Hoffman, using the Israel–Hezbollah conflict of 2006 as one of his case studies, found Hezbollah, as a nonstate actor, successfully employing a host of different warfighting tactics, technologies and means that were hard for Israel's IDF to respond to. He used the terms 'hybrid threat' and 'hybrid warfare'[7] to describe these tactics and provided us with this original, early definition:

'Hybrid threats incorporate a full range of different modes of warfare including conventional capabilities, irregular tactics and formations, terrorist acts including indiscriminate violence and coercion, and criminal disorder. Hybrid Wars can be conducted by both states and a variety of nonstate actors [with or without state sponsorship]. These multimodal activities can be conducted by separate units, or even by the same unit, but are generally operationally and tactically directed and co-ordinated within the main battlespace to achieve synergistic effects in the physical and psychological dimensions of conflict.'[8]

Hoffman's definition started a process by the US, NATO and allies of attempting to define hybrid warfare and threats that continues to date. There are still ongoing discussions among military thinkers and writers in relation to the relative 'novelty

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3   Mattis J. & Hoffman, F.G. 'Future Warfare: The Rise of Hybrid Wars', U.S. Naval Institute, Proceedings, November 2005, Vol. 131/11/1,233. https://www.usni.org/magazines/proceedings/2005/november/future-warfare-rise-hybrid-wars

4   Nemeth, W. 'Future war and Chechnya: a case for hybrid warfare', Naval Postgraduate School, Monterey, Master Thesis, (2002) at https://core.ac.uk/download/pdf/36699567.pdf

5   For a recent reflection on hybrid warfare and its correlation to grey-zone, see Hoffman, F.G. 'Examining Complex Forms of Conflict-Gray Zone and Hybrid Challenges', *Prism 7*, No 4, pp 31–47.

6   Hoffman, F.G. *Conflict in the 21st Century: The Rise of Hybrid Wars* (Arlington, VA: Potomac Institute for Policy Studies, December 2007).

7   See also Hoffman 'Hybrid threats: Reconceptualising the evolving character of modern conflict' (2009) Strategic Forum 240. See also Hoffman 'Hybrid Warfare and challenges' (2009), Joint Forces Quarterly 52.

8   Hoffman, F.G. *Conflict in the 21st Century: The Rise of Hybrid Wars*, p. 8.

of such warfare';[9] its emergence as a concept of warfare within the wider context of 'full spectrum operations';[10] as an element of the continuum of conflict'; distinct from grey-zone or political warfare;[11] or as an emerging new form of warfare below or blurring the threshold of armed conflict.[12] All of this discussion underlines the lack of a single and shared definition for hybrid warfare.[13]

An elusiveness in definitional consistency continues, mirroring the difficulty in defining which strategies and tactics should be included in hybrid warfare. The definition is flexible at best and tailored to suit the actor's wider purposes. In any case, 'the hybrid notion reflects the porosity between irregular and regular warfare'.[14]

## NATO developments

After being coined by General Mattis in 2005, Hoffman's 2007 widely cited definition of hybrid threats then found its way into the 2010 Capstone Concept[15] used by NATO in its 'Countering Hybrid Threat' (CHT) experiment. This defined hybrid threats as threats 'posed by adversaries with the ability to simultaneously employ conventional and non-conventional means adaptively in pursuit of their objectives'.[16] It also enunciated the need for a comprehensive approach 'to adapt its strategy, structure and capabilities accordingly… to deliver an effective response'. In 2011, NATO predicted that states may increasingly wage non-conventional attacks as '[hybrid threats] can be largely non-attributable, and are therefore suitable for situations where more overt action is ruled out for any number of reasons'.[17]

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9   As recent as 2017, Hybrid Warfare was regarded as relative novelty in the *MCDC Countering Hybrid Warfare Project: Understanding Hybrid Warfare*, (2017), p 3.

10  *Ibid*, describing Hybrid Warfare as the 'synchronized use of multiple instruments of power tailored to specific vulnerabilities across the full spectrum of societal functions to achieve synergistic effects'.

11  Hoffman, F.G. 'Examining Complex Forms of Conflict', (n 5), p.32.

12  NATO StratCom COE, *Hybrid Threats–A Strategic Communications Perspective*, Report 2019, p.8.

13  Bachmann, S. & Munoz Mosquera, A. 'Hybrid Warfare as Lawfare: Towards a Comprehensive Legal Approach' in E. Cusumano & M. Corbe (eds) *A Civil-Military Response to Hybrid Threats*, Palgrave Macmillan, Cham (2018), p.63.

14  Tenenbaum, E. 'La piège de la guerre hybride' (2015), Focus stratégique n. 63, p.5.

15  NATO – Supreme Allied Commander Transformation Headquarters, 'Military Contribution to Countering Hybrid Threats Capstone Concept', <www.act.nato.int/the-countering-hybrid-threats-concept-development-experiment>, 22 February 2017;see also S Bachmann, 'Hybrid Threats, cyber warfare and NATO's comprehensive approach for countering 21st century threats – mapping the new frontier of global risk and security management', (2011) 88 *Amicus Curiae* 24.

16  NATO ACT, BI-SC Input to a new NATO Capstone Concept for the Military Contribution to Countering Hybrid Threats, <http://www.act.nato.int/images/stories/events/2010/20100826_bi-sc_cht.pdf>22 February 2017.; also in Bachmann, S. & Gunneriusson, H. 'Hybrid Wars: The 21st Century's New Threats to Global Peace and Security', *Scientia Militaria, South African Journal of Military Studies*, Vol 43, No. 1, 2015, p.79.

17  Bachmann, S. & Mosquera, A. (n 13) and also referring to S. Bachmann & J. Sanden 'Countering hybrid eco-threats to global security under international law: The need for a comprehensive legal approach', *Liverpool Law Review* 33, 2013, 261.

Hybrid threats were defined as multimodal, low intensity, as well as kinetic and non-kinetic threats to international peace and security.[18] These include asymmetric conflict scenarios, global terrorism, piracy, transnational organised crime, demographic challenges, resource security, retrenchment from globalisation and the proliferation of weapons of mass destruction.[19]

In 2011, NATO's Headquarters Supreme Allied Command Transformation conducted an experiment aimed at 'Assessing Emerging Security Challenges in the Globalised Environment' (Countering Hybrid Threats or CHT). Among the outcomes of CHT, one finds the argument that hybrid threats faced by NATO and its partners require a so-called comprehensive approach of a wide spectrum of kinetic and non-kinetic responses to such threats from military and non-military actors alike. Essential to NATO's CHT conclusion was the hypothesis that such a comprehensive response will have to be a multidimensional response by a partnership of state and nonstate actors, such as international and non-governmental organisations, as well as private firms.[20]

In 2012, and regardless of the tangible results of the CHT and the existence of NATO's Capstone Concept of 2010, NATO decided to discontinue its work on the subject, while urging NATO member states and associated NATO Centres of Excellence to continue working on CHT.[21] It became clear that this decision had been made prematurely when NATO chose the term hybrid warfare to describe the 2014 Crimean annexation and the intensifying Russian aggression in Eastern Ukraine.[22] NATO's Wales Summit Declaration of September 2014 provides a reference to hybrid warfare and its components:

> We will ensure that NATO is able to effectively address the specific challenges posed by hybrid warfare threats, where a wide range of overt and covert military, paramilitary and civilian measures are employed in a highly integrated design. It is essential that the Alliance possesses the necessary tools and procedures required to deter and respond effectively to hybrid warfare threats, and the capabilities to reinforce national forces.[23]

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18  On the subject, Bachmann, S. & Sanden, J. 'Countering Hybrid Eco-threats to Global Security Under International Law: The Need for an Comprehensive Legal Approach', 33 (3) Liverpool Law Review 263.

19  See 'Updated List of Tasks for the Implementation of the Comprehensive Approach Action Plan and the Lisbon Summit Decisions on the Comprehensive Approach', dated 4 March 2011, p. 1-10, paragraph 1 cited in S. Bachmann & H. Gunneriusson, 'Russia's Hybrid Warfare in the East: Using the Information Sphere As Integral to Hybrid Warfare', *Georgetown Journal of International Affairs: International Engagement on Cyber V* (2015): 204.

20  See NATO ACT, 'NATO countering the Hybrid Threat', http://www.act.nato.int/nato-countering-the-hybrid-threat, 22 February 2017.

21  Bachmann, S. & Mosquera, A. (n 13), 62

22  NATO *Wales Summit Declaration*, par 13 Sept 2015, at http://www.nato.int/cps/fr/natohq/official_texts_112964.htm?selectedLocale=en. (07/07/2019).

23  *Ibid*.

This declaration, together with subsequent publications and announcements by NATO[24] seems to indicate the Alliance's awareness of the need to prepare for hybrid warfare. On 1 December 2015, NATO Secretary General Jens Stoltenberg and then European Union High Representative for Foreign Affairs and Security Policy, Federica Mogherini, announced the launching of a new hybrid warfare program and a new NATO hybrid warfare strategy. This led to the adoption and development of a so-called Readiness Action Plan (RAP) to respond to new threats, including hybrid warfare.[25]

## The grey-zone

Discussions of hybrid warfare often focus on the effective and simultaneous employment of a range of activities to achieve a desired effect, including less obvious and asymmetric challenges such as economic manipulation, disinformation and insurrection.[26] Conventional force, or threat of use of conventional force, remains a feature of hybrid warfare, but conduct of these combined and harmonised activities primarily remains below the threshold of what we might consider armed conflict.

Hence, a key feature of a hybrid threat is not only the combination of these activities, but their conduct below the threshold of war, or in the grey-zone. Such measures might be considered to be short of war due to the ambiguity of international law, the ambiguity of actions and attribution or because the impact of the activities does not justify a response.[27]

This is what is new in hybrid warfare as compared to earlier eras when nation states had comparatively well-defined concepts of red lines, minimising the amount of influence waged in the grey-zone. Cyber warfare and disinformation are more readily undertaken in this grey-zone, with responses limited due to the ambiguities mentioned above. Even insurrection, which has always been a factor in proxy wars, arguably now is facilitated more effectively and covertly through modern forms of propaganda and influence in the information domain.

Hicks seeks to characterise the grey-zone as having five common elements: bounded thresholds, veiled intentionality towards a security objective, multidimensional tools, use of (dis)information, and blurriness between public and private domains.

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24  *See* Davis, J.A. 'Continued Evolution of Hybrid Threats – The Russian Hybrid Threat Construct ad the Need for Innovation', http://www.jwc.nato.int/images/stories/threeswords/CONTINUED_EVOLUTION_OF_HYBRID_THREATS.pdf ((07/07/2019))

25  Mosquera, A. & Bachmann, S. 'Understanding Lawfare in a Hybrid Warfare Context', 37 NATO Legal Gazette (2016), 26.

26  Monaghan, A. 'The War in Russia's Hybrid Warfare', *Parameters 45*(4) Winter 2015-16 https://ssi.armywarcollege.edu/pubs/parameters/issues/winter_2015-16/9_monaghan.pdf

27  Dowse A. and Bachmann S., What is hybrid warfare and what is meant by the grey-zone, https://theconversation.com/explainer-what-is-hybrid-warfare-and-what-is-meant-by-the-grey-zone-118841

She has also sought to consolidate definitions into this excellent summary of grey-zone challenges

> An effort or series of efforts intended to advance one's security objectives at the expense of a rival using means beyond those associated with routine statecraft and below means associated with direct military conflict between rivals. In engaging in a gray zone approach, an actor seeks to avoid crossing a threshold that results in open war. [28]

The best exemplar of grey-zone tactics has been in Eastern Ukraine, where Russia has encouraged separatists and conducted an information campaign that has remained under the threshold of war. This conflict is such a good example that, confusingly, many refer to the physical area in Eastern Ukraine as the grey-zone[29].

## Russian aggression against Ukraine and the exploitation of Western weaknesses

What started off as an example of hybrid warfare, with the illegal occupation of Crimea by Russia's Little Green Men in March 2014 and then illegal annexation, later turned into a de facto war of aggression, which has been waged in Eastern Ukraine since 2014. This is a fact that Western politicians are unlikely to acknowledge[30] as doing so would have significant consequences. The Nuremberg Principles of 1950,[31] the International Criminal Court's new (leadership) crime of aggression under the Rome Statute[32] and the prohibition of the use of force in international relations under the UN Charter[33] would all have to be addressed if the West was to label and condemn correctly what has been happening in Ukraine.

Having said that, it becomes clear that the present mechanisms and guardians of international law are limited in how to respond to a reality where such violations of international law are committed by one of the five permanent members of the UN Security Council. Russia (like the other permanent UN Security Council member states) has multiple venues and methods to block or delay efforts to create a coordinated international response. For example, Russia could utilise its veto power in

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28  Hicks K. et al, By Other Means, CSIS report, July 2019, https://www.csis.org/analysis/other-means-part-i-campaigning-gray-zone

29  Rettman, A., 'Russia's grey war in Ukraine prompts fatigue', https://euobserver.com/foreign/144084

30  See eg Gunneriusson, H. and Bachmann, S. 'Western Denial and Russian Control - How Russia's National Security Strategy threatens a Western-based approach to Global Security, the Rule of Law and Globalization Polish Political Science Yearbook vol. 46 (1) (2017), 9–29

31  *Principles of International Law Recognized in the Charter of the Nürnberg Tribunal and in the Judgment of the Tribunal of 1950* at http://legal.un.org/ilc/texts/instruments/english/draft_articles/7_1_1950.pdf.

32  Statute of the ICC, (U.N. Doc. A/CONF.183/9*), Art 5 bis; full text is available at http://legal.un.org/icc/statute/romefra.htm.

33  UN Charter Art 2 (4), prohibition of the use of force.

the United Nations Security Council, regardless of the prohibition of the use of force in Article 2 (4) of the UN Charter.

The International Court of Justice (ICJ) in The Hague, the principal judicial organ of the UN, is built on the fact that only states can be parties to cases and jurisdiction is dependent on consent.[34] The International Criminal Court (ICC) can only exercise its jurisdiction over member states or, as an exception, through referral by the UN Security Council. Neither Russia nor China are member states (and for that matter the USA has not ratified its membership) and a referral by the UN Security Council is unlikely given that the states in question hold veto powers.[35]

The last resort would be to approach the European Court of Human Rights with an application regarding Russian violations of rights granted under the European Convention on Human Rights of 1950. This would be possible strictly speaking but would not deter Russian aggression in the long-run. Any ruling by the Court would likely only lead to Russia being required to pay financial remedies (something Russia and Turkey, as Europe's worst human rights offenders, have been willing to pay) without any prospect of such a judgement effectively being capable of forcing Russia to reverse its aggressive policies against Ukraine.

The West's only weapon is the imposition of sanctions, something which has taken place in the form of so-called targeted sanction against individual Russians close to the Kremlin. Unless the West is willing to target Russia's prime hybrid warfare weapon—the energy sector—these sanctions won't bite. The adoption of such sanctions against Russia's energy sector, a cornerstone of its national economy and bedrock of any armament spending, would have a detrimental effect on Russia's abilities but this is unlikely to happen any time soon, as long as Western Europe's, often self-imposed, energy dependency on Russia continues.

The amount of natural gas exported from Russia to Europe is at an all-time high. It shows little sign of slowing down despite political concerns from the European Union (EU). Soon, Russian natural gas exports to Europe will increase further with the impending completion of Nordstream 2 in the Baltic Sea. This massive project, with the support of German politicians, has been enabled despite the fact that presently active Baltic pipelines are yet to reach full capacity. Germany, the economic engine of Europe, has made itself dependent on Russian energy,[36] just as it is scaling down

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34 ICJ, *Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. United States of America)*, at https://www.icj-cij.org/en/case/70/judgments and *Israeli Wall Advisory Opinion* (Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory), at https://www.icj-cij.org/en/case/131 (07/07/2019).

35 See for an overview, Bachmann, S. 'Malaysia Airlines Flight MH17: the day Russia became a state sponsor of Terrorism', 99 *Amicus Curiae* 2014

36 *DW*, 'Nord-Stream 2 Pipeline row highlights Germany's energy dependence on Russia', https://www.dw.com/en/nord-stream-2-pipeline-row-highlights-germanys-energy-dependence-on-russia/a-47344788 (05/07/2019).

its own energy production of domestic coal and nuclear energy.[37] In this context, it is noteworthy that Germany's unilateral decision to leave nuclear technology by 2024 has exacerbated this dependency and vulnerability.[38] It has significantly weakened any potential economic countermeasures at domestic and EU level by states which are opposing Russian meddling and grey-zone activities against NATO and EU states, thus effectively questioning both unity and transatlantic security cooperation in the years to come.[39]

## China's territorial ambitions as a 'hybrid threat'?

China has participated in more territorial disputes than any other state since the end of the Second World War.[40] Many of these disputes could be considered expansionism, with the exception of Taiwan, which has remained a reunification objective of the People's Republic of China (PRC) since 1949. The disputes include land border claims and counter-claims, such as with India, and arguments with Hong Kong over its separate legal system are also increasingly a source of tension. However, the primary focus of Chinese expansionism tends to be in the maritime environment with disputes over the Paracel and Spratly Islands in the South China Sea and the Senkaku Islands in the East China Sea.

The Chinese maritime disputes especially in the South China Sea are complex, involving multiple overlapping claims with other regional states but also with other stakeholders who seek peaceful resolution of claims and assurance of freedom of navigation. The establishment of military facilities on the islands, in breach of a ruling of its claim by The Hague, exacerbated the situation, leading US and other navies to conduct regular freedom of navigation exercises through the South China Sea.

In addition to China's ambitions associated with territory in its direct proximity, China has developed a strategy for its future economy with the Belt and Road Initiative. Critics of this strategy assert that the associated infrastructure elements of the initiative are essentially an alternative means of securing key overseas territory, or a

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37  *Ibid.*

38  See Gunneriusson, H. and Bachmann, S. (n 19), H Gunneriusson, 'Russia and China's ongoing "hybrid warfare" – When does it cross the line?' https://limacharlienews.com/national-security/russia-china-hybrid-warfare/ (05/07/2019).

39  See De Maio, G. 'Nord Stream 2: a failed test for EU Unity and transatlantic coordination', https://www.georgetownjournalofinternationalaffairs.org/online-edition/2019/4/20/nord-stream-2-a-failed-test-for-eu-unity-and-transatlantic-coordination (05/07/2019).

40  Fravel, M.T. 'International Relations Theory and China's Rise: Assessing China's Potential for Territorial Expansion', *International Studies Review*, Vol. 12, Issue 4, December 2010, 505–532 https://doi.org/10.1111/j.1468-2486.2010.00958.x https://academic.oup.com/isr/article/12/4/505/1854189

new form of colonialism.[41] An obvious example of this strategy is China's effective acquisition of the port of Hambantota in Sri Lanka.[42]

China's approach to its territorial claims is one in which changes are implemented incrementally and thereafter become the new normal. Occupation of South China Sea islands is an example, in which China's 2019 Defence White Paper characterises international freedom of navigation as 'countries from outside the region… illegally entering China's territorial waters… undermining China's national security'.[43]

In a 2010 article, Fravel asserted that China was unlikely to resort to armed conflict or even aggressive expansionism in pursuing their territorial claims.[44] However, since that publication, we have seen examples in the East and South China Seas in which aggression has been clear, with challenges between military platforms and with conflict often narrowly averted.

Despite these tensions and occasional incidents, China's conduct of expansionism in the South China Sea primarily has been in the grey-zone, in that each step has been calculated to achieve objectives without crossing a threshold of warfare. However, can we consider it to be hybrid warfare? That is, has the posturing of forces been complemented by other activities to achieve their goals? Hoffman regards China as being 'well organized to conduct operations short of military conflict'[45] utilising three forms of nonwarfare, namely noncontact (fei jierong), nonlinear (fei xianshi) and nonsymmetric (fei duicheng)'.[46]

Such influence activities are widely suspected to be behind the Philippines government's softening of their stance against China in relation to the South China Seas dispute.[47] Such influence may be overtly undertaken through incentives such as Belt and Road Initiative agreements, although there is evidence that such initiatives can have a covert element and take advantage of corrupt regimes.[48]

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41  Greer, T. 'One Belt, One Road, One Big Mistake', *Foreign Policy*, 6 December 2018, https://foreignpolicy.com/2018/12/06/bri-china-belt-road-initiative-blunder/ (07/07/2019).

42  Abi-Habib, M. 'How China got Sri Lanka to cough up a port', *NY Times*, 25 June 2018, https://www.nytimes.com/2018/06/25/world/asia/china-sri-lanka-port.html (07/07/2019).

43  'China's National Defence in the New Era', http://www.xinhuanet.com/english/2019-07-24/c_138253389.htm

44  Fravel, (n 40)

45  Hoffman, F.G. 'Examining Complex Forms of Conflict', (n 5), p 33

46  Ibid.

47  Corr, A., 'Duterte's China ties, allegations of corruption, and the Philippine election', https://www.ucanews.com/news/dutertes-china-ties-allegations-of-corruption-and-the-philippine-election/85085

48  Doig, W. 'The Belt and Road Initiative Is a Corruption Bonanza', Foreign Policy, 15 January, 2019, https://foreignpolicy.com/2019/01/15/the-belt-and-road-initiative-is-a-corruption-bonanza/

Influence can extend to attempted corruption of Western politicians to advocate for Chinese policies over the dispute.[49] China more broadly exerts influence through a combination of political warfare activities, including mobilisation of diasporas, tasking of students, financial assistance to individuals and institutions, economic manipulation and large-scale cyber and other information operations.[50]

## Hybrid Lawfare – exploiting the legal grey-zone of modern conflict

Hybrid warfare is an open concept with different elements. Lawfare, for example, is a new aspect of non-kinetic conflict aiming at 'using law as a weapon to manipulate legal paradigms'.[51]

Lawfare is being used by Russia and China (in the context of the South China Sea as discussed in this article) both within and outside the scope of traditional armed conflict. For Russia the use of lawfare is 'a continuation of its policy of using every tool at its disposal to achieve its political and geo-strategic goals'[52] and a 'force multiplier' to meet its political, military and legal objectives, as highlighted in its Military Doctrine of 2014 and its National Security Strategy of 2015.

Both China and Russia have been active in the use and abuse of the rule of law in order to either prepare military action or to justify it after completion of the mission. Russian justification of the occupation and then subsequent annexation of Crimea is an example of the latter; while the Chinese justification for its claims over the South China Sea is an example of the preparation of a legal basis for the potential use of force in self-defence when protecting own sovereign rights and (island-) territory.

Lawfare in conjunction with hybrid warfare 'provides a layer of "fake" legitimacy, or at least reduces the erosion of apparent legitimacy, due to the nonattributable aspects inherent in hybrid warfare while using "easy" hybrid warfare methods'.[53]

Lawfare can be used as a method of hybrid warfare or influence operations.[54]

US writer, Kittrie came up with the following test:

> (1) the actor uses law to create the same or similar effects as those traditionally sought from conventional kinetic military actions—including impacting the key

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49  Remeikis, A. 'Sam Dastyari quits as Labor senator over China connections', The Guardian, 12 December 2017, https://www.theguardian.com/australia-news/2017/dec/12/sam-dastyari-quits-labor-senator-china-connections

50  Mahnken, Babbage and Yoshihara, 'Countering Comprehensive Coercion', CSBA, May 2018, https://csbaonline.org/uploads/documents/Countering_Comprehensive_Coercion,_May_2018.pdf

51  Dunlap, C. 'Lawfare Today: A Perspective', *YALE Journal of International Affairs* (Winter 2008), 146.

52  Bachmann, S. & Mosquera, A. (n 13), 62.

53  Mosquera, A. & Bachmann, S. (n 16), at 27.

54  *Ibid.*

armed forces decision-making and capabilities of the target; and (2) one of the actor's motivations is to weaken or destroy an adversary against which the lawfare is being deployed.[55]

Russia's use of lawfare in Ukraine thus exploits both (1) the undefined definition of the conflict as aggression and (2) the unwillingness of the international community to label it as such. And, it maintains uncertainty through a strategic (dis)information campaign which keeps the nature of the conflict open, so it is unclear whether it is international armed conflict, non-international armed conflict or civil unrest.[56] Here clear parallels regarding China's actions in the South China Sea can be drawn.

## China and Russia's use of the 'weaponisation' of the maritime environment as grey-zone tactics or consolidation of a hybrid warfare based approach

We are now turning to the example for such a lawfare approach: the so-called weaponising of the maritime environment through terraforming as part of a multifaceted security strategy. China's Defence Minister, Wei Fenghe, argued in 2018 that, 'The islands in the South China Sea have long been China's territory. They're the legacy of our ancestors and we can't afford to lose a single inch of them'.[57]

Officially, China claims that its overall intention was to use the extension of its territorial waters peacefully and to serve solely its commercial needs. This is doubtful, given that China has actively weaponised the claimed territories. Sumihiko Kawamura, a former rear admiral and commander of Japan's Maritime Self-Defence Force's antisubmarine air wing, suspects that China wants to use the South China Sea as leverage against the US Pacific security projection. Kawamura believes Beijing is trying to turn the South China Sea into 'a safe haven' for its nuclear-powered submarines, which are armed with ballistic missiles that can reach the United States. [58]

In this context, it is worthwhile to note that China did lose its case for claiming the SCS waters in a 2015 case brought before the UN Permanent Court of Arbitration by one of the affected states, the Philippines. China therefore failed spectacularly with its attempt to successfully use lawfare by manipulating the provisions of the United Nations Convention on the Law of the Sea to argue own sovereign rights (like

55 *Ibid*, citing Kittrie, O. Lawfare: Law as a Weapon of War (Oxford University Press, Oxford, 2015), 8.

56 *Ibid*.

57 *Lima Charlie News*, https://limacharlienews.com/national-security/freedom-of-navigation-south-china-sea/ (07/07/2019).

58 *Japantimes*, https://www.japantimes.co.jp/news/2012/11/07/national/beijings-senkaku-goal-sub-safe-haven-in-south-china-sea/#.XO1-4RZKjIU (07/07/2019).

exclusive economic and fishing rights) over the majority of the SCS waterways.[59] China later decided to ignore the ruling and to consolidate its illegal position further by illegally maintaining, and even expanding, so-called Exclusive Economic Zones in the disputed SCS waters.[60] This consolidation manifests itself in Chinese below the threshold grey-zone tactics like policing its falsely claimed territorial waters around artificially built islands, interference in air-traffic and challenging US and allied navies in their rightful freedom of seas navigation patrols, to name just a few examples.[61] China has created, like Russia in respect to the illegally annexed Crimea, a fait accompli.

In Russia's case, immediately following the annexation of Crimea in 2014, Russia began the planning and construction of the Crimean Bridge over the Kerch Strait in Ukraine to support its territorial claims. The project was successfully completed in May 2018 as the so-called Unification Bridge and was followed subsequently by Russian military action to ensure regional observance of the new status quo.[62] Russian naval units attacked and boarded three Ukrainian vessels in autumn 2018 for having allegedly violated Russian territorial waters when passing through the Kerch Strait.[63] What became known as the 'Kerch Strait' incident was followed by the effective closure of a part of the Sea of Azov waterway whenever Russia decided to conduct live fire naval exercise,[64] thus violating Ukrainian territorial waters, as the annexation of Crimea was and continues to be regarded as illegal.[65]

Russia's actions can be seen as consolidation action of its gains from its successful hybrid warfare campaign against the Ukrainian state when seizing Crimea. With the annexation complete and little to fear in terms of military action or meaningful sanctions, Russia can now resort to the use of traditional hard power in consolidating and protecting its position.

Both China and Russia have provided examples of how territorial gains made through hybrid warfare and grey-zone tactics can be weaponised further to serve wider national security aims and ambitions by warranting the question of how to respond in an effective manner.

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59   *The New York Times*, 'Tribunal Rejects Beijing's Claims in South China Sea' https://www.nytimes.com/2016/07/13/world/asia/south-china-sea-hague-ruling-philippines.html ((07/07/2019). For the actual ruling, see the original judgment at https://pca-cpa.org/en/cases/7/

60   https://www.lawfareblog.com/countering-chinas-actions-south-china-sea (07/07/2019).

61   https://thediplomat.com/2019/03/chinas-next-phase-of-militarization-in-the-south-china-sea/ (07/07/2019)

62   *Reuters*, https://www.reuters.com/article/us-apps-ukraine-commentary/commentary-in-azov-sea-putin-plays-a-deadly-ukraine-game-idUSKCN1NV2JY ((07/07/2019))

63   IISS, ttps://www.iiss.org/publications/strategic-comments/2018/the-kerch-strait-incident, (07/07/2019)

64   https://empr.media/opinion/analytics/russia-hybrid-activities-on-the-azov-coast-of-ukraine/ (07/07/2019)

65   See EU statement, https://eeas.europa.eu/delegations/ukraine/41530/international-law-crimea-ukraine_en, (07/07/2019).

## Russian warfighting stratagems as dangerous precedent

The question arises of what is new in Russian warfare since 2008. Among a host of features of the new war some are indeed noteworthy:

> the non-declaration of war, the use of armed civilians, non-contact clashes like the blockade of military installations by 'protestors', the use of asymmetric and indirect methods, simultaneous battle on land, air, sea, and in the informational space, and the management of troops in a unified informational sphere.[66]

The authors have written extensively about hybrid warfare and its Russian equivalent as reflexive control[67] and nonlinear warfare. Russian Hybrid Warfare has become known as the so-called 'Gerasimov' doctrine[68]— though while Western military authors (including us) continue to use this reference, it is at least questionable if General Gerasimov actually intended to have his thoughts and reflections on evolving Russian military operational approaches be regarded as a military 'doctrine' in a strict sense.[69] So, while the existence of such a doctrine is debatable, the overall success of contemporary Russian warfighting is not, and the term hybrid warfare is a good characterisation of Russia's contemporary aggressive foreign policy.

The actual consequences of Russia's hybrid warfare are far-reaching. Russia's foreign policy (and also China's) of assertive nationalist posturing, meddling in internal affairs, political warfare, and hybrid warfare disrupt the Western narrative of globalisation, rule of law, democracy and interconnectivity. This creates an untenable situation where the West is responding to ad hoc threats in an increasingly less assertive way instead of defining and implementing a joint foreign policy that would deter such an adversary.

Russia's version of hybrid warfare, whether we refer to it as Gerasimov's doctrine, Russian Hybrid Warfare or reflective control, has been successful. Firstly, Russia proved successfully 'that this warfare not only includes nonstate actors but also states'.[70] Secondly, it proved the effectiveness of this form of warfare because Russia's departure from its reliance on kinetic resources also reduced the need for using conventional military power in a conventional sense, which benefits the 'weaker' opponent. And thirdly, hybrid warfare as part of a wider information-operation and lawfare approach provided false legitimacy due to attribution questions and the potential for denial by the target state for political reasons. This Russian success

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66  Bachmann, S. & Gunneriusson, H. 'Hybrid Wars: The 21st Century's New Threats to Global Peace and Security' (n 16), 88.

67  *Militaire Spectator*, https://www.militairespectator.nl/thema/strategie-operaties/artikel/reflexive-control, (07/07/2019).

68  Monaghan, A. (n 17) for a detailed discussion of the origins and the nature of the Gerasimov Doctrine, 65-67.

69  *Ibid*, at 66 for some more background of this debate.

70  Bachmann, S. & Mosquera, A. (n 13), 64

with hybrid warfare is what China seems to be emulating in respect to its current territorial expansion: the use of 'little blue men', information operations, economic and diplomatic pressure and lawfare (which albeit failed).

## Countering hybrid and grey-zone warfare

Western nations have viewed China's rise and territorial expansion (defined initially by the Nine-Dash Line but with implications further afield) with very much a conventional mindset. Exemplified by the United States, the West's conventional thinking has given primacy in its countering strategy to military capability and posture[71].

However, a strategy that responds to a hybrid threat with a conventional strategy is less likely to succeed. As pointed out by Donnelly and Ratnam:

> The military's torpid response has been caused by bureaucratic inertia, the political dominance of traditional weapons and military organizations, the distraction of the post-9/11 wars, and a failure to comprehend the cumulative damage that was occurring and how rapidly modes of warfare were changing. [72]

A more effective counter may be a coordinated response against each element of the threat, rather than just with military force. One might think of this as warfare's version of Ashby's Law of Requisite Variety.

It is refreshing that the Australian Chief of Defence, General Angus Campbell, recently recognised that the failure to push back on authoritarian states that employ hybrid warfare tactics would result in 'a total mismatch'.[73] General Campbell pointed out that Australia and similar democratic nations need to better develop counters to political warfare threats such as disinformation, cyber, IP theft, coercion and propaganda.[74] He also highlighted the importance of countering grey-zone tactics in the shaping and influencing phases of conflict, rather than when events cross the threshold of war.

It is one thing to identify such a deficiency in national power; another to develop an effective response that overcomes the obstacles highlighted by Donnelly and Ratnam. Having said that, General Campbell is an officer who previously, as Australia's Chief of Army, recognised similar issues in his service and initiated the new doctrine

71 Montgomery and Sayers, 'Addressing America's Operational Shortfall in the Pacific', https://warontherocks.com/2019/06/addressing-americas-operational-shortfall-in-the-pacific/?_lrsc=b3f6fde9-c0e6-4a46-bd3f-e069b2a47321

72 Donnelly and Ratnam, 'US is woefully unprepared for cyber-warfare', https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/52560026

73 Wroe, D. '"Grey-zone" tactics: Australia vulnerable to political warfare, Defence Chief warns', *Sydney Morning Herald*, 13 June 2019, https://www.smh.com.au/politics/federal/grey-zone-tactics-australia-vulnerable-to-political-warfare-defence-chief-warns-20190613-p51xj6.html

74 Nicholson, B. 'ADF chief: West faces a new threat from "political warfare"', The Strategist, ASPI, 14 June 2019, https://www.aspistrategist.org.au/adf-chief-west-faces-a-new-threat-from-political-warfare/

of Accelerated Warfare to bring the Army properly into the 21st Century.[75] Having said that, the countering strategies have broader national and international perspectives than can be delivered under the military's control, so it will be interesting to observe in the future what changes can be progressed to deal with hybrid threats.

As noted by General Campbell, a key step is to recognise hybrid threats and the conduct of grey-zone actions. Babbage[76] identifies that China's approach, while successful to date, is now encountering serious challenges as regional nations have a clearer appreciation of China's political warfare strategy.

US think tanks have recognised the need to make adjustments. The Center for Strategic and International Studies (CSIS)77 highlights the need for a range of reforms, including in intelligence, in the way the US undertakes its own campaigns and frames the narrative, in how it responds to specific events and in keeping up with the cyber domain.

Babbage[78] has also developed concepts for the US and its allies to be more effective in countering China's hybrid campaign, ranging from asymmetric responses to a series of campaign strategy options. Babbage emphasises the importance of developing human capital in countering hybrid campaigns, developing allied unity and continuing to champion democratic values.

## Conclusion: Sino-Russian collusion to end a unipolar world order?

Russia and China have been working hard to end the unipolar order of the US, which has dominated global politics since the end of the Cold War and the implosion of the Soviet Union and the Warsaw Pact in 1991. It has to be acknowledged that a multi-polar world order, with China and Russia competing with the US for global influence and power, is the reality of today's global world affairs. Australia has to recognise this reality in order to not fall into the trap of blindly following the US's present attempts to counter and/or reverse the threats to its waning unipolar status as sole superpower without too much concern regarding its allies.

China and Russia have acted illegally in violation of international law and aggressively in both instances: China in regard to the South China Sea and Russia in regard to Crimea and Ukraine. Both actors seem to have identified the unwillingness and

75  Kuper, S. 'Accelerated warfare and preparing Army for future conflict', https://www.defenceconnect.com.au/land-amphibious/3219-accelerated-warfare-and-preparing-army-for-future-conflict

76  Babbage, R., 'Winning without fighting', CSBA report, July 2019, https://csbaonline.org/research/publications/winning-without-fighting-chinese-and-russian-political-warfare-campaigns-and-how-the-west-can-prevail

77  Hicks et al, ibid.

78  Babbage, R. Stealing a march, CSBA report July 2019, https://csbaonline.org/research/publications/stealing-a-march-chinese-hybrid-warfare-in-the-indo-pacific-issues-and-options-for-allied-defense-planners

inability of the West to counter their actions effectively. In Europe, no one wants to risk war over Russia's aggression in Ukraine. In the Asia–Pacific context, ASEAN countries, wedged between the giants India and China, in the South China Sea, are in much the same situation. Neither China nor Russia expect any military response from NATO or an ASEAN country, and so continue to use hybrid warfare and grey-zone tactics to erode further the international systems of comity and the rule of law. This leads to erosion within the affected societies and political systems, as the indecisiveness within the EU to continue with sanctions against Russia highlights.[79]

There is growing Sino-Russian cooperation across nearly all domains and sectors of interest and potential risk for Australia. From economic ties (China is Russia's second largest trading partner) to technical collaborations in respect to the internet of things including 5G infrastructure, and now the explicit expression of the intent to 'develop bilateral cooperation, in the spirit of comprehensive partnership and strategic interaction',[80] Sino-Russian cooperation increases.

It seems only logical that China is following Russia's successful use of hybrid war-fare as 'it reduces the need for using classical military resources, providing them with a shield of plausible deniability'.[81] With the backdrop of Europe's failure to call out Russia for its aggression in Ukraine, Russia's hybrid warfare strategy seems to have worked so far. Arguably, China's strategy in the South China Sea also seems to be working. Terraforming the maritime environment as undertaken by Russia and China is illegal under international law and constitutes the use of force or the threat of such. The fact that Russia and China successfully managed to get away with such illegal and aggressive behaviour is reprehensible and constitutes a clear and present threat to international comity and security.

The threats posed by contemporary adversaries (both state and nonstate actors) in employing hybrid and grey-zone tactics poses an increasing threat to Australia's security and global stability in the years to come; accordingly the identification of such threats and the planning of countermeasures and contingencies to meet these threats is paramount. Whether such an approach is based on a doctrinal approach of hybrid warfare as understood in the NATO and Western context, the use of grey-zone counter-tactics or a yet-to-be developed doctrine is academic, so long as the response is comprehensive and multimodal, drawing from the full spectrum of military and civil resilience.

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79  Lima Charlie News, (n 39)

80  *Tass* 'Russia, China to develop military cooperation as strategic partners' at http://tass.com/defense/1063608 and The National Interest,https://nationalinterest.org/feature/china-and-russia-strategic-alliance-making-38727.

81  Bachmann, S. & Mosquera, A. (n 13), 64

# The Achilles effect and preventing armies from becoming mobs

*Christopher R. Smith*

## Introduction

In his poem The Iliad, Homer pits the petulant Athenian demigod Achilles against his antithesis, the Trojan prince Hector. Homer's Hector was a skilled warrior, but he was also a paragon of nobility and reason. He was dispassionate, reflective and kind and he possessed a capacity to control his killing instinct.[1] Achilles, on the other hand, was brooding and temperamental. Incensed by Agamemnon's demeaning treatment of him, Achilles withdrew from Agamemnon's war with Troy and sulked.[2] His delicate sensitivities already heightened, Achilles was enraged when he learned of the death of his close friend Patroclus at the hands of Hector.[3] Overcome by grief, he returned to battle to avenge the death. All compassion left Achilles and he mercilessly killed every Trojan he could lay his hands on.[4] He eventually confronted Hector, slaying him in front of his parents and abusing the body to an extent that even the gods were sickened by the brutality.[5] Achilles was able to defeat Hector because his grief-induced madness inhibited reason, fear and morality. Through Achilles's victory over Hector, Homer expresses the tendency for passions such as fear, anger and hatred to consume humanity and reason in war.[6]

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1   Homer emphasises Hector's nature throughout the book. Book VI provides a good example. Homer describes Hector's visit to his wife and son, and Hector's concern for them. Homer describes Hector's meaningful meeting with the wives of the Trojan soldiers and an intimate meeting with his mother.

2   Book I describes Achilles withdrawal from battle, demonstrating his pettiness and the tendency for emotions and passions to overcome Achilles's reason.

3   Book XVIII describes Achilles's response to hearing of the death of Patroclus; weeping, tearing his hair out and throwing himself on the ground.

4   Book XXI describes Achilles's killing spree and his lack of compassion.

5   Book XXII describes the duel between Hector and Achilles, including Achilles's treatment of Hector's corpse.

6   Other authors and film-makers such as Cormac McCarthy *(Blood Meridian)* and Francis Ford Cappola (Apocalypse Now) have explored this idea too.

This article examines the measures that have emerged in modern Western armies that seem to mollify the propensity for the passions that consumed Achilles to consume armies at war. These measures include: (1) a stoic ethos of respectfulness, abnegation, forbearance, punctiliousness and austerity; (2) rules and conventions governing professional relationships, including overt displays of courtesy, respect and deference; (3) mechanisms that inhibit officers and enlisted soldiers from becoming overly familiar with each other, and that inhibit officers from over-identification with their subordinates; (4) regulations governing standards of behaviour, comportment and uniformity of grooming and dress; (5) regulated daily routines and inspections; and (6) rituals and conventions for marking important occasions.[7] These measures are otherwise known as military regimentation.

In a progressive society, military regimentation is an anachronism. It implies things considered by some to be pejorative such as imposed discipline, unthinking obedience and conformity. It invokes images of stereotypical military practice such as marching, saluting and fastidious grooming. Regimentation is the antithesis of the contemporary zeitgeist and some people believe it is contrary to important battlefield traits like cunning, creativity and initiative. Many people outside the military regard regimental practices as quaint and curious. Soldiers find them grating and pointless. Why then do they persist in armies to this day, even in the armies of the most progressive societies?

Some argue that regimental traits are simply redundant relics of a bygone age. Others contend their persistence is a manifestation of the military mind's preference for tradition, order and control.[8] Yet these explanations are unlikely to be sufficient to explain the stubborn persistence of regimental traits across many different cultures throughout different eras.[9] This article proposes that war is more than just a struggle between two armed groups; it is also a struggle between restraint and abandon, conscientiousness and recklessness, order and disorder. It contends the first and most important battle for an army is a battle for self-control and abnegation. It proposes that the combination of organisational traits commonly known as military regimentation play an essential role in winning this battle. Regimentation is therefore not some quaint perversion of the military mind; it is a necessary vaccine against the tendency for war's violent nature to overcome the inhibitions of civilised soldiers,

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7   This article does not suggest the measures came about with deliberate and explicit intention to mollify the passions that affected Achilles rather that their emergence is a function of other inadvertent historical causes.

8   Norman F. Dixon, *On the Psychology of Military Incompetence*, (New York: Basic Books, 1976), 179199. 'It is no accident that 'bull' is so closely linked to conservatism, for its very nature is to prevent change, to impose a pattern upon material and upon behaviour, and to preserve the status quo whether it is that of shining brass or social structure.'

9   Wooden figures found in the tomb of Mesehti of the 11th Dynasty are indicative. An image is available at http://www.unesco.org/culture/museum-for-dialogue/item/en/70/model-of-nubian-soldiers and Brian Campbell, *War and Society in Imperial Rome, 31 BC  284 AD*, (New York: Routledge, 2002), 38.

causing them to succumb to primitive impulses and become mobs — referred to herein as the *Achilles effect*.

This article begins by reflecting on the origins of modern regimental practices, which have their roots in the religious enmity of the Thirty Years War. It explores the philosophical idea that the human condition consists of a tension between reason and passion and between restraint and abandon. It demonstrates how war tends to diminish these tensions in favour of passion and abandon. The article then looks to philosophy and literature to understand the nature of these tensions in war, particularly the harmful effect on armies when passion and abandon dominate. It proposes that military regimentation is an exaggeration of the features of modern civilisation that keep people civilised and it provides evidence of a plausible relationship between the relative degree of order and restraint in an army and its performance in war. The article concludes by exploring the potential mechanism by which regimentation works to vaccinate an army against the *Achilles effect*.

## The Achilles effect

It is easy to take the relatively orderly and disciplined conduct of modern Western armies for granted; yet orderly and disciplined armies are a comparatively recent phenomenon. With some exceptions, medieval European armies were practically armed mobs.[10] It is revealing therefore that the origins of modern military regimentation coincide with the emergence of modern Western civilisation after the Thirty Years War.

Three of the main features of modern warfare emerged after the Thirty Years War:[11] the battle culture of forbearance, the use of drill to control and sustain troops, and the creation of the close-knit military community.[12] A number of social and technological factors at the time meant battle often resulted in two adversaries pouring volleys of musket fire into one another at very close range. Losses were staggering; nonetheless, one side usually broke ending the battle.[13] Precision of movement, standing fast in orderly formation and strict obedience were essential for success in battle.[14] Tactics and social arrangements therefore emphasised loyalty and forbearance; standing fast despite the enemy's fire, and stoic acceptance of casualties.[15]

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10  Lauro Martines, *Furies: War in Europe 1450-1700*, (New York: Bloomsbury Press, 2013)

11  Preston, Roland and Wise, *Men in Arms: A History of Warfare and its Interrelationships with Western Society*, 5th edition, (Forth Worth: Holt, Rinehart and Winston Inc., 1991), 116.

12  John A. Lynn, 'Forging the Western Army in Seventeenth Century France,' in MacGregor Knox and Williamson Murray Ed., *The Dynamics of Military Revolution*, (Cambridge: Cambridge University Press, 2001), 45.

13  Ibid., 46.

14  Ibid., 52.

15  Some might argue that this element of the Western way of warfare is changing into a culture of casualty avoidance.

These orderly and resolute practices stand in contrast to a generally more primitive and furious warrior ethos expressed throughout the Thirty Years War and earlier. Sparked by religious rebellion in central Europe, the Thirty Years War came to engulf virtually all the major European powers. Massive armed mobs that included large bodies of foreign mercenaries waged war across the continent. They survived on what they could forage and plunder, devastating and depopulating whole regions of central Europe.[16] It was a period of almost unequalled violence and savagery.[17]

The widespread violence and suffering of the period gave scholars like Thomas Hobbes an insight into the psychological forces that act on people when there is nothing to restrain their behaviour. Hobbes had seen people fight over resources made scarce by war and he had seen the atrocities committed by foreign mercenaries.[18] He came to realise that people in a natural unconstrained state become savage, selfish and indulgent, seeking to acquire power and resources and satisfy their needs at the expense of others.[19]

Hobbes argued that reason and fear of death are the two 'passions' allowing humans to escape their nature and make peace. Fear, he asserted, provides the motivation for peace, and reason illuminates the natural laws keeping people at peace.[20] Hobbes argued that to maintain a state of peace, people must forfeit certain rights in favour of a contract with each other called a commonwealth.[21] He proposed a sovereign should enforce the contract and maintain order, allowing people to escape a perpetual state of war against each other.[22] These are the ideas on which the modern state and modern civilisation are built.[23]

Other authors and philosophers have wrestled with the idea that without a leviathan, or some contra-influence, people tend to satisfy their immediate needs and acquire power and resources at the expense of others. In The Birth of Tragedy,[24] nineteenth

16  Preston, *Men in Arms*, 96.

17  Martines, *Furies*, viii.

18  Thomas Hobbes, Leviathan, printed by Andrew Crooke, at the Green Dragon in St. Paul's Churchyard, 1651., Part I, Chapter XII, Section 4, Paragraph 1. Hobbes was witness to the English Civil War, which was also fought with religious and revolutionary zeal similar to the Thirty Years War.

19  Ibid., Part I, Chapter XII, Section 3.

20  Ibid., Part I, Chapter XIII, Section 7.

21  Ibid., Part II, Chapter XVII, Section 8.

22  Ibid., Part II, Chapter XVII, Section 9.

23   Hannah Dawson, *Life Lesson from Hobbes*, Kindle Edition., (London: MacMillan, 2013), Introduction Paragraph 3. '…there are a whole host of activities –monetary transactions, renting a house, motorway driving, even having a party – which are at a basic level dependent on the coercive apparatus of the State and the mutual trust and respect that this creates. This is the *civilized and civilizing foundation* [emphasis added] without which the fantastically plural coordinations of society could not hope to get underway. It is on this foundation that I am free to make as much or as little of my life as I am able.

24  It is important to note this book received significant criticism after it was published and Nietzsche himself would later criticise it.'

century philosopher Friedrich Nietzsche suggested the human condition consists of a struggle between reason and passion and between restraint and abandon.[25] He referred to the traits associated with reason—such as order, restraint and morality—as Apollonian after the Greek god Apollo, whose ascribed characteristics most closely resemble the rational ideal.[26] He referred to the traits aligned with emotion, passion and indulgence as Dionysian after the Greek god Dionysus, whose ascribed characteristics most closely resemble the uninhibited and passionate ideal.[27] Nietzsche believed Greek tragedy's portrayal of the struggle between Apollonian and Dionysian elements gave classical audiences a distilled example of the human condition.[28] He concluded, it is not healthy to allow Apollo or Dionysus to dominate: 'without the other to hold it in check, each drive would tend to the extreme'. [29]

Author Sir William Golding's *The Lord of the Flies* is a modern allegory of the Apollonian–Dionysian struggle.[30] Golding's marooned schoolboys gradually reject the restraints of civilisation in favour of an indulgent, violent and primitive existence. They kill the thoughtful and sensitive Simon and the rational and intellectual Piggy, signifying savagery's consumption of kindness and reason in the absence of a leviathan. Golding's use of children in the story implies that a primitive and violent nature is innate whereas civilisation and peace are artificial and learned. Laws, rules, policemen, schools and other social conventions of civilisation are necessary to keep the darker side of human nature at bay.

Joseph Conrad's Heart of Darkness, which derived from his experiences working on a steamboat in the Belgian Congo at the peak of the colonial rubber trade[31], echoes Golding's inferences.[32] European societies of the period had strict moral codes and were preoccupied with rules, order and structure. Conrad used the Congo as a metaphorical antithesis of restraint in European society. His principal idea was that while the features of civilisation suppress savage tendencies civilisation cannot rid people of these tendencies entirely. Inside everyone lurks a heart of darkness that inexorably rises to the surface in the right circumstances.

25  Friedrich Nietzsche, *The Birth of Tragedy*, Douglas Smith (trans), (Oxford: Oxford University Press, 2000), xviii.

26  Ibid., xvi.

27  Ibid.

28  Ibid., xvii.

29   bid., xix.

30  William Golding, *Lord of the Flies*, (London: Faber and Faber Limited, 1954).

31  While the Belgian exploitation of the native Congolese was in the context of the colonial rubber trade, author Joseph Conrad uses ivory trade as the context for the *Heart of Darkness*.

32  Joseph Conrad, Heart of Darkness, 2nd edition, D.R.C.A Goonetilleke (trans), (Toronto: Broadview Press, 1999). Originally published in serial form in *Blackwood's Magazine* 1899, 17.

Conrad's and Golding's works of fiction are consistent with material cases such as the extraordinary descent into savagery of the crew of the Dutch East India Company ship Batavia, when it ran aground off the Australian coast in 1627.[33] Other cases are also illustrative, such as the behaviour of escaped convicts in Tasmania and their resort to cannibalism[34] and the wanton behaviour of the HMS Bounty mutineers[35]. Each story serves as a reminder of the dark psychological forces civilisation suppresses and the power of situational forces to affect human behaviour.

According to social psychologist Philip Zimbardo, there is a large body of evidence supporting the idea that situational factors triumph over individual power in the right circumstances.[36] Zimbardo was the director of the infamous Stanford Prison experiment in which he and his research team randomly selected volunteer college students to act as guards and prisoners in a fake prison. Some of the participants played their roles zealously, despite being aware the whole thing was faked. Some guards subjected prisoners to abuse and many of the prisoners submitted to the abuse. Zimbardo, who was playing the role of prison superintendent, allowed the abuse to go on for an unreasonable amount of time before shutting down the experiment on the sixth day.[37] He found that the 'pervasive yet subtle power of a host of situational variables can dominate an individual's will to resist'.[38]

Similarly, the pre-eminent military theorist Carl von Clausewitz observed that war is 'composed of primordial violence, hatred, and enmity, which are to be regarded as a blind natural force; of the play of chance and probability within which the creative spirit is free to roam; and of its element of subordination, as an instrument of policy, which makes it subject to reason'.[39] War's element of subordination, as an instrument of policy, which makes it subject to reason mirrors the Apollonian ideal in Nietzsche's dialectic; whereas the play of probability and chance and the element

33  Mike Dash, *Batavia's Graveyard: The True Story of the Mad Heretic who led History's Bloodiest Mutiny*, Kindle edition., (New York: Weidenfeld & Nicolson, 2002). Dash describes how the crew and passengers of the Batavia descended into savagery and waged war on one another across a few tiny sand islands off the Australian coast.

34  Alison Alexander, *Tasmanian Convicts: How Felons Built a Free Society*, (Sydney: Allen & Unwin, 2010), 195. Alexander describes how a small group of escaped convicts preyed on one another and fed on each other's flesh to survive.

35  Caroline Alexander, *The Bounty, London: (Harper Collins), 2003. Alexander describes how savage circumstances led to a number of the Bounty's crew to mutiny.*

36  Philip Zimbardo, *The Lucifer Effect: How Good People Turn Evil*, Kindle edition., Random House ebooks, Preface, Paragraph 6.

37  Ibid., Chapter 1, Section 2, Paragraph 5. Zimbardo wrote, 'One thesis [of mine] is that most of us know ourselves only from our limited experiences in familiar situations that involve rules, laws, policies, and pressures that constrain us. We go to school, to work, on vacation, to parties; we pay the bills and the taxes, day in and year out. But what happens when we are exposed to totally new and unfamiliar settings where our habits don't suffice? You start a new job, go on your first computer-matched date, join a fraternity, get arrested, enlist in the military, join a cult, or volunteer for an experiment. The old you might not work as expected when the ground rules change.

38  Ibid., Preface, Paragraph 14.

39  Carl von Clausewitz, *On War*, trans. and ed. Michael Howard and Peter Paret, (Princeton: Princeton University Press, 1989), 89.

of primordial violence, hatred, and enmity mirror the Dionysian ideal. Importantly, Clausewitz's dialectic differs to Nietzsche's in one crucial way; it includes the admixture of violence.

Clausewitz's point is that the admixture of violence profoundly changes behaviour. Violence tends to exaggerate passions causing excessive fear and hatred. Therefore, if Hobbes et al. are correct—that given the right circumstances it is only possible to cover up inner savagery for so long—then the implication of Clausewitz's theory of war is that war is not just the right situation for savagery to break out, it is the ideal situation. If not tempered by some contra-influence, the admixture of violence breaks down civilisation and causes armies to become mobs.

Francis Ford Cappolla's film, Apocalypse Now, is an allegory of this breakdown of the DionysianApollonian tension in war. Set during the Vietnam War, the film follows Captain Benjamin Willard as the crew of a United States Navy patrol boat escorts him up a river to find and kill Colonel Walter Kurtz. Kurtz has gone insane and become the leader of a rogue group of Montagnard tribesmen deep in the jungle across the Cambodian border. The river in the film serves as a metaphor for Dionysian attraction in war and Willard and the crew of the patrol boat represent war's effect on humanity. As Willard journeys further up the river, and away from the headquarters in Saigon (a vestige of civilisation), disorder and passion displace order and reason. The river grows darker and narrower and the crew members of Willard's boat become increasingly irrational and indulgent, turning to drugs and discarding their uniforms. They become like the primitive Montagnard warriors they eventually come to. Willard finally meets Kurtz at a place beyond the reach of civilisation. The disembodied heads of Kurtz' enemies sit atop spikes and other bodies hang by the neck. Kurtz represents the ideal warrior who pursues an ideal form of warfare, which is uninhibited by reason and restraint. Eventually, Willard brutally assassinates Kurtz by clubbing him with a machete thereby fulfilling his journey into savagery.

Group Captain Sara Mackmin's study of the causes of acts of personal violence by soldiers that contravene the laws of armed conflict supports Cappolla's allegory. She finds, 'a soldier is at most risk of using force illegally when he is only thinking about personal gain, when his cognitive abilities are impaired, when he is in an unfamiliar situation and is guided by limited knowledge or strong group dynamics and when he thinks he can get away with it'.[40] In other words, soldiers succumb to the *Achilles effect* when they are fearful, their passions are aroused and civilising influences are at their weakest.

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[40]   Sara Mackmin, 'Why Do Professional Soldiers Commit Acts of Personal Violence that Contravene the Law of Armed Conflict?', Defence Studies 7:1, 6589, DOI: 10.1080/14702430601135610

A mechanism that has a strong civilising power over group dynamics, that inhibits a soldier's sense of getting away with something wrong and provides a sense of familiarity and civilisation in unfamiliar and uncivilised moments, is therefore likely to inhibit the *Achilles effect*. Reinforcing or exaggerating the principal features of civilisation such as restraint, abnegation, order, hierarchy, routine and morality might therefore serve to curtail man's consumption by fury, abandon and indifference under the strain of war. Although not necessarily by design, military regimentation happens to be just such an exaggeration.

## The relationship between military regimentation and military effectiveness

The winter of 1778–1779 was the lowest point for the Patriots in their war for independence. The Continental Army suffered a defeat at Germantown in October 1778 before General George Washington led the weary and demoralised army to Valley Forge to camp for the winter. Conditions in the camp were squalid. Soldiers lived in crowded and damp quarters. They were inadequately clothed and fed.[41] Before the end of the winter, disease, malnutrition and exposure would take the lives of many of Washington's 12,000 soldiers.[42] Many more deserted. Washington despaired as he watched his already defeated and ill-disciplined Army disintegrate.[43] He assigned the task of repairing the Continental Army to Baron Friedrich von Steuben, a former member of the Prussian General Staff.[44]

Von Steuben arrived at Valley Forge in February and was immediately discouraged by the sight of the dishevelled mob he found there. He was appalled by the general indifference to field sanitation, military bearing and conduct; and set about fixing it.[45] His strict methods developed in the citizen soldiers a sense of abnegation and acquiescence to collective standards necessary for modern warfare.[46] The undisciplined rabble emerged from Valley Forge a modern regimented and disciplined army. On 19 June 1778, the British abandoned Philadelphia and marched back to New York City. Washington's army pursued them to Monmouth where they fought a draw. The result demonstrated the Patriots had attained the British Army's measure.[47]

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41  Rowland L. Young, 'What is to Become of the Army this Winter', American Bar Association Journal 64, (January 1978): 67.

42  Ibid., 68.

43  Ibid.

44  Ibid., 71.

45  Erick Trickey, 'The Prussian Nobleman who helped save the American Revolution', in < http://www.smithsonianmag.com/history/baron-von-steuben-180963048/>

46  Ibid.

47  Rowland, 'What is to Become of the Army', p.70.

The experience of the United States Army's II Corps in North Africa in 1943 also illustrates the positive effect of restoring order and regimentation on demoralised and defeated soldiers. Lieutenant General George S. Patton took command of II Corps from Lloyd Fredendall in the wake of its defeat at Kasserine. Patton observed, 'I cannot see what Fredendall did to justify his existence. Have never seen so little order or discipline … No salutes. Any sort of clothes and general hell'.[48]

Patton's first step was to restore order. He regulated daily routines, he ordered his soldiers to be clean shaven, to wear their helmets at all times, fasten their chin straps, roll down their sleeves, wear neck ties and leggings, and salute their officers.[49] These measures were immediately unpopular, but as one officer observed, 'However, begrudgingly, I must admit that the troops did look more professional and maybe this was part of the aura that I had detected on my return'.[50] Patton's deputy, Major General Omar Bradley, observed, 'Each time a soldier knotted his necktie, threaded his leggings, and buckled on his heavy steel helmet, he was forcibly reminded … that the pre-Kasserine days had ended, and that a tough new era had begun'.[51] In the space of an eight day offensive, which began just ten days after Patton took command, II Corps regained the ground lost at Kasserine and went on to an important victory at El Guettar.[52]

Like Patton, Field Marshal Sir William Slim famously turned the defeated and demoralised 14th Army into a victorious army by first restoring order. At its lowest point, the 14th Army was losing more men to disease than to enemy action, largely because of carelessness and lethargy born of squalor, fear and indiscipline. Before its turnaround and eventual success, the 14th Army routinely succumbed to inferior numbers of Japanese in battle.[53] Slim credited the turnaround in his army to the restoration of stereotypical military order and discipline.

> At some stage in all wars armies have let their discipline sag, but they have never won victory until they made it taut again; nor will they. We found it a great mistake to belittle the importance of smartness in turn-out, alertness of carriage, cleanliness of person, saluting, or precision of movement, and to dismiss them as naive, unintelligent parade-ground stuff. I do not believe that troops can have unshakable battle discipline without showing those outward

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48  Martin Blumenson, *The Patton Papers 1940-1945*, (Boston: Da Capo Press, Inc. 1974).

49  D.A. Lande, *I was with Patton: First-Person Accounts of WWII in George S. Patton's Command*, (St. Paul: MBI Publishing Company, 2002), 47.

50  Ibid.

51  Alex Axelrod, Patton's Drive: The Making of America's Greatest General, (Guilford: The Lyons Press, 2009), 75.

52  Jeromie Balwin, <http://warfarehistorynetwork.com/daily/wwii/lloyd-fredendall-the-general-who-failed-at-the-kasserine-pass/>

53  William Slim, *Defeat into Victory: Battling Japan in Burma and India, 1942-1945*, (New York: Cooper Square Press, 2000), Book I.

and formal signs ... It was our experience in a tough school that the best fighting units, in the long run, were not necessarily those with the most advertised reputations, but those who, when they came out of battle at once resumed a more formal discipline and appearance.[54]

The experience of prisoners of war provides a slightly different, but no less illustrative, example of the effect an absence of stereotypical military order can have on armies at war. In *This Kind of War: The Classic Military History of the Korean War*, historian T.R. Fehrenbach describes the experience of American prisoners in a Chinese POW camp, which became known as Death Valley. Breaking with convention, the Chinese did not separate officers and soldiers in the camp, nor did they allow the prisoners to maintain their own command structures and disciplinary systems. The Chinese advised the prisoners they were all equals.[55] The equality had an immediate appeal to many men;[56] but, without discipline or structure, Death Valley became a Hobbesian world in which some men no longer wanted to live and others, who were determined to live, took food from the sick and dying.[57] Fehrenbach observed:

> The disciplines that hold men together in the face of fear, hunger, and danger are not natural. Stresses equal to, and beyond, the stress of fear and panic must be overlaid on men. Some of these stresses are called civilisation … The controls of civilisation make men, often against their will, become their brother's keeper. When the controls are taken away, it is but a step to becoming their brother's killers. The veneer of civilized decency is much thinner than most Americans, even after seeing Auschwitz and Belsen, think.[58]

Contrast the experience of the prisoners in Death Valley with that of the prisoners in Stalag 11B under British Sergeant Major J.C. Lord. Wounded and taken prisoner at Arnhem, Lord arrived at the camp with several hundred fellow prisoners from the 1st Airborne Division. He found the prisoners in the camp had succumbed to lethargy born of hunger, boredom and squalor. Even the bodies of the dead were unceremoniously taken to their graves in an old cart. Lord set about making things right.[59]

For the next six months Lord was in effective control of the camp, which at times held up to 17,000 prisoners of mixed nationality. He restored order by instituting garrison-style regimental routine and protocols; and with the loyal support of his non-commissioned officers, he maintained it. He kept a formal guard, which

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54 Ibid., 542-543.

55 T.R. Fehrenbach, *This Kind of War: The Classic Military History of the Korean War*, Kindle edition., Chapter 27, Section 2, Paragraphs 9-12.

56 Ibid.

57 Ibid., Chapter 27, Section 2, Paragraph 3842.

58 Ibid., Chapter 27, Section 2, Paragraph 18, 2021.

59 In <http://www.napoleon-series.org/cgi-bin/forum/archive2006_config.pl?md=read;id=67470>

mounted daily, and oversaw daily inspections. He made every fit soldier participate in physical training and expected high standards of dress and bearing.[60] These measures were very unpopular when introduced, but helped restore the prisoners' self-respect and military bearing. Officers and soldiers arriving at the camp were amazed by the standard of turnout and attitude of the prisoners. Lord had restored the Apollonian-Dionysus balance by exaggerating the features of civilisation and probably saved the health and lives of many as a result.[61]

There is also a potential correlation between the absence of regimental order and atrocities. Author Jim Frederick describes the insipid attempts of various young officers and non-commissioned officers to maintain order in One Platoon at the peak of the Iraq War.[62] Many members of the platoon regularly took drugs and consumed alcohol. They were often insubordinate, with little consequence for their behaviour. Their appearance reflected their apathetic attitude—unshaven, dishevelled, incorrectly dressed and often choosing not to wear their protective equipment.

The platoon members developed a mutated moral code with an inward protective logic, born of an unhealthy and largely unwarranted sense of victimhood and self-pity. They grew to believe everyone, and everything, was against them and to hate all Iraqis, their superiors, their headquarters, the other companies and even the other platoons in their company. According to Frederick, 'Foremost among their rationalisations was their conviction that no one else had experienced what they had, and no one else could possibly understand it'.63 The platoon member's moral code grew out of a sense that they were more important than anyone, and anything, else—even, more important than morality, their country and the purpose for which they were fighting.

The phenomenon that took hold of One Platoon is described in Jonathon Shay's study of the Vietnam War's psychological effect on soldiers titled, *Achilles in Vietnam: Combat Trauma* and the *Undoing of Character*. Shay observed that soldiers in small isolated groups 'sometimes lose responsiveness to the claims of any bonds, ideals or loyalties outside a tiny circle of immediate comrades [in war]. An us-against-them mentality severs all other attachments or commitments'.[64]

As the *Achilles effect* took hold of the One Platoon, the soldiers grew increasingly aggressive. They began to routinely beat suspected insurgents and eventually came

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60  Ibid.

61  Ibid.

62  Jim Frederick, *Black Hearts: One Platoon's Descent into Madness in Iraq's Triangle of Death*, Kindle edition., (London: Macmillan), 2010.

63  Frederick, *Black Hearts*, Chapter 14, Paragraph 11.

64  Jonathon Shay, *Achilles in Vietnam: Combat Trauma and the Undoing of Character*, (New York: Scribner, 1994)., 23.

to consider all Iraqis as suspects. Some soldiers would get drunk and go out looking for any Iraqi to beat up.[65] Eventually, the platoon's enmity, self-pity and anger led to the rape and murder of a teenage girl, and the murder of her family. The platoon's carelessness and apathy also led to the unnecessary capture and death of three of its members at the hands of insurgents.

In this and the other short case studies presented above, the absence of military regimentation or its restoration was not the only factor at play. For example, there were undoubtedly bad characters within One Platoon;[66] but that is not sufficient to explain the behaviour of the platoon. Many of the thousands of American platoons that deployed to Iraq during the war contained bad characters, but not every bad character engaged in rape and murder. While it is unlikely regimentation would have turned the bad characters in One Platoon into good people, it might have at least served to limit their potential to do bad things. Better still, it might have prevented them from succumbing to the dark passions such as apathy, enmity, and fear that contributed to their descent into a mob.

Regimentation has its limits. It is a poor proxy for a strong sense of right and wrong, for example. There have been many regimented and well-disciplined units that have done unspeakably cruel and barbaric things. Reserve Police Battalion 101, for example, was a relatively orderly and disciplined unit made up of ordinary German men, yet it was responsible for the murder of thousands of Polish Jews and other minorities during the Second World War. Historian Christopher Browning observes that people invoke many reasons to explain why soldiers commit atrocities.[67] Examples include: 'wartime brutalisation, racism, segmentation and routinisation of the task, special selection of the perpetrators, careerism, obedience to orders, deference to authority, ideological indoctrination, and conformity'.[68] In the case of Reserve Police Battalion 101, 'these factors [were] applicable in varying degrees, but none without qualification'.[69]

Browning distinguishes between atrocities caused by the *Achilles effect*, which he associates with a breakdown in self-control,[70] and sanctioned atrocities committed by disciplined troops that lack 'the immediacy of battlefield frenzy and fully [express]

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65  Ibid., Chapter 14, Paragraph 13.

66  The soldier responsible for the rape and murder of Abeer Qassim Hamza entered the United States Army via a waiver for drug and alcohol use and was in the process of discharging from the Army for anti-social behaviour prior to anyone knowing about his role in the rape and murder of Hamza and her family.

67  Christopher R. Browning, *Ordinary Men: Reserve Police Battalion 101 and the Final Solution in Poland*, Kindle edition., (New York: Harper Perennial, 2017), Chapter 18, Paragraph 1.

68  Ibid.

69  Ibid.

70  Ibid., Chapter 18, Paragraphs 2-4.

government policy'.[71] The My Lai massacre is an instance of the former; whereas, reprisal executions of civilians in response to partisan attacks are examples of the latter.[72] Browning calls these latter types of atrocities—'atrocity by policy.' He notes that unlike atrocities caused by the *Achilles effect*, atrocities by policy are not 'spontaneous explosions or cruel revenge of brutalised men'.[73] Because atrocities by policy derive from a calculating and rational mindset, features of regimentation like order, deference and conformity are likely to enable rather than inhibit them. Therefore, while regimentation might be an effective prophylaxis for the *Achilles effect*, in the hands of the wrong people a regimented and disciplined army can become an efficient instrument of murder. Regimentation cannot do duty for ethics.

Regimentation is also not a substitute for things like unit cohesion, belief in the cause, individual determination, battle discipline, success and good leadership, among a myriad of other factors that affect the performance of armies and units. Regimentation is not a cure-all. Field Marshal Sir William Slim succeeded not just because of his emphasis on restoring order in the 14th Army. He also paid particular attention to organisational matters such as administrative processes, malaria prophylaxis, and the supply and preparation of fresh food. Patton emphasised training and was probably a superior tactician to Fredendall. Training was particularly important in reversing the fortunes of the Continental Army. Slim, Patton and Washington were all good leaders, in one way or another. Yet restoring a degree of regimentation was a tool that each of them employed to prevent the disintegration of their forces. Perhaps, this feature of their leadership suggests the task of keeping the *Achilles effect* at bay is more difficult in the absence of regimentation. It hints at a causal relationship between military regimentation and military effectiveness, and it suggests that bringing about an appropriate level of regimentation in an army, or in a unit, might be a feature of good leadership.

However, the inoculating effect of regimentation might not be sufficient to mollify the *Achilles effect* in every instance. In the same way a supremely fit athlete, who is doing all the things a good athlete should do, is still vulnerable to viruses, a well regimented army—with healthy levels of esprit, leadership, cohesion and the like—is still vulnerable to the corrosive passions induced by war. The example of Wellington's Army at the siege of Badajoz in Spain is illustrative, where after the capture of the town the army ran amok for three days until control was reasserted.[74]

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71  Ibid., Chapter 18, Paragraph 5.

72  Ibid.

73  Ibid.

74  The siege of Badajoz took place during the Peninsula Campaign in 1812. Wellington's army lost 4,800 soldiers killed or wounded when it stormed the city walls. Incensed by their suffering and losses, the troops sacked the city, raping and murdering the inhabitants. They got drunk and refused the orders of their officers. It took three days to bring the army back under control.

But what of the examples of apparently effective armies and units that shun the rudiments of regimentation? Examples such as the Israeli Army, Western special forces, and some insurgent organisations suggest regimentation is not necessary for wartime effectiveness in all cases. Regimentation's mollifying influence might not be universally necessary to keep the *Achilles effect* at bay. It might be, for example, that extraordinary leadership or extreme levels of ethical indoctrination are sufficient. Or, perhaps relying on extraordinarily high levels of leadership, ethics and other factors is itself a vulnerability. It is perhaps indicative that the special forces of Australia, the United States and the United Kingdom have all in recent years come under scrutiny for behaviour in Afghanistan that, on face value, might suggest they had, to at least some degree, succumbed to the *Achilles effect*.

Compare Slim's experience in Burma to that of the highly publicised 5307th Composite Unit (Provisional) better known as Merrill's Marauders. The unit is famous for its long-range penetration in 1944 to seize the important airfield at Myitkyina in Burma. Its combat record was impressive by any measure; but its participation in the campaign lasted just five months.[75] By August 1944, the 5307th had disintegrated.

The disintegration of the Marauders was the result of several factors. The unit was made up of volunteers from the South West Pacific and Trinidad, in the West Indies. According to American historian Frank McLynn, many of the recruits were 'psychopaths pure and simple'.[76] The 33rd Infantry Regiment in Trinidad, for example, was known as the 'pits of the army' and was a dumping ground for many of the United States Army's troubled souls.[77] As a provisional unit, the Marauders had no unit insignia or history from which to derive identity. The soldiers signed on as volunteers on short-term contracts.[78] They also faced a difficult enemy, endured weeks of almost constant fighting, and suffered unnecessarily from the perception that their commanders broke important promises.[79] These factors notwithstanding, the primary cause of the disintegration of the Marauders was disease; and failure to maintain order within the 5307th was the most important contributing factor.

Like other special forces, the Marauders were freed of the normal administrative and disciplinary measures endured by regular forces. The Marauders did not emphasise the features of regimentation that Slim believed to be so critical to battlefield success. During the three months of training in India, serious disciplinary indiscretions

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75  John B. Gaither, *Galahad Redux: An Assessment of the Disintegration of Merrill's Marauders*, Fort Leavenworth, Kansas, 1975., p.iii.

76  Frank McLynn, *The Burma Campaign: Disaster into Triumph 1942 1954*, Kindle edition., (New Haven: Yale University Press, 2010), Chapter 14, Paragraph 1.

77  Ibid.

78  Ibid.

79  Ibid., Chapter 14.

were an almost daily occurrence.[80] Ten per cent of the Marauders went absent without leave.[81] Many Marauders made a sport of shooting at farm animals and even shot at the feet of locals to make them dance.

> On the train to Ledo they fired out of the window at any passing 'wogs' that took their fancy. Arrogant, sociopathic, full of blithe self-confidence, the Marauders were a gung-ho outfit…[82]

This indiscipline translated into a failure to maintain malaria prophylaxis and basic levels of field hygiene, which significantly abetted the prevalence and effect of disease. Without the intervention of someone like Slim to restore Apollonian dominance over Dionysus across the organisation, the Marauders succumbed to a fate born of their own self-pity and indiscipline, illustrating how the absence of regimentation makes a leader's task of keeping the *Achilles effect* at bay all the more difficult.[83]

## Virtue, habit and the relationship between good order and military efficiency

Recent studies hint at the connection between outward order and inner self-discipline. An experiment found that people in a messy room tend to score lower in self-control than people in a tidy room, for example.[84] The case of controversial British journalist and explorer Henry Morton Stanley is illustrative of this phenomenon. He was considered by some to possess super human qualities.[85] Others regard him as a brutal colonialist and ruthless exploiter. But, according to psychologist Roy Baumeister and author John Tierney, in recent years a more intriguing story has emerged; one which helps to understand the relationship between outward order and inner self-discipline.[86]

Stanley led his third expedition into Africa in 1871, at the age of forty-six. When his party came across an uncharted jungle, Stanley split it into two. One group was to stay behind and await supplies while Stanley led the other into the jungle. Without Stanley's leadership the stay-behind party disintegrated. It kidnapped young African women and kept them as sex slaves. Its members beat, stabbed, shot and flogged natives for relatively minor indiscretions. They had thieves shot and decapitated

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80  Ibid., Chapter 14, Paragraph 1.

81  Ibid.

82  Ibid.

83  James H. Stone, *Crisis Fleeting: Original Reports on Military Medicine in India and Burma in the Second World War*, Office of the Surgeon General, The Department of the Army, Washington DC, 1969., 396.

84  Ibid., Chapter 7, Paragraph 30.

85  Roy.F. Baumeister and John Tierney, *Willpower: Rediscovering our Greatest Strength*, Kindle edition., (New York: Penguin, 2011), Chapter 7, Paragraph 6.

86  Ibid., Chapter 7, Paragraph 7-8.

and displayed the disembodied heads outside their fort to deter others. One of the stay-behind party paid to have an eleven-year-old girl killed and fed to cannibals while he sketched the ritual.[87] Stanley reflected on the behaviour of the men in the rear party:

> At home these men had no cause to show their natural savagery…they were suddenly transplanted to Africa & its miseries. They were deprived of butcher's meat & bread & wine, books, newspapers, the society & influence of their friends. Fever seized them, wrecked minds and bodies. Good nature was banished by anxiety. Pleasantness was eliminated by toil. Cheerfulness yielded to internal anguish … until they became but shadows, morally & physically of what they had been in English society.[88]

Meanwhile, Stanley's party managed to keep its discipline. For several months, he explored the forest, enduring the worst of the African jungle. His group suffered from disease, including malaria, dysentery, festering sores and ulcers. Its members were unceasingly hungry, and many died of starvation. Natives attacked them with poison arrows and spears sometimes maiming, killing and eating them. Only a third of those who entered the jungle with Stanley came out alive. Nonetheless, despite the extreme hardship, the party remained cohesive. Stanley's willpower and forbearance were essential factors.[89]

The key to Stanley's success was making things like abstinence, fastidiousness and sufferance habits in easier times and thus inoculating himself against his moments of greatest weakness and temptation. It is easy, for example, to agree to diet when one is satiated. It is far more difficult to abstain from eating when one is hungry. But Stanley also knew that his self-control, like a muscle, would atrophy without exercise. During the expedition, he always tried to keep a neat appearance. He 'set great store by the clarity of his handwriting, by the condition of his journals and books, and by the organisation of his boxes'.[90] He also made a point of shaving every morning.[91] Despite the austerity and difficulty of his circumstances, Stanley's punctiliousness helped him ward off apathy and the decline of his own will.92 And so it is with the seemingly petty and pedantic rudiments that characterise military regimentation. Each element on its own, such as shaving, saluting or polishing a shoe, seems petty and pointless; but, when taken as a whole, all the activities, customs and conventions of military regimentation make sense. Collectively, they

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87  Ibid., Chapter 7, Paragraph 2.

88  Ibid.

89  Ibid., Chapter 7, Paragraph 4.

90  Ibid., Chapter 7, Paragraph 29.

91  Ibid., Chapter 7, Paragraph 28.

92  Ibid., Chapter 7, Paragraph 29.

work to make things like abstinence, fastidiousness and sufferance habits in easier times to inoculate armies in moments of greatest weakness and temptation. When the *Achilles effect* is strongest, the habits formed by military regimentation ward off apathy and the decline of will.

## Conclusion

At the end of Oliver Stone's Vietnam War film Platoon, the main protagonist, Private Chris Taylor reflects, 'I think now, looking back, we did not fight the enemy; we fought ourselves. And the enemy was in us'. [93] War is more than a struggle between two armed groups; it is also a struggle between restraint and abandon; conscientiousness and recklessness, order and disorder. Succumbing to the *Achilles effect* makes victory difficult because mobs perform poorly in war. Victory over oneself might therefore be an essential precursor to victory over one's enemies. This idea explains why militaries tend to exaggerate the principal features of civilisation and therefore why regimentation in one form or another is a consistent feature of armies.

The veneer of civilisation is fragile. War easily fractures that veneer; therefore it needs special reinforcement in an army. Regimentation is that special reinforcement. While individual elements of regimental practice such as saluting and shaving seem to make little sense on their own, they are among a body of civilising mechanisms that reinforce respectfulness, abnegation, forbearance, punctiliousness and austerity, among other things. They control relationships and ward off apathy and the decline of will. Like the instruments of civilisation, regimentation compels soldiers to form a habit of virtuous and disciplined behaviour thereby acting as a prophylaxis against the *Achilles effect*. It amounts to a continual process of exercising, reinforcing and automating outward virtues, which keep the corrosive effects of war at bay. And while regimentation is not a cure-all, its absence probably makes a leader's task of keeping the *Achilles effect* at bay markedly more difficult.

In the contemporary anti-vaccination debate, 'anti-vaxers', who have not experienced the horrific effects of a disease that has been kept at bay for decades by an inoculation program, are quick to undervalue the benefits of the vaccine. They give unreasonable emphasis to the relatively minor consequences of a vaccine's side effects. Unless they have experienced the severe consequences of a disease, they readily dismiss the vaccine's importance. And so, it might be with military regimentation.

People with little experience of war's corrosive effect on armies may tend to dismiss the importance of the inoculating effect of regimentation and, based on superficial and stereotyped notions, overemphasise regimentation's perceived creativity and

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93  Oliver Stone was himself a Vietnam War veteran.

initiative-sapping qualities. The challenge for post-modern armies is to win the reg-imentation 'antivax' debate in a seemingly Dionysian age in which the effect of not taking the vaccine is poorly understood; the contemporary zeitgeist is contrary to things like forbearance, restraint and order; and emotion seems to trump reason so often.

# Commentary

# Introduction

The power of the oceans and the discipline they enforce on those 'who go down to the sea in ships, and do business in great waters' are enduring challenges for navies.1 While human ingenuity and advances in technology have increased our knowledge of the maritime environment, the safe and assured operation of ships at sea still requires skill, experience and courage. Admiral Prazuck's elegant essay on the unique nature of a ship's crew reminds us the challenges posed by sea service are shared by many nations.

Common challenges are the basis for a shared outlook and a motivation to develop habits of cooperation. These habits, underpinned by routine communication, engender mutual understanding and trust. While these skills, these habits, are recognisable in any good ship's crew, they are also recognisable in any good relationship between nations. Just as they enable a crew to weather a storm or a battle, they enable nations to avoid conflict and find common cause. Perhaps this is one reason why navies have such utility as instruments of diplomacy. More than anything else, Admiral Prazuck focuses us on people, because whether we look at nations or ship's crews, companies or universities, it is ultimately the people who matter.

**Sea Power Centre – Australia**

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1    Psalm 107:23

# What makes a ship's crew so unique?

*Admiral Christophe Prazuck*

Sailors have long been the object of intellectual curiosity; from Plato's '*three kinds of men: the living, the dead and the sailors*' to Norbert Elias whose 'Genesis of the Naval Profession', traced the gradual merging of two incompatible social systems on board his Majesty's frigates in the 17th century[2].

The unique nature that defined sailors of previous centuries seemed to fade, however, during the second half of the 20th century. The great industrial 'World' wars, the appearance of a third military arm, the Air Force, and the advent of the nuclear age dulled the singularity of the sailor and made him a military man like any other… nearly. The finely balanced tension born from a taste for salt water and a taste for gunpowder, that had been the mark of a sailor for many years, ceded ground to a more uniform approach across Europe. The status once afforded to a sailor of the state was gradually eroded and forced into the standard military mould, which, in its turn, has become progressively more attached to the civil service.

Over the past few years, we have witnessed the growth of a concerning trend against the naval profession in many of our European neighbours. Even in those historic nations boasting long and glorious maritime traditions, a shortage of crew has led to warships and submarines being tied up alongside. How has this "vocational crisis" come about in Western Europe? And how can we prevent it spreading at a time when we are, more than ever, dependent on a globalised and maritime-oriented economy? Why is the rest of the world reinvesting heavily in the high seas when we are not? Are we forgetting the defining features, the essence, of perhaps the most beautiful profession in the world?

The concept of 'crew' is in my view what defines and differentiates the unique nature of Navy personnel management. A crew gathers together the greatest number

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2   The Aristocratic 'Gentlemen' sailors and the professional, but common, men of the sea, which created the basis of British maritime supremacy in the 19th and 20th centuries.

of skills in the smallest number of people in the smallest physical space possible, to sail and fight in far flung places over long periods of time and with complete independence. The need for physical fitness and the energy of youth, the requirements of any fighter, add additional layers of nuance to an already complex HR equation.

## Balancing the variables

What is a warship for? Fundamentally, it performs two primary functions: to observe and to fight. These two things form the essence of our crews' behaviour at sea.

To observe, you have to be present, which means remaining at sea for many months, without support. This level of autonomy, of course, requires good logistics (food, fuel etc.), but it also demands a high degree of technical prowess (at 300m under water, you can't call a breakdown truck) and good personnel management (if you don't get on with the sailor in the next-door bunk you can't move house or even get away from them at the weekends).

Modern sailors must therefore have a high and varied level of technical skill (the crew must be able to repair the whole range of equipment on-board without any external assistance), be inherently adaptable, sociable by nature, balanced and emotionally stable, especially when separated for long periods from their loved ones.

In combat, the technical skill and composure that characterise a good crew are highly prized. But it is also the very real prospect of combat that explains why the crew of a military vessel is often five to ten times larger than that of a merchant vessel of similar size.

Self-evidently, the crew of a warship have to operate the ship's weapon systems. In the past, Men-Of-War were categorised according to the number of guns they carried; today, it's by their sensor and weapons fit, the number of radar and missiles and torpedoes they carry. On a contemporary warship there are a huge array of weapon control stations to be staffed by highly specialised operators, whose number and variety are ever increasing: helicopter and drone pilots, nuclear engineers, missile specialists, torpedo buffs and experts in cyber defence.

Furthermore, and perhaps most importantly, combat requires that a sailor takes *"death as a working hypothesis"*[3]. They need to know how to take a punch as well as how to dish them out, and to keep the ship fighting no matter what. Replacement weapon crews may be needed as well as doctors, nurses and stretcher-bearers.

Finally, by its very nature, conflict, whether on land, at sea or in the air, requires a level of physical conditioning and the kind of fighting spirit that is most likely to be found amongst the younger part of the population.

3    Michel Goya, *'Sous le feu : la mort comme hypothèse de travail'*, (Paris : Taillandier, 2015)

As a result, therefore, the Navy needs to bring together the highest possible volume of skills and young sailors in the limited space of a warship. This equation has three variables: if we reduce the space, we limit the number of crew; if we reduce the number of crew, each one has to be more broadly skilled; if we increase each sailor's skill base then every time one leaves the ship it has a greater impact on the operational availability of the unit.

## Smaller and smaller crews

This equation is not new: the size of ships has always been limited by both physical (draft, size of ports…) and financial considerations. In the two generations spanning the transition from the anti-aircraft cruiser 'Colbert' (commissioned in 1956) to the air defence destroyer 'Forbin' (commissioned in 2010), crew size has decreased by a factor of four; but not the need for versatility and autonomy, or resilience.

With the advent of the European multipurpose frigates (FREMMs), the French Navy has probably reached its limit in determining the smallest possible crew. Any further reduction in personnel numbers would now have a disproportionate effect on both the unit's resilience and combat effectiveness. Armed with this particular 'lesson identified', the crews of the future generation of ships will undoubtedly seek to ensure they have the additional personnel margins that maritime history has taught us are indispensable.

## The need for endurance at sea and in combat

Once the optimal size and shape of a crew has been determined there remains the challenge of finding qualified sailors willing to be a part of it.

In the first instance, these sailors must be relatively young, but the need for youth is not limited to the levels of physical fitness and fighting spirit that I have already mentioned. A maritime watch pattern, before you factor in the toll of combat operations, has its own particular physical demands, not least sleep deprivation.

Sailors routinely work to a schedule called a quarter watch: they divide the 24 hours of a working day into blocks of four or six hour shifts and get up nearly every night at a different time to scan the horizon or their radar screens, sonars and electronic warfare interceptors. This pattern will usually last for several months at a time.

This is only one of the reasons why sea-going sailors are generally younger than the average age in the other services (31 years in the surface fleet and 30 years in submarines as opposed to 35 years in the French Army and Air Force). When compared to the average age of the French working population (40 years) the difference is even more pronounced.

Sailors must also accept a very specific and peculiar way of life on-board; one made up of long and regular absences from home and a type of communal interdependence that pushes the boundaries.

The length of an operational deployment is generally planned to take into account a balance between the distance sailed to reach an operational area and the limits of human acceptance for long deployments. For instance, if it takes three weeks to get to the Gulf from Toulon, it would be inefficient to remain on station for only a month. Equally, today no parent of young children would be willing to spend a full two years away from home, as for example was frequently the case for sailors during the Indochina conflict. Once again, youth is a determining factor. The repeated absences and unpredictable programs of a career at sea make it a very unattractive prospect in the modern age given the average age for starting a family in France is between the ages of 30 and 40 years.

Family separation is not the only emotional constraint associated with a life aboard. The *limited volume/numerous crew* equation imposes a level of physical proximity at sea that would never be deemed acceptable ashore. For example, while the French National Rail Service (the SNCF) is in the process of withdrawing its last night trains from service, the six junior officers of a 'Rubis' class attack submarine still share the equivalent of a second class sleeper compartment for periods of up to four months at a time.

It is our responsibility, therefore, to select, train and retain young sailors who are capable of learning the advanced technical skills required at sea but who are also able to withstand the unusual constraints of such a life. Unfortunately, since the 1970s, our Western societies have experienced two very significant developments that make this ever more challenging.

## A slow break with tradition

Firstly, technology has brought about unprecedented change, yet in our western, post-industrial, service-driven societies technical competence has become a rare commodity. A good mechanic or a good electrician, both once common professions in France, have become as valuable for huge international companies like Électricité de France (EDF) or Peugeot as they are for the Navy.

Secondly, a sociological shift has changed the way work and careers are seen in society: the desire for work-life balance, professional mobility and digital communications, are at the heart of society's rapid evolution. These changes pose particularly difficult questions when it comes to recruiting for a job that, however extraordinary, requires long periods away from home, digital media and social networks; and one that is twinned with a level of investment in technical training that demands an

enduring commitment to the employer. Our young sailors today are increasingly citing the lack of a permanent connection to the internet among the causes of early contract termination.

These two social evolutions, in particular, have led to the scarcity of a labour force that used to be abundant in the West. Nevertheless, it seems not to be an issue for the major emerging powers, who have been engaged for the last ten years in an unbridled naval arms race: it is estimated that by the mid-2020s, China will have four fully functioning aircraft carriers. In such a short period of time, even with much larger financial resources at our disposal, we would not be able to generate that amount of highly trained human resource.

## It takes 22 years to train a nuclear submarine commander

Fundamentally, the career of a modern sailor is a race against time. A long series of technical training courses must be successfully completed which, for the most part, cannot be outsourced. Sailors are expected to spend a long time at sea not simply to gain the necessary experience, but also to test their resilience to the constraints of distance, close proximity to others, discomfort and danger. They are forced to move their homes and families regularly because our combat vessels are spread over three separate coasts and five overseas territories. And yet, we have to ensure that we make best use of our investment in a sailor's career before personal circumstances (weariness, physical or psychological problems), the desire for family (marriage, children) or professional curiosity (the attraction of civilian employers who woo them for their technical skills) encourage the sailor to pack his bag and leave. All the more galling for the Navy is that when a sailor leaves before they have reached peak efficiency, it is impossible to recruit someone to replace them and their unique skill set at the same level: we have to start all over again, from the ground up.

For example, it normally takes 22 years of specialist training and assignments at sea to train the commanding officer of a nuclear ballistic missile submarine, on whose shoulders rests the readiness and deployment of France's nuclear deterrence capability; that is 22 years before they reach 45 years old, the age below which the Navy chooses its commanders. Their training time is longer than the time spent designing and building the submarine that they will command.

## Serving France

Today, even if the ultimate goal of our wonderful profession is to risk our lives on the world's high seas in the service of France, it is clear that we must recognise the very specific and sometimes contradictory requirements of the job: youth and skill, self-reliance and team spirit.

Today in France, as in the 17th century in England, the naval profession must rely on a balance between the characteristics required for *combat* (physical strength, courage, and self-sacrifice) and those needed for a *life at sea* (a wide technical skill-set and an ability to cope with the unique way of life, fraught with long absence and crowded living conditions).

Our crews are of course members of the armed forces like their brothers and sisters serving in the Army and Air Force, but in addition they are - and always will be  sailors. The beginning of the 21st century has laid on their shoulders the heavy weight of responsibility, characterised by an explosion in maritime trade and nuclear proliferation. We must ensure that the status afforded to our sailors by wider society recognises their remarkable service and takes into full account the enormity of the choice made by those exceptional citizens who make up our Navy today.

The Genesis of the Naval Profession, edited by René Moelker and Stephen Mennell (Dublin: UCD Press, 2007).

# Is strategic studies at risk?

*Ahmed S. Hashim*

## Introduction

Strategic studies as a discipline has been the subject of much contention for decades. Its achievements have often been questioned by its critics. It has been criticised by many as a rootless and superficial field and its demise has been foretold many times, particularly after the end of the Cold War, when its relevance was repeatedly called into question. The aim of this paper, therefore, in this inaugural issue of the *Australian Journal of Strategic and Defence Studies* is to address three broad themes in the field of strategic studies.

*First*, what do we mean by strategic studies? Defining it is not a particularly difficult matter; what is more problematic is its relationship with the fields of international relations (IR) and security studies. The debate concerning this triangular relationship has been quite intense as it has involved the important issue of delineating the boundaries of disciplines that are intricately related.

*Second*, when was strategic studies born? The common assumption is that it arose out of the crisis posed by the onset of the Cold War and the emergence of nuclear weapons, specifically the hydrogen bomb, which presented human beings with the specter of total annihilation. However, we have too often ignored the role of a figure in its birth: Edward Mead Earle, the American historian whose writings and policy prescriptions from before the Second World War were important to the emergence of the field. Nonetheless, strategic studies took off with the advent of nuclear weapons and the onset of the Cold War between the West and the Soviet bloc. Its historical trajectory from the 1950s to the end of the Cold War deserve a brief overview. What countries led in the field and why? Why was there no strategic studies in the Third World—now the Global South—in the early decades? This paper will suggest a number of speculative and intuitive answers to why it took so long to take off in the Global South and why it remained a predominantly a Global North, and particularly

an Anglo-Saxon (American, British and Australian), enterprise for so long, though with notable contributions from another major Western power, France.

*Third*, this paper will address the wide-ranging set of criticisms that have been levelled against strategic studies since its emergence in the 1950s. Strategic studies has withstood the many attacks launched against its contributions, which have been variously described as meagre, immoral or even promoting bellicosity among states. As long as mankind insists on the use of force in inter-state relations, there will always be a need and a place for those who study war and violence in the international system. Whether they do it for the academic cumulation of knowledge or for the practical purpose of helping the policymakers and militaries of their respective states navigate the dangers lurking in the international system, there will always be a need for strategic studies.

## What is strategic studies?

We must start with the term strategy. Volumes have been written about what it means.[1] The word strategy comes from strategos—ancient Greek for general or military commander—and there many derivatives of the word associated with military endeavour. The word strategy did not enter European military lexicon until the 18th century. Carl von Clausewitz, the Prussian officer and author of On War who is more often quoted than read, wrote in his magnus opus that strategy was 'the use of the engagement for the object of the war.[2] While concise, Clausewitz's definition was narrow. Over time, it has expanded to mean the pursuit of national goals by the threat or use of military force. While other instruments of achieving national goals were considered, force was the *ultima ratio* of the state in the international system. As British officer Colonel A.J. Trythall wrote, 'strategy is the art of using, or threatening to use, military force to achieve political goals.'[3] In his lengthy treatise, *Modern Strategy*, Colin Gray defined strategy as 'the use that is made of force and the threat of force for the ends of policy.'[4]

## Defining strategic studies

As Pascal Vennesson writes, strategic studies is 'an inter-disciplinary field of study which at its core examines the preparation, threat, use, control and consequences of organized force for political purposes in the course of a dynamic interaction

1  See Beatrice Heuser, *The Evolution of Strategy: Thinking War from Antiquity to the Present*, Cambridge: Cambridge University Press (2010), 3-35; Lawrence Freedman, Strategy: A History, New York: Oxford University Press, 2014; Hew Strachan, 'The lost meaning of strategy,' Survival, Vol.47, No.3 (2005), 33-54.

2  Carl von Clausewitz, On War, (edited and translated by Michael Howard and Peter Paret), Princeton: Princeton University Press (1976), 128.

3  Colonel A.J. Trythall, 'The Origins of Strategic Thought,' *RUSI Journal*, Vol.118, No.3 (1973), 51.

4  Colin Gray, *Modern Strategy,* Oxford: Oxford University Press, (1999), 17.

of at least two competing wills.'[5] What comes out clearly here is that the defining characteristics are *force* and *military power*. Strategic studies is *multi-disciplinary* in that it is inherently parasitic, which is not meant in a derogatory sense; rather it is a field of study that draws on methods, concepts and inputs of knowledge from other disciplines such as anthropology, geography, history (in particular military history), sociology and economics.[6] Strategic studies is a practical field of study, a major task of which—as one of the early leading American strategic scholars, Bernard Brodie opined—is to be 'an intellectual aid to official performance.'[7] This was a point reinforced in contemporary times by Colin Gray, who reminds us that those who are in the field 'understand themselves to be engaged in the pursuit of socially useful knowledge.'[8]

## What is the relationship between international relations, strategic studies and security studies?

The debate has been endless and can only be summarised. Firstly, political science, is the study of how states and societies allocate values, resources and benefits. International relations, which is a sub-set of political science, is the study of inter-state interactions. States in the international system interact in many ways; one of these ways is through the use of or threat to use force against each other. Since strategic studies is the study of the *actual* or *potential use of force* by states, would it be a correct deduction that strategic studies is therefore a sub-field of international relations? Yes, it would be.

The philosophical foundations of strategic studies stem largely from the school of realism within international relations. The Realists see the world as it is, not as how people might want it to be. Human beings are not perfect as they often succumb to various lusts, desires and covet other people's belongings and resources. This is not to argue that human nature has been unchanged and unchanging since the emergence of man; a stand-point that Norman Angell took to task in his chapter on 'Human Nature' in his famous book *The Great Illusion*. The key actor in human society is the state, defined —as derived from the sociologist Max Weber— as an entity having the monopoly of violence within its own defined territorial bounds (a major issue in contemporary international politics since many states do not meet that criteria at all). Domestic politics is characterised by a state of affairs where

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5   Pascal Vennesson, 'Is Strategic Studies Rationalist, Materialist, and A-Critical? Reconnecting Security and Strategy,' *Journal of Global Security Studies*, (July 2019), 1.

6   John Baylis, 'The Continuing Relevance of Strategic Studies in the Post-Cold War Era,' *Defence Studies*, Vol.1, No.2 (Spring 2001), 3.

7    Bernard Brodie, *War and Politics*, London: Pearson Publishers, (1974), 452.

8    Colin Gray, 'New Directions for Strategic Studies? How Can Theory Help Practice?' *Security Studies*, Vol.1, No.4 (1992), 611.

the state: (a) plays a role in the authoritative allocation of resources and benefits, (b) controls the instruments of violence, and (c) 'disciplines' the population within its boundaries to accept its legitimacy and authority. At least that is the theory, it took centuries of bloody practice to get there in the West.

As the most oft-quoted theorist of international relations, Hans Morgenthau, put it, international politics is different from domestic politics. The Realists argue that the international system is anarchical. They do not mean chaotic; indeed, order and stability have been a norm in the international system. What they mean is that there is no super-arching (world) government that can maintain order among states and ensure that they 'stay in line'. States are driven into the logic of 'self-help' to provide for the defence of their territory, sovereignty, and people. To defend itself, the state must develop military power and threaten to use, or actually use, that instrument if need be. Unfortunately, while all states are juridically equal, to paraphrase George Orwell, some states are more equal than others. There is a hierarchy of power in the international system since some states have more of it than others.[9]

While we have addressed the relationship between strategic studies and international relations, we now have to address the connection between strategic studies and security studies. Most scholars agree that security studies is a sub-field of international relations.[10] *So what is security studies?* This is important to address because if both strategic studies and security studies are sub-fields of international relations, what then distinguishes them from one another? Some scholars have written that these two sub-disciplines are 'close cousins'.[11] Others have opined that while security studies is a sub-discipline of international relations, strategic studies, in turn, is a sub-discipline of security studies.[12]

The key term in security studies is the word security, which has been defined generally as the absence of threat to one's values, resources, and existence. Whose values, resources, and existence are we talking about? Traditionally, the *referent* of security—the entity to be secured—was the state. Security studies advocates have argued that security studies casts a much wider net than strategic studies. The entity to be secured could be human beings, a society or a community. Furthermore,

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9   The key tenets of Realism are to be found in Thucydides, *The Peloponnesian War*; Nicolo Machiavelli, The Prince, E.H. Carr, *The Twenty Years Crisis*, Hans Morgenthau, Politics Among Nations, Kenneth Waltz, *The Structure of International Politics*. Its significance and relevance has been debated for decades. I am interested here in providing a summary of its tenets; see Michael Joseph Smith, Realist Thought from Weber to Kissinger, Baton Rouge, LA: Louisiana University Press, (1986), 1-25;

10  See Terry Terriff, Stuart Croft, Lucy James and Patrick Morgan, Security Studies Today, Cambridge: Polity Press (2004), 2; Alan Collins (ed.), *Contemporary Security Studies* (5th edition), New York: Oxford University Press (2019), 1.

11  David Ekbladh, 'The Interwar Foundations of Security Studies: Edward Mead Earle, the Carnegie Corporation and the Depression-Era Origins of a Field,' *Global Society*, Vol.28, No.1 (2014), 40.

12  Alan Collins, *Contemporary Security Studies* (5th edition), 2.

in many cases around the world, the state has been the source of threat to entities existing within its domain. Finally, security studies addresses threats that go beyond the 'merely' military ones. States, communities and human beings face exposure to a wide range of threats such as those stemming from disease, terrorism, pollution, lack of adequate supplies of water, refugee flows, malnourishment and famine, and environmental degradation. Some of these threats are ones that it is difficult to apply force against in the traditional sense. In conclusion, it makes sense to many theorists to conceive of strategic studies as the narrow sub-discipline of security studies that deals with the exercise of force and use of military power by states against one another, while security studies – the wider sub-discipline of international relations – deals with the vast panoply of threats that afflict most countries.

## The birth and evolution of strategic studies

Strategic studies originated in the inter-war period but took off in the aftermath of the Second World War and the onset of the Cold War.

The First World War is a useful starting point to put into perspective what ultimately prompted certain individuals and institutions to view the role of armed force in a different light. The 'Great War' was a cataclysm of global proportions that had led to the death and injury of millions and hellish destruction. For Europeans, the war was a psychological trauma. The *military mind* was held responsible for much of the tragedy that had unfolded, although civilians did not escape censure. Nonetheless, some observers—such as military journalist, Herbert Sidebotham of the (Manchester) *Guardian* and later of the *Times*— suggested that the 'civilian mind has very important and probably decisive contributions to make to the future art and practice of war, and future success or failure will depend mainly on the degree to which these contributions are used or neglected.'[13]

Post-war intellectuals and academics were among these civilians who began to devote their energies to the phenomenon of war. The field of international relations emerged in the aftermath of the war and divergent views concerning the roles of force and military power became discernible. For some, it became their mission to educate humanity and policy-makers of the incontrovertible 'truth' that war was a disease that must be eradicated, not managed. Eradication of war was Quincy Wright's mission.[14] As political scientist David Baldwin put it, Wright saw war as 'a disease to be cured, rather than an instrument of statecraft'.[15] Other intellectuals

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13  H. Sidebotham, 'Civilian or Military Strategy,' *Journal of the British Institute of International Affairs*, Vol.3, No.5 (September 1924), 247.

14  See Karl Deutsch, 'Quincy Wright's Contribution to the Study of War: A Preface to the Second Edition,' *Journal of Conflict Resolution*, Vol.14, No.4 (December 1970), 473-478.

15  David Baldwin, 'Security Studies and the End of the Cold War,' *World Politics*, Vol.48, No.1 (October 1995), 120.

and thinkers were equally effected by what the First World War had wrought but came to different conclusions about the role of force and military power: that they are a reality, and have been instruments of statecraft for as long as people can remember. For major international relations' scholars, such as the Sprouts, Nicholas Spykman and Arnold Wolfers among others, these ideas did not constitute strategic studies as we know it, but rather were the acknowledgement of the centrality of military power in international relations.

## The origins of strategic studies

We have to start with the generally unappreciated Edward Mead Earle. Indeed, he was truly 'present at the creation', so to speak.[16] Earle was a diplomatic historian who began to disengage from history and focus on 'military defence' and security issues from 1937 onwards, as it became increasingly obvious that certain states within the international system were again hell-bent on beating a path to war. As an American, he was naturally concerned by the palpable intellectual and material lack of preparedness of the United States for what was about to engulf the world. In a little-known paper from 1942, Earle began:

> It is a striking paradox that, although military defense has been a perennial problem of the American people, there has been until recently, no conscious, integrated, and continuous study of military security as a fundamental problem of government and society.[17]

American scholars, he continued, have shown a crippling incuriosity concerning the role of war in human affairs, despite the fact that human beings live in a 'warlike world', that the US has been a participant in various wars and that, indeed, it was currently [i.e. in 1942] 'engaged in a vast intercontinental war'. The nation and its statesmen must understand the role military force plays in the maintenance of order and stability, otherwise the United States would not have security, he argued. Earle lamented the fact that political and other social scientists had not seriously contended with defence and strategic matters. Earle pointed out in 1943, up until that time America had not produced a strategic studies thinker of the stature of a Machiavelli, Guibert, Jomini or Clausewitz.

Earle is chiefly remembered for bringing together over twenty contributors to produce *The Makers of Modern Strategy: Military Thought from Machiavelli to Hitler* in 1943. Most of them were historians, including emigres from Europe, particularly from France and Germany. As editor of the volume, he wrote the introduction, which provides yet another window into his realist-based thinking about strategic issues.

16  David Ekbladh, 'Present at the Creation: Edward Mead Earle and the Depression-Era Origin of Security Studies,' *International Security*, Vol.36, No.3 (2011-12), 107-141.

17  Edward Mead Earle, "National Defense and Political Power," *Political Science Quarterly*, Vol.55, No.4 (1940), 481.

He opens his introduction with the statement, 'When war comes it dominates our lives.[18] War in the 20th century has become total for many reasons. Ideology plays a role: the ideologies of the totalitarian states glorify war and make it total, forcing democracies to follow suit. War is total because of the material resources required to wage it and because the demands of war seep into every nook and cranny of people's lives. Rather than succumb to the siren song of those within our societies who 'deprecate its significance in history,' Earle asserts we must study it. The purpose of *The Makers of Modern Strategy* he said was to 'enable Anglo-Saxon readers to comprehend the causes of war and the fundamental principles which govern the conduct of war.'[19] It is, of course, too easy from a contemporary perspective to raise an eyebrow at Earle's use of the term Anglo-Saxon in this context, which is particularly ironic given the nationalities of the contributors. However, the use of racial terms was *de rigueur* at the time he was writing and Earle genuinely believed that the two great Anglo-Saxon powers—the United States and the British Empire (which contained, as he knew, many non-Anglo-Saxons)—were in an existential struggle against the 'evils' of totalitarianism, as represented by Nazi Germany, fascist Italy, and militarist Japan.

It the book's introduction Earle tells us that strategy 'deals with war, preparation for war, and the waging of war'. No doubt influenced by Clausewitz's definition, Earle informs us that 'narrowly defined, it [strategy] is the art of military command, of projecting and directing a campaign.'[20] But strategy, he says, has expanded beyond the traditional and narrow definition; and as war becomes more complex, strategy must consider non-military factors: economic, psychological, moral, political, and technological. In this context, strategy does not exist just during wartime; it is, rather, 'an inherent element of statecraft at all times.'[21] Earle thus defines strategy as 'the art of controlling and utilizing the resources of a nation – or a coalition of nations – including its armed forces, to the end that its vital interests shall be effectively promoted and secured against enemies, actual, potential, or merely presumed'.[22] The highest form of strategy is grand strategy whose purpose – if it is to be effective -- is to ensure that resorting to war is unnecessary or if peace fails that it is undertaken with the maximum chance of victory. It is clear that Earle intended to introduce Americans to strategy, as that had never been their forte. Rather, their greatest achievements had been in the narrower, more technical arenas, such as tactics and military technology, not in thinking about the relationship between war

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18  *The Makers of Modern Strategy,* vii.

19  Ibid., viii.

20  Ibid.

21  Ibid.

22  Ibid.

and politics or ruminating on how to effectively integrate ends and goals with ways and means.[23]

*Makers of Modern Strategy* was phenomenally successful and became a 'modern classic' in the words of Princeton military historian, Peter Paret, in his introduction to the contemporary and much upgraded version of the book, *Makers of Modern Strategy: from Machiavelli to the Nuclear Age*.[24]

Earle witnessed the birth of both the atomic and thermonuclear ages but unfortunately died of cancer in 1954, at the age of 60. The dropping of the atomic bomb was, of course, the seminal event that shaped the post–Second World War era. The atom bomb itself was a symbol of the close relationship that had emerged between the military and the scientific community; particularly reflected in the enormous research, production, and testing enterprise known as the 'Manhattan Project'. The years between 1945 and 1954 witnessed the steady and almost inevitable rise of what came to be called the civilian strategic thinkers within the American national security establishment. However, it was still a discipline that was in search of itself.

## Strategic studies: An American 'social science'

Decades ago, the noted Franco-Austrian theorist, Stanley Hoffman, stated in a seminal article that international relations was an American social science. [25] The same could equally be said of strategic studies whose single-minded focus after 1955 was the Cold War confrontation between the West and the Soviet bloc, and the problem of nuclear war. Twenty-five years ago, the noted Anglo-American strategic thinker, Colin Gray, wrote in *Strategic Studies and Public Policy* that the period between 1955 and 1965 was the 'golden age' of American strategic thought. Strategic studies was energized in that era, dominated as it was by the US's all-consuming need to face and deal with its ideological enemy, the USSR. Initially, it was driven by the desire to achieve US nuclear supremacy but when that appeared unattainable, to ensure nuclear stability, and by the need to avoid nuclear war. Indeed, when we talk about Western dominance, it really was American dominance for a particular period. It was the era of Albert Wohlstetter, William Kaufman, Bernard Brodie, Herman Kahn, and of course, Thomas Schelling. What they had in common was a devotion to understanding the dangers of nuclear war.[26] Many of them worked for the RAND Corporation, which was established in 1948 as think-

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23  Ibid., ix.

24  In retrospect there are various criticism that can be made about the volume's biases e.g. why start with Machiavelli? Why not include Thucydides, Belisarius, Sun Tzu or Kautilya?

25  Stanley Hoffmann, "An American Social Science: International Relations," *Daedalus*, Vol.106, No.3 (Summer 1977), 41-60.

26  Marc Trachtenberg, 'Strategic Thought in America, 1952-1966,' *Political Science Quarterly*, Vol.104, Issue 2 (Summer 1989),

tank to develop the effective and efficient strategy for the use of airpower and the atom bomb through rigorous quantitative analysis. RAND recognised, however, that many aspects of war required the tools of social sciences. However, RAND's foray into the Third World in the 1960s using the social sciences proved less than fruitful. America's involvement in Vietnam comes to mind.

No survey of American strategic studies can avoid the tragedy that was the Vietnam War. Civilian strategists and the institutions for whom they worked, such as RAND, became consumed by what the military and the national security community initially thought was a sideshow. The failings of strategic studies in regard to Vietnam were on two distinct levels: the first being North Vietnam, or the self-styled Democratic Republic of Vietnam (DRV) and the second America's mercurial and difficult ally, the Republic of Vietnam. With respect to the former, the key issue was how to defeat or rather coerce what a monumentally baffled Lyndon Baines Johnson referred to as a 'bicycle-powered peasant economy'. How was it that a primitive state with a fraction of the military, economic and industrial power of its foe could withstand substantial punishment and continue to send significant numbers of well-trained infantry to fight the US and its ally in South Vietnam?

By way of contrast, why was 'our ally,' South Vietnam so ineffective at defending itself with our help? Why was the Army of the Republic of Vietnam so bad? None of the econometric, systems analysis or even qualitative models put out in large quantities could answer that question for American strategists and the policymakers they advised. Indeed, one could argue that the Vietnam War and the subsequent defeat contributed to the erosion of the golden age of US dominance in strategic studies.

## Strategic studies in the West outside the United States

When strategic studies emerged in the rest of the Global North, it was in Britain, France, and Australia. In those early years the only Western military power apart from the US was Britain, which already had a strong historical tradition of studying wars thanks to officers and intellectuals before the Second World War such as Spenser Wilkinson, Basil Liddell Hart, and J.F.C. Fuller. In the aftermath of the Second World War, it developed a small but strong group of civilian strategists and a number of institutions dealing with strategy and war studies such as the International Institute for Strategic Studies.

Outside of the English-speaking Western world, only France developed significant and robust strategic thought, and consequently strategic studies. To some extent, French strategic studies drew from the sociological origins of French international

relations and from the emerging 'Anglo-Saxon' school of strategic studies.[27] However, the dominant philosophical foundations owed much more to Raymond Aron, whose inspirations, ironically, were two Germans: Max Weber and Carl von Clausewitz.[28] Following the fiasco of the Algerian decolonisation war in the early 1960s, French leader, Charles De Gaulle, was determined to transform his country into a major military power; and nuclear weapons constituted an essential element of the quest for *la gloire*. In this context, despite considerable obstacles, France developed a cadre of strategic thinkers who put France on the map with respect to this field. Raymond Aron, Pierre Gallois, Andre Beaufre and Herve Coutau-Begarrie may not be household names in the United States but their ideas and output in this field were significant.[29]

Australian achievements in strategic studies must be highlighted as they have been tremendous. Outsiders underestimate the achievements in this field of those *down under* in the *lucky country*. However, on closer inspection it is not surprising that Australia became a powerhouse in strategic studies.[30] Australian strategic studies are a product of the country's strategic environment and of its intellectuals and policymakers near permanent obsession with that particular environment—a Western country located close to Asia—over the course of the past century. Despite being far away and located at a great distance from the centre of gravity of great power conflict, Australia was plugged in to what was happening around the world. Hugh White, one of Australia's leading strategic thinkers and analysts, once wrote that Australia was born in 'strategic sin.'[31] Its birth was a result of the effective use of military power by Britain during the Seven Years War between it and its formidable rival, France, a war which could rightly be referred to as the first world war because it was truly global in scope. In its early years, Australia existed in a state of 'strategic innocence' due to the protection afforded by Britain's strength as a great power. Australia's solid contributions in the First and Second World Wars endowed it not only with a first-rate military but with a keen awareness of geopolitics and the international

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27  Olivier Zajec, '*Security Studies* et la pensée strategique francaise: de la vision globale a la myopie contextuelle,' ResMilitaris, (December 2016), 1-15.

28  Thomas Meszaros, 'The French Tradition of Sociology of International Relations: An Overview,' *American Sociology*, Vol.48 (2017) 297-341.

29  Among the French strategic thinkers, only Raymond Aron has achieved the level of reverence that is reserved for the leading strategists of the 'Anglo-Saxon' world. He was a towering intellectual, a polymath at ease with history, military history, Clausewitzian studies (he was a profound interpreter of Clausewitz), sociology, IR theories and of course strategic studies.

30  The story of Australia's emergence as a power-house in strategic studies has been told many times. Paul Dibb, 'Conclusion: What is the future of strategic studies,' in Russell Glenn (ed.), New Directions in Strategic Thinking 2.0: *ANU Strategic and Defence Studies Centre's Golden Anniversary Conference Proceedings*, (Canberra: ANU Press, 2018), 193-205.

31  Hugh White, 'Strategic Studies in practice: An Australian perspective,' in Russell Glenn (ed.), *New Directions in Strategic Thinking 2.0: ANU Strategic and Defence Studies Centre's Golden Anniversary Conference Proceedings* (Canberra: ANU Press, 2018) 105-116.

system. Australia's strong political and military ties firstly with Britain and then later with the United States ensured that, even when they vehemently disagreed with their two powerful allies, Australian policymakers and diplomats were vocal in articulating their country's views. It is not surprising then that Australian academics also began to take a profound interest in emerging strategic issues, particularly after the Second World War.

Australian international relations scholars expended considerable political effort establishing Australia as a strategic studies centre, despite opposition from some academics, intellectuals, those on the left, and universities worried by both the research agenda of studying force and the forging of links too close to the United States, its giant strategic studies complex and sponsors. Australians speak and write in the lingua franca of strategic studies: English. This was a critical factor in the integration of Australians into the strategic community. Many Australians studied in Britain or the United States. Furthermore, Australia has proven welcoming to existing and in-training scholars from other countries, many of whom settled and made Australia's strategic issues their own to study, even providing policy advice to their adopted country.

## Strategic studies in the Global South

Now I come to what was formerly known, during the Cold War, as the Third World but is now more appropriately referred to as the Global South. There are two distinct issues to address. First, what existed in terms of strategic studies in the Global South. And second, what did Western strategic studies have to say about strategic issues in the Global South, which in a nutshell, was not much in the early decades. This issue became a pointed source of criticism, which will be discussed in a later section.

The answer to the first issue is that until very recently, strategic studies in the Third World was almost non-existent.[32] Many Latin American countries – particularly those overwhelmingly dominated by an elite and population of European descent that had become independent in the 19th century had developed relatively robust militaries and were resolute in their desire to emulate aspects of the military culture, symbolism and norms of the more successful European armed forces such as France and Imperial Germany. In many Latin American countries, militaries intervened in political processes seeing themselves as mythic saviours, protectors of the existing order, or as instruments of modernisation and development, as long as it was under military direction or control. These countries had no strategic studies independent of

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32  The Global South is not made up of an undifferentiated group of countries. While they often share similar political and socioeconomic problems associated with underdevelopment and the pitfalls of rapid, skewed and uneven modernization, they are not all the same and their military capabilities varied.

their overwhelmingly politicised military establishments. Thereafter, when they faced internal dissension and violent left-wing guerrilla or urban terrorism movements, the focus of their militaries was to develop internal counterinsurgency and counterterrorism practices to combat revolutionary war and to develop concepts of 'acceptable' economic development and modernization.

In these 'national security states', as they were known in the comparative politics literature, the military dominated what passed for strategic studies. In those countries, the geopolitical ideas of Rudolf Kjellen and other geopolitical thinkers argued that the state was a living organism that must be protected. The Latin American militaries regarded themselves as the guardians of this living organism, which they believed must be saved from dangerous microbes: leftwing ideas and intellectuals[33]. Civilian participation in this enterprise was frowned upon.

When the majority of the Global South became independent after the Second World War, they were, for the most part, military weaklings, with exceptions such as India that had developed enormous armed forces to fight on behalf of Britain. Most countries in the Global South did not have civilian strategic experts and their militaries, which in many cases ruled these newly independent nations, monopolised any strategic thought within their establishments; wider debate was not encouraged.

Over time, this situation began to change, particularly after the Cold War ended, as many Global South countries had by then emerged as military powers in their own right. Many of their best and brightest had trained as international relations and strategic studies scholars in the West, which encouraged the development of strategic studies in the Global South. But, there was an irony: the training of Global South students in the Global North initially meant the transmission of western strategic studies discourses and practices to the Global South.

Political scientist Mohammad Ayoob and others have pointed out in various publications that the Western approach to strategic studies was largely inapplicable to the security problems of the Global South.[34] However, with the emergence of the second and third generations of Global South strategic scholars, we might finally see strategic studies and strategic practice in line with the realities of Global South security environments.

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33  See David Pion-Berlin, 'Latin American National Security Doctrines: Hard-and Soft-line Themes,' *Armed Forces and Society,* Vol.15, No.3 (Spring 1989), 411-429.

34  See Mohammed Ayoob, *The Third World Security Predicament: State Making, Regional Conflict and the International System*, Boulder: Lynne Rienner Publishers (1995).

# The critiques of strategic studies

Since its inception in the 1950s, strategic studies has been subjected to a wide-ranging set of criticisms. Each time its advocates have succeeded in fending off these criticisms, some have been withering assaults, while others have highlighted deficiencies that could not be ignored and need to be addressed.

## Early critiques of strategic studies

In the early decades of strategic studies, many individuals took the discipline to task for a wide range of *sins*. Some declared that strategic studies was immoral because it was not concerned with the ethical and moral problems posed by the emergence of nuclear weapons; rather its members discussed how to wage war under these new conditions. It was accused of being a pseudo-science because of its creation of theories and concepts that had no bearing on the real world. Civilian strategists were derided as being *not* academics but mercenaries, providing advice to their respective governments and military institutions on how to effectively and efficiently practice that *social evil*: war.[35] Civilian strategists were known as civilian 'militarists' or as 'crack-pot' realists in the immortal words of C. Wright Mills.[36]

What many of the critics ignored was the fact that the civilian strategists were trying their best to ensure escalation to full-scale war was avoided in the nuclear age, particularly following the invention of the hydrogen bomb. In any event, these critiques were met head-on and addressed by a number of people in the field of strategic studies, including Hedley Bull, who was one of Australia's leading international relations theorists and a keen strategic thinker.[37]

## Western strategic studies and the Third World/Global South

Early strategic studies as practiced in the West virtually ignored the military *problématique* of the Third World, or what we now call the Global South. This is not to say that the threat of force or its actual use among and within states in that vast region did not occur. On the contrary, it did occur, with depressing regularity. The exercise of force was a constant feature of the Third World security environment.

*So why did Western strategic studies not study the conflicts and wars of the Third World?* Firstly, Western strategic scholars were preoccupied with the nuclear confrontation between the superpowers and making sure it would not end in the extermination of humanity. Whatever conflict happened among the lesser nations was

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35  For the early criticisms of Strategic Studies, see Anatol Rapaport, *Fights, Games and Debates*, Ann Arbor: University of Michigan Press, (1960); Irving Louis Horowitz, *The War Game: Studies of the New Civilian Militarists*, New York: Ballantine Books (1963); Philip Green, *Deadly Logic: the theory of Nuclear Deterrence*, Athens, Ohio: Ohio University Press (1966).

36  John Playford, 'Civilian Militarists,' *Australian Left Review,* (December 1968), 33.

37  Hedley Bull, 'Strategic Studies and Its Critics,' *World Politics*, Vol.20, No.4 (July 1968), 593-605.

seen either as an extension of Cold War dynamics or as the exertion of puny military power of little significance. To be sure, some conflicts and wars apart from the US–Vietnam entanglement caught the attention of some observers, namely, the Arab–Israeli, Sino–Indian, and Indo–Pakistani conflicts and wars. But those interested were few and far between.

For many years, Western strategic studies of the Third World suffered from a paucity of information due to a lack of regional and language experts. In the early 1990s, eminent American strategic thinker, Eliot Cohen, wrote a piece about wars in what was still referred to as the Third World; he called them distant wars and began by pointing out that our knowledge of wars in the Third World was imprecise because records were few and data hard to come by.

Area and regional studies had taken-off in the 1960s within the remit of Comparative Politics and studies of civil-military relations in the Third World abounded. But, studies of the exercise of force and military power in the Third World did not. One also must not forget that in the early decades of strategic studies' emergence, Third World military power was less significant and often when it was exercised it did not impress. Arab performance was not worthy of consideration, except for the October 1973 War,[38] and then only to those interested in drawing lessons from its tactics, techniques and procedures. The Iran-Iraq War was referred to as the clash of the inept versus the incompetent, due to the dismal and inefficient use of military power by both belligerents, and not surprisingly, little interest was shown until very recently.

The attitude of the West to conflicts in the Third World is reminiscent to the famous response of Helmut von Moltke the Elder's to a military journalist asking his opinions on the American Civil War: 'I am not interested in the clash of mobs in the wilderness.' Many in the West saw wars in the Third World as nothing but amateurish approximations of what *we do*. This attitude has changed in recent years, and analyses of the exercise of military power by states in the Third World is now being addressed by a growing number of strategic analysts in the West.

## The 'relevance' of strategic studies

The post–Cold War era has seen a new angle of attack leveled against strategic studies: its relevance. Over a quarter of a century ago, the well-known strategist and international relations theorist, Richard Betts, noted in a seminal article—provocatively titled, 'Should Strategic Studies Survive?'—that the spectre haunting strategic studies was the spectre of peace.[39] Of course, peace did not break out with the end

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38  See Robert Harkavy, 'The Lessons of Recent Wars: A Comparative Perspective,' *Third World Quarterly,* Vol.6, No.4 (October 1984), 868-891.

39  Richard Betts, 'Should Strategic Studies Survive?' *World Politics*, Vol.50, No.1 (October 1997), 7.

of the Cold War and we continue to been subjected to the spectacle of *nasty little wars* around the globe. However, Betts' comments highlighted the bias of strategic studies at the time on wars between the great powers fought by people who *look like us*, presumably Westerners. He was not sure that strategic studies would be eclipsed by peace breaking out; and he was right to suggest that the abeyance of great power war, or threat of war, might not be a permanent condition. Sure enough, we are once again seeing intensified great power competition and that as we enter the third decade of the twenty-first century war is not implausible.

In 1993, Betts could not have known that these *nasty little wars* in faraway places of which nobody had previously heard would come to centre-stage at the turn of the twenty-first century. Many would agree that the wars in Afghanistan and Iraq have been costly, of questionable importance and have demonstrated a mismatch be-tween policy goals and military means. Moreover, they have occupied the energies and resources of many in the strategic studies arena, either academically or even in active involvement on the ground. But to what end?

## Conclusion

Strategic studies is a sub-discipline whose relevance and achievements have been the subject of contention for decades. Every now and then, because of its ill-defined frontiers, questions of what is strategic studies and is it relevant are raised .How do you define it and demarcate it from other similar fields? Has it effectively dealt with the numerous criticisms it has been subjected to since its emergence in the 1950s? These are questions that strategic studies, a field of which I have been a card-car-rying member for the entirety of my career, has struggled with since its inception.

But, strategic studies is not on the cusp of irrelevance. To the chagrin of many, it re-fuses to die the ignominious death its numerous critics seemingly think it deserves. Every few years, those in the field of strategic studies engage in some extensive soul-searching about their area of study or find that they have to defend it, yet again, from the verbal assaults of its critics.[40]

As long as human beings continue to think about or actually use force in their rela-tionships with one another, the future of strategic studies is assured. Those of us in the field can certainly learn from the achievements and failures of our predecessors. However, as was once said: The past is a distant country.  We must resolutely fo-cus on the present and the future. It is, of course, a cliché, but the present global strategic environment is characterised by considerable uncertainties and dangers.

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40  See Laurence Martin, 'The future of strategic studies', *Journal of Strategic Studies*, Vol.3, No.3 (1980), 91-99.

For Australia, these uncertainties and dangers will require clarity of thinking concerning the country's national security, threat perceptions, and defence planning. This is where strategic scholars in the country can make a difference. It is hoped that this journal will be a safe home for productive debate on a wide range of strategic studies challenges impacting Australia in the coming years.

# Reflections on an American seer: Andrew W. Marshall and the mind of the strategist

*Michael Evans*

## Introduction

Andrew Marshall, legendary former Director of Net Assessment (ONA) in the United States (US) Department of Defence, died on 26 March 2019 at the age of ninety-seven in Arlington, Virginia. His sixty-year career as a defence intellectual—including over four decades of service as head of the ONA— saw him help shape American strategy for an era of nuclear weapons, the Cold War and for the rapid changes of the early 21st century. He was the trusted Pentagon insider whose task was to study the contours of future warfare for successive administrations; yet, while many American defence specialists often cultivate public profiles as *action-intellectuals* in the vein of Herman Kahn, Marshall trod a different path. His career was forged on a cult of anonymity. Rarely in the history of any modern defence organisation has one man been so invisible and yet so intellectually influential for so long. Outside of specialist defence circles, Marshall remains a largely unknown figure or as some Western strategists are wont to remark, 'the most influential man you have never heard of'.

From 1973 until 2015—from Nixon to Obama—Marshall made the ONA a bastion of intellectual activity in a vast Pentagon bureaucracy, where all too often innovation is the prey of bureaucratic fads, inter-service politics and election cycles. In the process, the ONA director became not only an architect of official strategy but a mentor to two generations of American defence analysts, ensuring that the US strategic studies community renewed itself by continuously fostering younger talent and new ideas. To many Western defence specialists Marshall is America's Yoda, the grand master of a philosophy of competitive strategy that contributed decisively to the fall of the Soviet Union; he is the American sage of the 21st century's Revolution in Military Affairs (RMA) and an unsentimental analyst of a rising China. The Marshall mystique extended well beyond the West. He was, as one Russian analyst put it, the 'Gray Cardinal' of the Pentagon, an *éminence grise* who—like Puzo's

Tom Hagen in *The Godfather*—ran a semi-secret forty-year practice serving only one powerful client: the Secretary of Defence. In the Chinese military of the 1990s, Marshall was a key influence in changing the direction of strategy. In an interview in April 2012, Major General Chen Zhou, the main author of several Chinese post-Cold War defence white papers stated: 'We [the People's Liberation Army] studied RMA exhaustively. Our great hero was Andy Marshall in the Pentagon. We translated every word he wrote'.[1]

## Early years

Andrew Walter Marshall was born in 1921 in Detroit of lower middle-class English parents. From his early childhood onwards, he exhibited a fascination with self-education and in his teens read the works of Dostoevsky, Tolstoy, Liddell Hart and Toynbee. In his early manhood, during the Second World War, Marshall worked as a machinist in the aircraft industry but after the war, he studied for a master's degree in economics at the University of Chicago, where his teachers included Milton Friedman and Frank Knight. While at Chicago, he also worked part-time at the Institute for Nuclear Studies, where he had the good fortune to be selected as an assistant to the great physicist Enrico Fermi. On college graduation in January 1949, Marshall joined the new Research and Development (RAND) organisation, which was established by the US Air Force to draw the best American scientific and industrial minds to the new fields of missile science and atomic weaponry. It is important to note that Marshall did not join the new think tank as a strategist but as a statistician, since in 1949 the field of strategic studies was yet to be invented. Once immersed in the research atmosphere of RAND in Santa Monica, California, with its eclectic group of physicists, mathematicians, and social scientists, Marshall soon gravitated towards studying the problems of emerging Soviet-American nuclear rivalry.

As the missile age dawned and the Cold War began, Marshall was to use Dean Acheson's famous phrase, 'present at the Creation'.[2] With its demand for skills in physics, mathematics, engineering and economics, the early nuclear age of the 1950s and 1960s was a period of intellectual revolution that led to the rapid side-lining of the professional military as the masters of strategy. Memorably described by Fred Kaplan as 'the Wizards of Armageddon', it was talented civilian experts who filled the policy vacuum that ensued and began the enormous intellectual challenge of mastering the atomic weapons revolution. Many of the best wizards were located at RAND and Marshall soon became part of a brilliant set that included Herman Kahn; the economist Charles Hitch; the political scientist Bernard Brodie;

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1    Cited in 'The Quiet American', *The Economist*, 8 January 2015.

2    Dean Acheson, *Present at the Creation: My years in the State Department*, (New York: WW Norton, 1969).

and the mathematician, Albert Wohlstetter along with his wife, the talented historian, Roberta.[3]

For Marshall, the 1950s were a critical apprenticeship in the evolving field of nuclear age strategy. He served alongside such luminaries as Paul Nitze on the 1957 Gaither Committee to investigate American vulnerability to nuclear attack and became a consultant to the Central Intelligence Agency (CIA). The future Pentagon strategist involved himself in a wide-range of original research ranging from nuclear deterrence theory and warfighting through the diagnostics of strategic warning and communications intelligence to Soviet organisational behaviour. Marshall also began what became one of his later trademarks in the Pentagon—intellectual support for colleagues and the mentoring of rising scholars and analysts. For example, he was a moving spirit in persuading Roberta Wohlstetter to write her classic study of American intelligence failure in 1941, *Pearl Harbor: Warning and Decision* (1962)—a book that in the wake of the 9/11 attacks remains of enduring importance.[4]

In the 1960s, Marshall developed a strong interest in the analytical challenge of measuring the relativities of military power and in the problem of long-term strategic competition under conditions of nuclear stalemate. He was an early critic of the RAND concept of systems analysis based on the quantification and rationalisation of resources, which was adopted by the Pentagon when the Kennedy Administration took office in 1961. Systems analysis as a form of quantifiable management cost-effective decision-making was used by American defence planners to link strategy to capability choices. Marshall believed such an approach to developing America's strategic options in the nuclear era was far too narrow and technocratic to be realistic.

In 1966, in a RAND paper, *Problems of Estimating Military Power*,[5] Marshall argued that quantitative metrics were incapable of measuring an adversary's actual fighting performance, nor did they illuminate the complex uncertainties arising from geography, logistics, military doctrine and, above all, human error. In contrast, he advocated the use of more qualitative methods of strategy derived from politics, social science, organisational studies and psychology. In his work on strategy at RAND, Marshall drew increasingly on inter-disciplinary research ranging from political history through to business studies and social anthropology. He also collaborated with

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3   Fred Kaplan, *The Wizards of Armageddon* (Stanford CA: Stanford University Press, 1991).

4   Roberta Wohlstetter, *Pearl Harbor: Warning and Decision* (Stanford CA: Stanford University Press, 1962).

5   Andrew W. Marshall, *Problems of Estimating Military Power* (Santa Monica, CA: RAND Corporation, 1966), https://www.rand.org/pubs/papers/P3417.html.

leading scholars as varied as the economist James Schlesinger; the historian Richard Neustadt, and the political scientists William Kaufmann and Graham Allison.[6]

By the late 1960s, Marshall had risen to the position of Director of Strategic Studies at RAND, where he pursued the idea of a long-term strategy aimed at bolstering the West's geopolitical position against the Soviet Union. Marshall believed that US Soviet strategic competition, emanating from the unique combination of Cold War ideological differences and nuclear stalemate, needed to be carefully assessed and codified in a search for Western advantage. This conviction led him to develop the closely related, but nonetheless distinctive, approaches to strategy known today as net assessment and competitive strategic advantage. Since Marshall's reputation as a world-class strategic thinker is based on the application of these two approaches, we need to examine them theoretically before going on to analyse their practical use inside the Pentagon.

## Net assessment and competitive strategic advantage

For Marshall, net assessment came to represent an approach to strategic analysis that focused on the complex interaction between adversaries. In turn, net assessment formed the intellectual foundation for a competitive strategies approach to countering the Soviet Union. Marshall's notion of net assessment, with its focus on dynamic interaction and intellectual breadth, remains very different from standard techniques of intelligence analysis and military threat assessment. He wanted to incorporate not just tangibles such as arsenals and force ratios but also a vast array of intangibles ranging from the impact of culture, resource constraints, geography and logistics to training regimes. Marshall's approach to assessment employed a broad-based, comparative analysis of national security establishments in peace and war, with the aim of identifying 'critical domains of competition' that could be exploited for long-range strategic advantage.[7]

Under Marshall, net assessment became a form of eclectic and interdisciplinary analysis, drawing on fields such as economics, military history, political science and sociology. Three particular characteristics came to distinguish net assessment from the 1970s onwards: (a) comparative analysis; (b) a concentration on diagnosis; and (c) long-term trend identification. As a comparative analysis of 'friend and foe' capabilities, net assessment sought to identify strategic asymmetries between the North Atlantic Treaty Organisation (NATO) and the Warsaw Pact. The optimum output of a good net assessment became a strategic diagnosis in the form of a comprehensive

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6   John Schutte, 'Andrew W. Marshall and the Epistemic Community of the Cold War', 2015, http://www.au.af.mil/au/aupress/digital/pdf/paper/dp_ 0016_schutte_casting_net_assessment.pdf

7   See Mie Augier, 'Thinking about War and Peace: Andrew Marshall and the Early Development of the Intellectual Foundations of Net Assessment', Comparative Strategy, 1:32, 2013, 1-17.

picture of a competitive relationship between two adversaries. Finally, identifying long-term trends provided a basis for estimating the levels of continuity and change in an adversary's force posture and weapons programs.[8]

In many respects, net assessment is less a strategic methodology than a way of strategic thinking that requires high intellectual application across multiple academic disciplines. As a field it defies codification into common routines. Various attempts by military hierarchies in the United States and Europe to align net assessment with bureaucratic procedures have all been unsuccessful.[9]

The practice of net assessment became the foundation for Marshall's related philosophy of competitive strategies. In 1972, Marshall published a RAND paper, *Long-Term Competition with the Soviets: A Framework for Strategic Analysis*[10], which has been described by strategist, David J. Andre, as being 'a seminal contribution to US strategic thinking in the post-World War II era'.[11] The paper sought to outline a method of strategy that transcended electoral politics, budget cycles and service rivalries. It outlined a system of competitive strategy based on long-term interaction between national security establishments along with an advanced understanding of organisational dynamics. Marshall's thinking was strongly influenced by cutting-edge business studies proposing that effective strategy between adversaries should be based on 'competitor analysis'—and that countries like corporations, possess certain 'core competencies'—which if correctly exploited lead to success.[12] Seen in retrospect, *Long-Term Competition* with the Soviets is Marshall's free market answer to the challenge of the Marxist-Leninist dialectic with its 'correlation of forces'. While the idea of competitive strategy was not new—it is outlined in the ancient texts of both Sun Tzu and Thucydides—Marshall's achievement was to codify a modern approach in Cold War conditions. He saw competitive strategy as both a method and a guide to long-term advantage based on identifying and aligning enduring US strengths against enduring Soviet weaknesses. The overall aim was to

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8   Ibid.

9   See Eliot A. Cohen, *Net Assessment: An American Approach* (Tel Aviv: Jaffee Center for Strategic Studies, 1990) and Paul Bracken, 'Net Assessment: A Practical Guide', *Parameters: Journal of the U.S. Army War College* XXXVI, no. 1 (Spring 2006), 90–98

10  Andrew W. Marshall *Long-Term Competition with the Soviets: A Framework for Strategic Analysis*. Santa Monica, CA: RAND Corporation, 1972. https://www.rand.org/pubs/reports/R862.html.

11  David J. Andre, *New Competitive Strategies: Tools and Methodologies, Volume 1: Review of the Department of Defense's Competitive Strategies Initiative*, 1986-1990, (McLean, VA: Science Applications International Corporation, November 30, 1990), 2.

12  Mie Augier and Andrew Marshall, 'The Fog of strategy: Some organizational perspectives on strategy and the strategic management challenge in the changing competitive environment', *Comparative Strategy*, 4: 36, 2017, 275–292.

drive the engine of US–Soviet military competition into areas of cost-imposition that were unfavourable to Moscow.[13]

## The Office of Net Assessments

In the early 1970s, much of Marshall's thinking on net assessment and strategic competition became attractive to the Nixon Administration. Confronted by the twin challenge of withdrawing from Vietnam and the Soviet Union's relentless drive to achieve nuclear parity, National Security Advisor, Henry Kissinger decided to recruit Marshall from RAND into government service as head of a long-range net assessment group. At the end of 1971, following a directive from President Nixon approving the formation of Marshall's group, the Office of Net Assessment was established and tasked with undertaking analysis of intelligence, military capabilities and the future strategic environment for the National Security Council (NSC). Then, in September 1973, the Nixon Administration decided that Marshall's office was best situated not in Kissinger's NSC but as part of the Pentagon, where it fell under the direct control of James Schlesinger, the Secretary of Defence.[14]

Marshall was fortunate during the early years of his tenure that his office had bi-partisan political support from three able defence secretaries, James Schlesinger (1973-75); Donald Rumsfeld (1975-77); and Harold Brown (1977-81). Schlesinger, in particular, helped cement the foundation for ONA's work. Not only were Marshall and Schlesinger both former RAND defence experts they were also personal friends, with a shared conviction that net assessment could provide far better long-term guidance to US strategy. Indeed, Schlesinger came to view Marshall as a prophetic figure, a man whom, he said, could 'see things without the data'. It was Schlesinger who made the key decision that all ONA assessments would be unfiltered 'best judgments' that went directly from Marshall's think tank to the Office of the Secretary of Defence. This meant that ONA reports avoided being staffed through the Pentagon's bureaucracy, where useful ideas could be corrupted by any number of special interest groups. In effect, Schlesinger ensured that net assessments became strategic documents for the eyes of only the most senior officials. Schlesinger's enlightened approach to managing the ONA was followed by his successors Rumsfeld and Brown.

Marshall's intellectual approach to his new position was outlined in an August 1972 memorandum entitled, 'Nature and Scope of Net Assessment'. In this document he

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13  Stephen Peter Rosen, 'Competitive Strategies: Theoretical Foundations, Limits and Extensions', in Thomas G. Mahnken, ed, Competitive Strategies for the 21st Century: Theory, History, and Practice (Stanford, CA: Stanford University Press, 2012), chapter 2.

14  See George E. Pickett, James G. Roche, and Barry D. Watts, 'Net Assessment: A Historical Review' in Andrew W. Marshall, ed, On Not Confusing Ourselves: Essays on National Security Strategy in Honor of Albert and Roberta Wohlstetter (Boulder, CO: Westview, 1991_, 158–62

argued that the US could no longer rely on expenditure to retain strategic superiority over the Soviet Union. The dilemma the Americans faced with the growth of the Soviet nuclear arsenal in the 1970s was summed up by Defence Secretary, Harold Brown, when he remarked in January 1979: 'Soviet spending…has shown no response to US restraint—when we build, they build, when we cut, they build'. Given this reality, Marshall became convinced that the Soviets had to be out thought by recourse to 'inventive approaches to defense problem solution[s], and [by] carefully calculated risk taking' that aimed to identify and to exploit US strategic advantages.[15]

Marshall was less interested in providing policy prescriptions than he was in providing a diagnosis of emerging strategic problems to arm the minds of senior decision-makers. As a long-range research organisation, ONA deliberately distanced itself from the hurly-burly of everyday bureaucratic processes and internal politics inside the US Department of Defence. It was never tasked with making critical strategic decisions but rather with incubating, evaluating, and promoting a range of future strategic ideas, which the Pentagon bureaucracy was ill-suited to pursue. As Marshall put it, 'the single most productive resource that can be brought to bear in making net assessments is sustained intellectual effort'. In such an analytical endeavour, the important and the long-term assumed precedence over the urgent and the short-term. From 1973 onwards, four long-term areas of Cold War confrontation became ONA priorities: the US-Soviet strategic nuclear balance; the rival NATO-Warsaw Pact alliances in Europe; the maritime balance of global power; and the estimation of comparative defence spending between the US and the USSR.[16]

To ensure high quality research in all these areas, Marshall concentrated on forging a wide-ranging inter-disciplinary program. While he drew where possible on the resources of the CIA, the Defence Intelligence Agency (DIA) and the armed services, he placed much greater emphasis on attracting the best and brightest minds from business, industry and academia to work for the ONA.

Over the years, Marshall developed what can only be described as a cult following among the cadre of defence analysts he recruited from leading universities, such as Harvard, Yale, Princeton and Stanford, to work in his office. They came to see themselves as an exclusive intellectual elite known as 'St Andrew's Prep' in deference to their mentor. Several members of 'St Andrew's Prep' such as Eliot Cohen, Stephen

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15  Gordon S. Barrass, 'U. S. Competitive Strategy during the Cold War', in Mahnken, *Competitive Strategies for the 21st Century*, chapter 5.

16  Daniel I. Gouré, 'Overview of the Competitive Strategies Initiative', in Mahnken, *Competitive Strategies for the 21st Century*, 71–89

Peter Rosen and Aaron Friedberg, went on to became senior officials in the Clinton and two Bush administrations.[17]

## The Reagan era and the collapse of the Soviet Union

Part of Marshall's determination in pursuing competitive strategies during the Cold War was his long-held conviction that the Soviet command economy could not endure a protracted arms race without facing domestic disruption.

The heyday of competitive strategies came in the 1980s under the presidency of Ronald Reagan. Unlike most of his predecessors, Reagan believed that the Soviet Union was doomed to end on the rubbish heap of history, and he was determined to force that country to pay an increasing price for its rivalry with the West. In particular, the president's belief in the growing vulnerability of Soviet political economy became a major factor in his decision to compete with the Russians through arms technology. Reagan's overall strategy was to build up the US military in key areas while forcing Moscow to spend ever-increasing amounts of resources not only to maintain military parity with the United States but also to support its surrogates abroad from Afghanistan to Angola.[18]

Under Reagan, the B-1 bomber program; the Advanced Technology Bomber (the B-2 stealth bomber); new land-based MX Peacekeeper intercontinental ballistic missiles (ICBMs); and the Strategic Defence Initiative (SDI) or 'Star Wars' scheme of ballistic missile defence were all initiated. Pershing II intermediate range ballistic missiles and cruise missiles were deployed into Europe to support NATO and arms and money were provided for anti-communist forces globally. While it remains unclear how much the SDI owed directly or indirectly to Marshall, the scheme was a variant of his competitive strategy approach in that it forced the Soviet military into an area of high-end electronics where it was clearly deficient. As Daniel Gouré, a former senior Pentagon official, noted in 2012, 'by seeking to devalue the ballistic missile, Reagan struck at the heart of Moscow's sole competitive advantage vis-à-vis the West'.[19]

In 1987, Defence Secretary, Caspar Weinberger announced in his Department's Annual Report: 'I have decided to make competitive strategies a major theme of the Department of Defense during the remainder of this Administration'. Weinberger and his successor, Frank Carlucci, fostered a Strategic Concepts Development Centre

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17 John Schutte, 'Andrew W. Marshall and the Epistemic Community of the Cold War', 2015, http://www.au.af.mil/au/aupress/digital/pdf/paper/dp_ 0016_schutte_casting_net_assessment.pdf

18 Thomas G. Mahnken, 'The Reagan administration's strategy toward the Soviet Union', in Williamson Murray and Richard Hart Sinnreich, eds, *Successful Strategies: Triumphing in War and Peace from Antiquity to the Present* (New York: Cambridge University Press, 2014), chapter 13.

19 Gouré, 'Overview of the Competitive Strategies Initiative', 98.

(SCDC) at the National Defence University to closely examine the dynamics of long-term military competition. A competitive strategies philosophy was also instrumental in shaping the US Navy's new Maritime Strategy, which aimed at enclosing the Soviet fleet in its home waters. As Gouré observes, 'while not the singular reason for the collapse of the Soviet Union, the competitive strategies approach, particularly as applied by the Reagan administration, did much to set the stage for subsequent events and for the eventual collapse of the Soviet Union and the Warsaw Pact'.[20]

There can be little doubt that the superpower arms competition of the 1980s was one of the main reasons for the disintegration of the Soviet regime. In 1992, Marshal Sergei Akhromeyev, the Chief of the Soviet General Staff recalled, 'the Soviet Union could not continue the confrontation with the United States and NATO after 1985. The economic resources for such a policy had been practically exhausted'.[21]

Marshall was by no means the only American strategist to perceive the Kremlin's growing economic weakness—nor did he foresee the speed of Soviet collapse in 1991. Yet, given his framework for competitive strategy, his scepticism about Soviet economic strength, and his dogged pursuit of an accurate estimate of the Soviet defence burden, Marshall made major contributions to US strategy in the Reagan and George H. Bush years. As Robert Gates has written, Marshall's work in these areas 'led to a fundamental rethinking of our long-term competitive position in the Cold War'.[22]

## A new interwar period

Following the end of the Cold War, the collapse of the Soviet Union and American military success in the Gulf War of 1990-91—all of which suggested the arrival of a new strategic era of unchallenged American superiority—many saw the future as an era of triumphalism and 'the end of history'. In contrast, Marshall perceived only the arrival of a 'new interwar period'. Over the course of the 1990s, two areas began to emerge as long-term research concerns for the post-Cold War ONA. The first was the revolution in conventional weapons systems stemming from advanced electronics, precision munitions and terminally guided long-range systems. The second was the replacement of Europe by Asia as America's future arena of long-term strategic consideration. In particular, Marshall became concerned at the rapid rise of China and its potential to become a peer competitor of the United States.[23]

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20  Ibid., 91.

21  Barrass, 'U. S. Competitive Strategy during the Cold War', 84.

22  Robert M. Gates, Foreword, in Andrew Krepinevich and Barry Watts, *The Last Warrior: Andrew Marshall and the Shaping of Modern American Defense Strategy* (New York: Basic Books, 2015), x.

23  Krepinevich and Watts, *The Last Warrior*, chapters 8–9.

The ONA had carefully tracked writings on what Soviet strategists called a 'military technical revolution' (MTR) arising from new conventional weapons systems during the 1980s. Russian military theorists postulated that, over time, electronics and precision munitions would combine to create autonomous 'reconnaissance-and-strike complexes' (battle networks created by the integration of command, communications, and firepower). Taking his cue from Soviet thinking, Marshall commissioned a body of research to analyse the processes of military innovation in terms of technology, doctrine and organisation and how these might be translated into strategy. For example, he commissioned two leading American military historians, Williamson Murray and Allan Millett to produce historical case studies on military effectiveness in the period from 1914 to 1945—when carrier warfare, air power, submarines and armoured mobility were all developed. Marshall was interested in exploring how a technological monopoly could evaporate quickly in the face of rivals, as was the case with the British lead in carrier aviation in 1918 and American atomic weapons in the late 1940s. The Murray-Millett study was published in three edited volumes between 1988 and 1991 under the title *Military Effectiveness* and they remain today seminal texts in any understanding of military innovation.[24]

The ONA's work on military effectiveness assumed much greater policy importance following the end of the Cold War when swift American success in the 1991 Gulf conflict demonstrated the raw power of the precision revolution. For Marshall, the liberation of Kuwait provided strong evidence of major changes in warfare arising from the use of stealth aircraft, long-range munitions, advanced sensors, and the use of satellite technology. He came to believe that long-range strike systems would eventually blur traditional distinctions between land, air and sea in favour of multi-dimensional operations. Accordingly, in the early 1990s, he told his staff, 'the most important thing we [the ONA] can focus on in the next several years is the investigation of, and experimentation with, novel concepts of operation and new organisations to exploit the technologies available now and likely to be available in the next 20 years'.[25] To this end, in 1992, ONA produced an analysis of the phenomenon of the military revolution which, almost a decade later, was published under the title of *The Military Technical Revolution: A Preliminary Assessment* by the Centre for Budgetary and Strategic Assessment in Washington in 2002.[26] The significance of this work was that it set the terms for the debate on what Marshall christened the 'Revolution in Military Affairs' (RMA) and which came to dominate much of Western defence thinking throughout the 1990s.

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24  Allan R. Millett and Williamson Murray, eds, *Military Effectiveness*, vols 1-3 (New York: Cambridge University Press, 1988–91).

25  Ibid., 220.

26  Andrew F. Krepinevich, The Military Technical Revolution: A Preliminary Assessment (2002) at https://csbaonline. org>research>publications>the-military-technical-revolution-a-preliminary-assessment/publication

An RMA-style military became of keen interest to Republican candidate, George W. Bush, in his quest for the White House. In early 2001, following Bush's presidential victory, Donald Rumsfeld returned as Secretary for Defence for a second time and began to pursue a 'transformation' of the US armed forces based on information age technologies and organisational change. As part of this policy, Marshall was asked by Rumsfeld to conduct a review of US defence aimed at creating 'an advantage-based defence strategy' that would prolong American superiority in key competencies such as undersea warfare, aerospace science, robotics and combat training.[27] When the United States invaded Iraq in 2003, its air power and digitised ground units conquered the country in less than three weeks with only a third of the force levels deployed during the 1991 Gulf War. It was a striking demonstration of decisive RMA-style warfare.

Yet, a swift victory was soon eclipsed by the unexpected development of long irregular wars in Afghanistan and Iraq. While much of the US defence establishment became consumed by protracted irregular conflict in the Islamic world after 2003, Marshall, a Thucydidean realist by instinct and education, saw a US-China strategic competition as the greatest threat to American primacy. Marshall was unconvinced by the popular wisdom of Beijing's 'peaceful rise' or by claims of 'responsible stakeholder' status and believed that the single biggest challenge facing American security was the growing linkage between the precision revolution and the changing balance of military power in Asia. In 2011, one of Marshall's ONA protégés, Aaron Friedberg, published, *A Contest for Supremacy: China, America and the Struggle for Mastery in Asia*, a pessimistic study which attacked 'a wilful, blinkered optimism that Sino-US rivalry was highly unlikely, in part because it was too dangerous to contemplate'.[28]

Given America's distraction with radical Islam and insurgency warfare, Marshall feared that China would be unrestrained in acquiring the technological means to begin shifting the strategic balance in the Western Pacific progressively in its favour. The ONA director never faltered in urging a concentration of American strategic effort in Asia in order 'to plan for the types of military challenges a malevolent China may pose over the long-term and [to] incorporate these into service and joint war games and exercise programs'. China's acquisition of long-range missiles, cyber, space and undersea warfare capabilities could only place limitations on America's ability to project naval power to secure its Asia-Pacific alliance system stretching from Japan to Australia. For Marshall, weapons systems such as the Feng 21-D anti-ship ballistic missile provided evidence that China was rapidly acquiring the

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27  Donald Rumsfeld, *Known and Unknown: A Memoir* (New York: Sentinel 2011), 293.

28  Aaron L. Friedberg, *A Contest for Supremacy: China, America, and the Struggle for Mastery in Asia* (New York: W. W. Norton & Company, 2011).

capacity to pursue 'area-denial and anti-access' (A2AD) strategies off its littoral. The US Navy's forward presence, symbolised by its powerful aircraft carrier groups, would become vulnerable leaving Taiwan, Japan and South Korea exposed to potential Chinese coercion.

From the early 2000s, ONA undertook important research aimed at fostering better understanding of China's strategic culture and its view of war. Marshall was particularly impressed by the French scholar, François Jullien's work on Chinese military thought with its emphasis on achieving positional and psychological advantage *(xing and shih)* over an adversary—concepts which resonated with his own philosophy of competitive strategies.[29] Concepts such as the US Navy's air-sea battle, joint operational access and, more recently, the joint concept for access and maneuver in the global commons all bear the imprint of ONA influence. However, despite Marshall's strong focus on Sino-American strategic relations, it remains unclear to what extent he influenced the Obama Administration's 2011 announcement of a 'pivot', or rebalancing, of US defence resources towards the Asia-Pacific.

At a conference dinner in the mid-1990s, some of Marshall's 'St Andrew's Prep' protégés presented him with a framed print of Jean-Léon Gérôme's 1873 painting of François Leclerc du Tremblay (Père Joseph), the Capuchin monk who served at the right hand of Cardinal Richelieu and who has come down to us as the original *éminence grise*. The implication is clear: just as du Tremblay played a key role in France's emergence as the great power of Europe at the end of the Thirty Years War, so too was Marshall instrumental in shaping America's global supremacy by helping to defeat the Soviet Union during the Cold War. Marshall was a quiet seer, a courtly and self-effacing individual comfortable with anonymity in the pursuit of improved knowledge. His private motto, 'There is no end to the good a person can do if he does not care who gets the credit,' demonstrates a dedication to impersonal truth rather than personal ambition. In a real sense, Marshall is reminiscent not of the Capuchin, du Tremblay, but of another Frenchman, the Dominican priest and philosopher, Antonin-Gilbert Sertillanges. The latter's description of the harmonious soul in pursuit of knowledge in his 1921 book, *The Intellectual Life*, can be applied to Marshall:

> Do you want to do intellectual work? Begin by creating within you a zone of silence, a habit of recollection, a will to renunciation and detachment which puts you entirely at the disposal of the work; acquire that state of soul unburdened

29  Francois Jullien, *A Treatise on Efficacy: Between Western and Chinese Thinking*, translated by Janet Lloyd (Honolulu, University of Hawaii Press, 2004).

by desire and self-will which is the state of grace of the intellectual worker. Without that you will do nothing, at least nothing worthwhile.[30]

Sertillanges goes on to argue that, while the most mediocre mind may hit on an idea, like a rough diamond or a pearl, what is really difficult is what he calls 'the cutting of the idea, and, above all, its setting into a jewel of truth which will be the real creation'.[31] Marshall not only hit upon the ideas of net assessment and competitive strategy, he also cut them into jewels of knowledge to serve America's national interest during the Cold War. He achieved this 'cutting of ideas' not by seeking to build an empire inside the Pentagon—the ONA has seldom numbered more than twenty personnel—but by relying on an intellect which was attuned to longer-term trends. It is this capacity for original thought and its objective presentation to the policy-world that makes Marshall such an influential American strategist.

## The Marshall legacy

What then of Andrew Marshall's legacy? Any judgment can only be an interim one given that so much about his work remains secret. An important 2015 intellectual biography, *The Last Warrior: Andrew Marshall and the Shaping of Modern American Defense Strategy*, by two of his protégés, Andrew F. Krepinevich and Barry D. Watts attests to Marshall's significant role as a Pentagon seer.[32] Moreover, the continuing importance and sensitivity of Marshall's work can be gauged by the simple fact that, of twenty-five net assessments produced by the ONA under his directorship, only two are declassified today. This secrecy notwithstanding, it seems clear that Marshall is one of the most prominent Western strategists of the past half century. He helped the West win the Cold War and set important parameters for our understanding of strategy in the 21st century. During his long stewardship of the ONA, he approached the crafting of strategy as a creative process in which preferable policies must be measured against interaction with adversaries and conditioned by resources. His interlocking strategic frameworks of net assessment and competitive advantage continue to remain relevant as we enter what Paul Bracken has called a 'second nuclear age' in Asia, marked by the rise of China and renewed great power rivalry[33] Indeed, in 2012, the leading American scholar Thomas G. Mahnken, edited

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30  A. G. Sertillanges, *The Intellectual Life: Its Spirit, Conditions, Methods*, trans by Mary Ryan, (Washington DC: The Catholic University of America Press, 1998 edition), xviii.

31  Ibid., xxvi.

32  Krepinevich and Watts, *The Last Warrior: Andrew Marshall and the Shaping of Modern American Defense Strategy*.

33  Paul Bracken, The Second Nuclear Age: Strategy, Danger and the New Power Politics (New York: St Martin's Press, 2012).

a major study entitled, *Competitive Strategies for the 21st Century*, focused on Asia in general, and China in particular.[34]

Marshall's extraordinary career from the physics laboratory in Chicago where he worked with Enrico Fermi through his membership of RAND's glittering coterie of nuclear strategy pioneers to his long and influential directorship of the Pentagon's ONA is a reminder of the importance of fostering intellect in strategic affairs. Thinking about strategy requires significant creativity as well as curiosity and a tolerance for uncertainty. These are virtues that are seldom found in defence bureaucracies, which tend to thrive on predictability and routine. When one combines bureaucratic orthodoxy with the impact of contemporary social media outlets and a relentless electronic news cycle, the environment for good Western defence policy-making in the future is hardly encouraging. In the years ahead, a Westminster-style governmental system, such as Australia's, would do well to examine how Marshall's ONA functioned and to consider the value of creating a diagnostic strategic-level think tank as vital adjuncts to its defence organisation.[35]

From the Spanish Habsburgs through to the Germans in two world wars to America in Vietnam and Iraq, history is littered with countries that could win battles but not wars because they lacked proper organisation for high-level strategy formulation. Marshall's long ONA tenure was distinguished by his laser-like concentration on wars not battles; by an unwavering focus on the strategic future not the present; and by an eternal vigilance that eschewed complacency. He remains an American original and the last survivor of the gifted Cold War strategists from the RAND Corporation, who rose to prominence in the 1950s. In 1986, when historian, Peter Paret, edited a now famous collection of essays entitled *Makers of Modern Strategy from Machiavelli to the Nuclear Age*, Andrew Marshall's name did not appear in any of the chapters on Cold War strategy.[36] In the future, it is almost certain that any further edition of *Makers of Modern Strategy* will have to remedy that omission—and not just about the Cold War—but in its new chapters on the post-Cold War era and beyond.

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34  Mahnken ed, *Competitive Strategies for the 21st Century*: Theory, History, and Practice.

35  It is significant that the British Ministry of Defence created an Office of Net Assessment in 2018. See Gabriel Elefteriu, *A Question of Power: Towards Better UK Strategy Through Net Assessment*, (London: Policy Exchange, 2018), especially 13–45.

36  Peter Paret, ed, *Makers of Modern Strategy from Machiavelli to the Nuclear Age* (Princeton NJ, Princeton University Press, 1986).

Focus

# Hugh White's How to Defend Australia



**How to Defend Australia**
*Hugh White*

La Trobe University Press
(Black Inc. 2019)

In this issue of the AJDSS our Focus section topic is Hugh White's recently published book, *How to Defend Australia*. Here James Goldrick and Brendan Sargeant present their differing points of view on White's thesis and the important debates it raises.

# An invitation to isolation: there's more to national strategy than fortress defence

*James Goldrick*

Hugh White seeks fundamental changes to Australia's defence strategy and the force structure maintained to provide for our national security. Why he thinks this is necessary is set out in his new book, *How to Defend Australia*. The premise is straightforward: China is so powerful that its domination of East Asia and of the South East Asian periphery is inevitable, if not an accomplished fact. The primacy of the United States has ended; and the unavoidable result will be the weakening and likely collapse of the security arrangements that have prevailed largely unchallenged for many decades. White believes this situation is something wholly new for Australia, given our history since European settlement, and that it requires a wholly new approach. Australia must look for the first time, he asserts, to secure its security without the expectation–or even hope—of great power support. Furthermore, White believes there are insufficiently aligned interests for Australia to rely upon any of the other actors in the region as partners in balancing China. Indeed, the suggestion is that there are enough possible sources of contention with India, Indonesia and even Japan, that these nations need to be factored into Australia's risk matrix.

The solution proposed is to focus on the defence of the Australian continent (this includes Tasmania but not, in the final event, Australia's offshore territories in the Indian Ocean) by what *How to Defend Australia* defines as a strategy of 'maritime denial'. The resulting force structure involves a much larger submarine force than is currently planned, as well as continued emphasis on long range strike and precision weaponry, principally delivered by fast jet aircraft with the potential of unmanned vehicles in the future. This combination is explicitly not a 'balanced force', which White regards as being an attempt to maintain too many capabilities with resources spread too thin to provide decisive force when and where it most matters. The much greater cost of the 'maritime denial' strategy proposed will be met in part by

the wholesale disposal of force elements assessed as superfluous to the construct. Thus, the majority of the current and planned naval surface fleet, as well as the big amphibious ships, will be sold off and not replaced.

There are several problems with *How to Defend Australia's* thesis. The first and most important is that geography is not all about territory. Geography matters for Australia, but not in the way many think. Australia's problem fundamentally is that it is at the end of the line of any and every supply chain. Our situation is thus not an invitation to invasion but to isolation. Threats against Australia have always manifested themselves—even at the 'darkest hour' of early 1942—in efforts to attack or cut our national transport links with the outside world rather than in attempts to land large bodies of troops on the continent.

This misunderstanding has resulted in us often ignoring the fundamental reason for the alliances in which we have been engaged for most of our history since European settlement, as well as the justification for commitments in distant theatres. Australia has from the first been critically dependent on both exports and imports and this dependence, both in crude financial terms and in the vital matters of keeping the population fed and supported, has steadily increased. It is not appreciated by many the extent to which Australia's food distribution systems in 2019 depend on diesel-powered road transport, while agriculture itself is reliant upon the import of fertilisers to compensate for the continent's low levels of phosphorous in the soil. And, of course, we no longer refine aviation fuel domestically.

Political scientists and contemporary strategists are prone to employ selective historical analogies in ways that make historians uncomfortable, not only because the contemporary context may have fundamental differences from the cited situation from the past but also because the chosen analogy may omit factors critical both to the historical example and to current events. *How to Defend Australia* suffers from this syndrome in the way classical British strategic policy is cited as an exemplar for the proposed Australian approach. *How to Defend Australia* sets out a trinity of British strategic goals – to secure the English Channel and home waters to prevent invasion, to ensure that no major European power could control Belgium or the Netherlands and to prevent any single power from dominating Europe as a whole. White draws very close parallels between this trinity and his assessment of Australia's essential strategic requirements.

It is true that the three goals were primary considerations for any British government from at least the middle of the 16th century, but they did not remain the only vital interests that needed guarding. The security of Britain's seaborne commerce was increasingly important in sustaining its economy and thus its national finances, as was its ability to trade with the European continent even as it sought to intercept the shipping of any adversary. But, by the second half of the 19th century, a vulner-

ability had been added to this financial dependence that was just as serious as any threat of invasion. The combination of the urbanisation and population growth that accompanied the Industrial Revolution with Britain's adoption of free trade meant that feeding the British people was increasingly managed by the just-in-time import of cereals and other agricultural products. With only a few weeks of food in country, it was essential for Britain to ensure that its sea communications were maintained – requiring a naval effort that had to be global in its ultimate reach.

Given Australia's energy dependence and its lack of oil refineries and stockpiles, our need to find ways of protecting the tankers that keep the country—both defence force and domestic transport—running has parallels to the British situation of the 19th century that even the most austere historian could not deny but which *How to Defend Australia* does not acknowledge. Furthermore, while Australia's dependence on imported fertilisers to maintain its own food supply may be less direct than Britain's in the longer term it is no less critical.

The focus on an anti-invasion ADF creates another concern. Our strategic environment is becoming increasingly complex not just because of changing power balances but because of other developments in the world around us, of which climate change is perhaps the most important. No future grand strategy can ignore this reality, either in the requirement to manage these problems directly or to cope with the knock-on effects, which may well result in new sources of inter-state dispute. Furthermore, as recent events in the Strait of Hormuz have confirmed, threats to the global system and to Australian interests manifest themselves in many ways and at many levels of conflict. Therefore, the construct of a defence force centred on an anti-invasion mission may be arguable as necessary but it clearly cannot be sufficient.

Australians are right to be on their guard about military commitments far afield, but such caution must be accompanied by the understanding that we rely as a nation, as we always have, on a global system for our prosperity and on the maintenance of seaborne transport for our survival. Just as our interests and vulnerabilities are shared with other nations so must protecting them be a collective effort. Australia will never have the capacity to project power and sustain presence out to all the locations where our vital interests are involved. We must work with others–and we may have to do such work a long way from our own shores.

Here, *How to Defend Australia* is also problematic. White largely rejects the value of alliances in our new strategic environment and again cites the example of what has elsewhere been termed Britain's 'splendid isolation', based on the idea that nations have no permanent friends, just permanent interests. The fact that the British were always prepared to involve themselves in alliances when and where needed is given little recognition. White is right not to minimise the challenges of our relationships

with India, Indonesia and Japan, but he is wrong to be so dismissive of our potential to work together to mutual benefit. Much more should have been said in *How to Defend Australia* about why partnerships are so difficult in the 21st century Indo-Pacific and what Australia could do to encourage their development.

The assessment of the technological factors that *How to Defend Australia* employs to support Australia's ideal force structure is also curiously incomplete. There is surprisingly limited acknowledgement of the challenges Australia would face maintaining the 'system of systems' of sensors, communications, targeting and platforms, such as the F-35 strike fighter aircraft, without substantial external assistance. What is even more surprising is the relative absence of analysis of the stresses that cyberattacks will put on these systems, the extent to which cyber warfare will be interweaved with kinetic effects and the extent to which Australia will need to develop capabilities which can operate in electromagnetic and data environments that are highly contested. This may be because some of the assertions as to the absolute superiority of *How to Defend Australia's* favoured systems in combat could thus be called into question.

It is the subtext of *How to Defend Australia* that may be most significant. White is right to call for a dispassionate assessment of Australia's changing strategic environment and the responses that we need to make, even if his solutions are questionable. This book is an engaging read on a very important subject, but it must be studied with great care, a critical eye and constant awareness that there is more to national strategy than fortress defence. Its real value lies not so much in the credibility of the author's construct for our future security but as the start of a conversation that Australia needs to have as we face the uncertainties of our new reality.

# If we must prepare for the worst, what must we do now?

Brendan Sargeant

Defence policy is the most challenging of all areas of public policy. It involves speculating about the future and how that future might deliver threats to the wellbeing and survival of one's country. It requires that one make a judgement about which of all the possible futures that might eventuate is the one most likely to realise itself. It then requires a judgement about what measures might need to be taken in the present to mitigate against all the threats and risks that might accrue from this possible future. This can involve the expenditure of billions of dollars, which once committed, close off alternative courses of action. The cost of error is very high and, in some circumstances, catastrophic.

It gets harder. The implementation of defence policy, especially new policy, is extraordinarily complicated. It involves large, complex systems characterised by the interaction between technology and human beings directed towards achieving outcomes in a future that is often speculative, or in a present that is never fully comprehensible. Much of the work is done in the hope that the world it is being undertaken to provide a response to will never occur. The organisations that preside over the development and use of capability have long histories and enormous accumulated experience. They have a view about policy and strategy, built on experience, which may be at variance with what policymakers are trying to achieve. Every process, every institution, every weapon system, has embedded within it an implied vision of the world and a view about what is the most appropriate policy and strategy.

Aside from its complexity, the work of defence policy is an emotional challenge because all involved understand, often personally, that the cost of error is very high. To do serious work in this area requires that you understand that your obligation is not only to the present, but to the future, often to the future beyond the span of your own lifetime.

Every page of Professor Hugh White's book, *How to Defend Australia*, carries this sense of obligation to the future.

White's book builds an argument about how we might understand the challenge and undertake the defence of Australia. The way in which he constructs his argument and the style in which he presents it are central to the meaning of his book. Most commentary on *How to Defend Australia* makes reference to the elegance of White's writing and the clarity of his argument. The first thing to note is that the way he writes–clearly and simply–renders a great courtesy to the reader. He helps the reader navigate a subject which is complex and also requires a certain degree of resilience to confront seriously.

In developing his argument, White strips away much of the noise of the current moment. He focuses on underlying patterns and forces that we are often blind to as we manage the distractions of the present, and he tries to interpret these patterns and forces to see what they might reveal. The book's focus is on the structure and possible trajectory of forces that in some possible futures may combine to create an existential threat to Australia. In this sense, the book locates itself at some point in the future where a major Asian power may have the capacity to threaten Australia's security. It asks the question: what is likely to occur in that moment and what would enable Australia to respond effectively? Once you accept that this is where White has placed his thinking and argument, the other big question comes into view. If existential threat is a possible future, and if we have an obligation to prepare for the worst, what must we do now?

This is a challenging question. We live mainly in the present as products of our history and culture; our view of the world and the future is always partial. White's book understands this, but his stance is that the matters under discussion are of such significance that to ignore the future in favour of the present, or to assume that what we see in the present is pretty much what we will see in the future, is to take unacceptable risk and does not meet our obligations to the generations that will succeed us.

At the heart of the book is the recognition that the rise of Asian powers, particularly China, and the lessening of the power of the United States in Asia, has changed the strategic order irrevocably. White explores in detail what this might mean for Australian strategic and defence policy. He has asked questions about technology and the possible future role of the United States in Asia. He has explored the implications of our geography for our defence and the way we might operate strategically in the Indo-Pacific. He has considered how these forces affect capability development and the viability of certain capabilities over time. He has seen how Australia might be vulnerable. He has been sceptical as to the extent that activity now might change those larger forces. He has explored the implications of that scepticism.

In his discussion of Australia's strategic interests, he focuses on those features of Australia and the regional environment that are enduring: the nature of our broader environment from both the perspective of geography, but also the large economic and demographic forces that, over time, change the relationship between Australia and countries in this neighbourhood. He establishes a hierarchy of interdependent strategic interests that provide a framework for understanding potential threats and their significance, but more importantly, create a framework for developing the type of defence force that might represent the best response by Australia.

As he does so, he works his way through the implications for how we might build the ADF. These are the most contentious parts of the book for contemporary policy and there is much to argue with. He calls into question some of the signature decisions that governments have made in recent years, particularly in relation to the future frigate program and the future submarine program. He does this with reference to both the history of the capabilities and the theories that underpin and animate thinking about them. Where he considers those theories wanting or outmoded, he says so. In doing so he tests the assumptions underpinning certain capabilities and challenges their relevance for the world that he sees emerging. This is particularly so in relation to surface combatant ships which he argues are of diminishing relevance to Australia's needs.

These sections of the book need to be read closely and with care, not only for the proposals he advances, but for the reasoning and assumptions underlying them. The exploration of a trade-off between affordability and the level of capability required; the forces that prevent clarity of purpose in relation to capability choices; and in particular the discussion on the consequences of pursuing high levels of interoperability without sufficient thought to the operational and strategic cultures that this creates are important discussions. In this respect, I think that perhaps the most problematic part of the book is the assumption that European technology and equipment is a viable alternative to that of the United States. ADF capability is heavily dependent on technologies provided by the US within the Alliance framework. I am not confident that any alternative is viable if we want to retain current and prospective levels of capability, or capabilities sufficient to meet the challenge of a major Asian power.

That said, it is easy enough to argue about the detail of White's arguments, but he does highlight the strategic consequences of different choices.

It is in the context of the need for clear-sighted understanding of future potential strategic risk and potential responses that White raise the question of the likely need for Australia, at some point, to consider nuclear capabilities. His discussion recognises the complexity and moral gravity of the question.

The book spends some time on management and budget issues. It is an area not well understood and White brings some clarity. My view is that Defence management performance in Australia has been, especially when considered over the long term, quite good. The burden of White's argument is that the foundation of good management and the capacity for major change is clarity of strategic goals and hard thinking about how they translate into management process. This seems to me to be right. Once goal clarity is lost, the normal problems of managing large and complex systems compound.

On budget considerations, White does not walk away from advocating increased expenditure. His focus is on affordability, efficiency and trade-offs. Affordability is a way of establishing limits and imposing discipline, which in this context means establishing clarity of goals and being clear-sighted in pursuing them. But as he makes clear, increased expenditure is affordable in the context of Australia's wealth and budget capacity. How much we spend is at bottom a policy choice built on decisions we make as a country to invest in Defence now as a means of reducing our strategic risk in the future.

There is a question that bedevils all policymakers: in responding to the present, how much of the future are we prepared to put at risk? In this respect, White's book stands as a reminder that we make choices in the present that create futures we may not understand and perhaps are not even able to envisage. It reminds us that there are choices we may want to make in the future, but in order to be able to do so we need to build the capacity now. The book also asks whether refusal to see futures that the world may create is a wilful blindness, one that privileges existing institutional arrangements, which have their own strategic imperatives that find expression in particular policies and strategies.

These parts of the book should provoke a strong and necessary debate because they challenge major institutions and their modes of being in the world. If, as a country, we decide the current force structure is right, we will have a deeper understanding of why. If not and it needs to change, we will understand better what that change means.

If we were, as a country, to decide that the vision of a future world presented in the book is possible, and we were as a consequence to decide to take it seriously and act, what does this mean? This is where the book raises many of its imponderables, at least for me.

To work towards some form of implementation of the strategy advocated by White would represent a profound change to our strategic identity, to who we think we are in the world and how we live. It would be a major challenge to our strategic imagination. Australia would become a different country because change of the scale

the book considers would involve rethinking the lessons that we believe we have learned from our strategic history.

You do not have to agree with the book's vision of what the future world might hold. You may even decide that what the book is proposing is outside the realm of any reasonable possibility. However, the expansion of Chinese power is real and there is some uncertainty about the nature of United States' involvement in the future Indo-Pacific strategic order. The book does highlight the need for radical thinking, radical in the true sense, in that there is a need to go back to the fundamentals of our strategic environment and ask the questions on the basis of first principles.

As I reflect on the book, my sense is that the style of the writing—in its simplicity and measured tone, its focus on logic and the careful construction of argument built on explicit assumptions—conveys as much significance as the content. As I turn it in my mind, I hear a voice talking. I also hear a crowd of voices, including my own, clamouring to respond. Behind these voices there is a silence. It is the silence of the future. My reading is that the voice that this book conjures is trying to speak out of that silence. As the future comes closer, the meaning and significance of what this book is telling us will become clearer. It will help us to know ourselves better.

Yet I also wonder if White's approach and style of argument has the effect of diminishing human agency, of conceding too much to the large forces he describes. The future he sets out is not the only possible future. In this respect, I sense a bleak determinism behind much of the thinking and argument. Perhaps this is necessary as a means of focusing attention on matters that normally we do not like to think about.

This book is now in the world and it tells a story about a possible future and of what that future might mean for the present. It is a book that anyone who wants to think about Australia should read and reflect on. In the years to come, it will be fascinating to see what this book does to us as it travels with us into the future.

## Our Man: Richard Holbrooke and the End of the American Century

*George Packer*

Jonathon Cape (2019)

Reviewed by Ric Smith
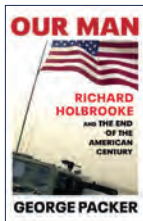
Just as the American diplomat Richard Holbrooke was often described as a *force of nature*, so George Packer's biography of him is a *force of literature*, at least of the biographical genre—engrossing in its content, brilliant in its composition.

What differentiates Packer's work from typical accounts of the life and times of a major public figure is his focus on Holbrooke's personality and his character. His judgement is forthright: 'Our man' aspired to be the Secretary of State for a Democrat President but in the end, says Packer, his 'dream job' was denied him because of 'defects of character'.[1] But it didn't happen quickly: the story of Holbrooke's career and how his defects mixed with his successes spreads over 50 years. In Packer's telling, it's a tragedy, but never less than entertaining.

Holbrooke's restlessness and precociousness were evident in his first overseas assignment as a junior State Department adviser in Vietnam in the 1960s. He was quick to judge that victory in Indochina could not be achieved by military force alone and that negotiation (*a political solution*) offered the only way out. He didn't oppose the war. He just thought it was being fought the wrong way, with too little regard for its political content. He liked military power but understood its limits; and his judgements in this area informed his thinking for the rest of his career, not least in his final role as Special Representative for Afghanistan and Pakistan (SRAP).

In Packer's account, two particular threads—Holbrooke's character and the influence of Vietnam—eventually came together to preclude the kind of relationship he aspired to with the last President for whom he worked, Barack Obama. He got off to a bad enough

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1    George Packer, *Our Man: Richard Holbrooke and the End of the American Century* (London: Jonathon Cape, 2019), 7.

start with the President-elect when, in their first meeting, he asked to be referred to as 'Richard' rather than 'Dick' because that's what his wife preferred. But it got worse: Obama felt he was being patronised, and was particularly sensitive to Holbrooke's repeated implication that Afghanistan could be for him what Vietnam had been for Johnson some 50 years earlier. Holbrooke's reputation and the triumph of his earlier work in the Balkans and the UN notwithstanding, Obama would have sacked Holbrooke two years later had it not been for the support he had from Hillary Clinton.

The background against which Packer paints this colourful portrait is clear from his bold subtitle: *'and the end of the American century'*. America, the nation, and Holbrooke, the man, are seen as moving through the post–Second World War era in parallel. 'The best about us was inseparable from the worst … Our confidence and energy, our excesses and blindness, were not different from Holbrooke's.'[2]

Packer's judgements about the wide canvas of the American century and the decline of American influence in the 1990s are sweeping. 'There was no Clinton doctrine other than the Pres-

ident's boundless confidence in globalisation…Holbrooke wanted more … He was that rare American in the treetops who gave a shit about the dark places… If we didn't act no one else would…'[3] And so, quoting Holbrooke's complaint that 'we are too complacent and indifferent', Packer concludes that 'the main lesson of the nineties—where there's an American will there's a way—depended on accidents of history and geography[4] …Pax Americana began to decay at it's very height … 1998. We were flabby, smug and self-absorbed. Did any country ever combine so much power with so little responsibility?'[5]

These are Packer's views, but they align with those of his subject. Holbrooke believed, Packer says, that 'a soft Democrat was politically doomed',[6] and Holbrooke liked Hillary Clinton better than Bill because she was tougher.

It would be tempting to pause to argue that there was more to America's relative decline than the failings of the Clinton Administration, but the fast moving narrative brooks no interruption. And anyway, the deeply personal and pungent *bon mots* with which Packer punctuates his tale are distraction enough. 'I told you,' he insists, 'that foreign policy makes no sense.'[7] And he

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2    Ibid., 9.

3    Ibid., 398.

4    Ibid., 429.

5    Ibid., 399–400.

6    Ibid., 429.

7    Ibid., 269.

asserts, 'Governments are composed of human beings, not policy positions'[8] and 'In government, foolish certainty usually beats fragile wisdom.'[9]

Packer had studied Holbrooke for 40 years, without really liking this 'monstrous egotist'.[10] Courtesy of Holbrooke's third wife and widow, Kati Marton, Parker had unfettered access to Holbrooke's papers, including some of a kind most wives would normally have withheld. It's this familiarity with the subject and Packer's raw and distinctive style that lifts this biography way above the ordinary.

'I can't get his voice out of my head,' Packer says at the outset.[11] Along the way, he refers to 'the relentless undertow of that voice', and in the end says 'I've gone on longer than I meant. There's too much to say, and I still can't get his voice out of my head'.[12]

Richard Holbrooke's personal qualities are indeed a rich lode to quarry. His intelligence and self-confidence, his brashness and energy, his creative flair, his unrelenting ambition and competitiveness, his genuine humaneness, his networking skills, his questing for loyalty—these were the ingredients that earned him many sobriquets, 'bulldozer' not the least of them. But the effect was tarnished by other qualities:

his insecurity (described by his closest friend as 'vulnerability' and 'fragility'), his narcissism, his rudeness ('no one escaped his inattention'), and his inability to see himself as others saw him ('he couldn't laugh at himself because he didn't know himself'). And while there are times when diplomacy demands a certain level of duplicity, Packer recalls enough of it in Holbrooke's personal life as well as his professional career to suggest he made an art form of it.

Packer's account embraces all this and more: Holbrooke's carelessness in dress and habits (the sweaty feet, the socks) as well as manners, his financial overreach as he endeavoured to match it in the world of celebrities and power that he liked to inhabit, his desperate pursuit of publicity, his competitive and often destructive personal relationships. Numerous affairs were fitted in among (and in some cases in parallel with) his three marriages, including one in the 1980s when for six years he and Diane Sawer were the 'Manhattan power couple in a decade of televised glitz' (before she dumped him).[13]

Holbrooke's relationship with Tony Lake is a story within this story. We meet Lake as Holbrooke's State Department contemporary and his much admired and envied best friend, even as he as-

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8   Ibid., 107.

9   Ibid., 121.

10  Ibid., 6.

11  Ibid., 3.

12  Ibid., 556.

13  Ibid., 214.

pires to seduce his wife, but overtime he becomes a fierce rival for preferment in Democrat administrations as Lake presses on to become National Security Adviser and Holbrooke is overlooked. The tension between them surfaces again and again as they work together on some of the great crises of their times.

Holbrooke's success in bringing about a settlement in the Balkans through the Dayton Accords might well be seen as his greatest achievement. Packer's account of his clever use of military power in support of high tempo and highly personalised diplomatic effort is engrossing. 'Holbrooke's diplomacy,' he says, was 'theatre for mortal stakes'.

Packer also reflects well on his subject's time as America's Ambassador to the UN in the late 1990s. This was he says 'a nonstop blur of purposeful activity… [which] saved the American position in the United Nations, which amounted to saving the United Nations'*14*. In this case, his formidable diplomatic skills were deployed in winning support from Congress for the US to pay its overdue arrears and remain in the UN, thus heading off—for 20 years at least—a lurch towards *America First*.

Though Australian ministers and officials had known and worked with Holbrooke over the years, it was as Ambassador to the UN that he engaged our interests most closely. Packer's account has him contributing significantly to the passage of the Security Council Resolution that authorised the dispatch of the Australian-led international force to Dili in 1999. Through his Washington lens, Packer remarks that the successful peacekeeping mission which followed 'showed that the US—with a decent power in the region and American leadership—could stop atrocities and stabilise war-torn countries'.[15]

Holbrooke returned to the East Timor story later in a flying visit to Indonesia to broker an agreement on the management of the Indonesia–East Timor borders which was under threat from the activities of pro-Indonesian militias. Sir Peter Cosgrove's account of this in his autobiography is a nugget that escaped Packer's quarrying.

Cosgrove describes how Holbrooke, working as a 'tag-team' with the like-mannered US Ambassador to Jakarta, Bob Gelbard, 'dominated' the meeting he had convened in West Timor at a day's notice and hammered through an agreement (based in fact on a working paper Cosgrove had faxed to them the previous day but which was presented as a US proposal). Cosgrove admired the 'tour de force' and was delighted to have an agreement signed and sealed but admits to being 'a little stunned by Holbrooke's "cudgel diplomacy" '.[16]

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14  Ibid., 414.

15  Ibid., 414.

16  General Peter Cosgrove, *My Story*, (Sydney: HarperCollins Publishers Australia, 2006), 282–284.

Living in Washington at the time of my appointment as Australia's Special Envoy to Afghanistan and Pakistan (Australia's SRAP) in April 2009, I was immediately invited by Holbrooke to attend his SRAP team's daily meetings, in what he called his 'shitty little office' at the State Department. As in his own office so in the many SRAP meetings we attended, all the characteristics Packer describes were on display. The early morning theatre was not to be missed as the 'force of nature' bullied, cajoled, flattered and smoozed in ways that sometimes astonished even his personal staff. 'Stop the meeting!' he demanded on one occasion. 'The Secretary has to hear this—go get Hillary, she has to be here, say nothing until she arrives.' Of course she didn't come down from her seventh floor office to his on the first floor but the effect of this piece of theatre on those present was no less for that.

Holbrooke incidentally claimed a personal affection for Prime Minister Kevin Rudd. He was especially impressed by Rudd's 'Apology to the Stolen Generation' speech, which he claimed to have watched live. But, in the patronising way that had irritated Obama, he almost invariably called him 'young Kevin'.

In the end, Holbrooke assembled 40 or more SRAPs in an endeavour to write the foreign ministries of the world into the Afghan project. But his frustration grew as it became clear that with the Pentagon opposed to any negotiation with the Taliban, the President would not countenance the case for a 'political solution'. Publicly his loyalty to Obama was undented but he remained convinced that if he could only meet the President personally he could bring him around.

The tragedy of this was captured in his demise: running late as he rushed to a meeting with Secretary Clinton from another futile attempt to lobby Obama's staff, he collapsed in her office and suffered a massive aorta tear. Tales of the instructions he continued to bark as he was being carried away to hospital became part of the legend. He died two days later. To have faded away in his own bed would never have befitted Holbrooke.

Nor was this the end. A memorial service held at Washington's Kennedy Centre in January 2011 was attended by two American Presidents, two UN Secretaries-General, several past Secretaries of State and military and other luminaries too numerous to name. Pakistan's President Zadari was there—and so was Tony Lake. The service embraced the full breadth of emotion: family grief as Kati Marton and then Holbrooke's two sons spoke, pathos as the boys described their dysfunctional relationships with their father, assertions of admiration and respect from the best and brightest of America's foreign policy establishment, endless tales about the man—all leading to what, in Australia, we would have called a good old fashioned roast.

For those of us present, the colour and flair and the range of feelings about Richard Holbrooke were on full display that day, and it's that display which has now been captured by George Packer in this remarkably readable biography.

# LikeWar: The Weaponization of Social Media

*Peter W. Singer and Emerson T. Brooking*

Houghton Mifflin Harcourt (2018)

Reviewed by Michael Hatherell



Peter Singer and Emerson Brooking's 2018 book *LikeWar: The Weaponization of Social Media* is a significant contribution to our understanding of the way in which social media has and could be employed in strategic competition and conflict. Singer and Brooking begin their analysis by detailing the historical development of the internet, considering not only the technology but also the social practices built around devices and applications. With the combined development of the smartphone and social media, they argue that the internet has now 'left adolescence'.[1] Building on this discussion, the remaining chapters in the book assess how social media has become a means for: crowdsourced investigations (Chapter 3); state censorship and disinformation (Chapter 4); the fabrication of information by entrepreneurs and organised political forces (Chapter 5); the building of popularity and power by pop stars and terrorist organisations alike (Chapter 6); and a crucial second front in conflict amongst states and nonstate actors (Chapter 7).

In writing *LikeWar*, Singer and Brooking were able to draw on their own extensive experience researching and writing about national security. The nature of their research journey over five years is outlined in Chapter 1, encompassing both an analysis of events as they occurred and their interviews with key informants. The authors also note that they were able to treat 'the internet as a laboratory itself', including joining 'digital armies', setting 'traps for trolls' and 'being enlisted into the fight in new ways'.[2] While each of the chapters focus on distinct arguments about social media and its impact, the narrative in the book is propelled through intriguing mini-case studies of individuals, movements and organisations using social media to collect, analyse and distribute information. These case studies are not only entertaining but also illustrative of the main arguments that the authors offer about the changing nature of politics and war.

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1   Peter W. Singer and Emerson T. Brooking, *LikeWar: The Weaponization of Social Media*, (Boston and New York: Houghton Mifflin Harcourt, 2018), 51.

2   Ibid., 20.

*LikeWar* could, however, be critiqued for failing to deliver on some of its loftier claims. The book is certainly not tentative in its characterisation of the changes brought about by social media, including the argument that 'war and politics have never been so intertwined' and that the decisions of engineers in Silicon Valley 'shape the battlefield on which both war and politics are increasingly decided'.3 Yet, some readers may find that these claims go too far in trying to highlight the novel quality of '*LikeWar*'. Kori Schake, for instance, argued in her review of the book that 'If Clausewitz would recognize it, it hasn't changed the nature of war. *LikeWar* is a valuable guide to the innovative weapon of social media, but it doesn't clear the bar of proving we're in a new kind of war'.4

It is not necessarily a bad thing that Singer and Brooking are bold in some of the claims that they make as it challenges the reader to engage critically with their arguments. In that spirit, I think that given the likelihood of a changing social media terrain the relevance of some of their arguments and accompanying examples can be questioned. Chapter 3, for instance, discusses what the authors call the 'end of secrets'. As examples, the live tweeting of the raid on Osama Bin Laden's compound by

@ReallyVirtual (or Sohaib Athar as he is known in real life) and the efforts of Eliot Higgins and his project Bellingcat to investigate the shooting down of MH17 are some of the most intriguing vignettes in the whole book. They do raise the question, however, of how states and other powerful actors might respond to this use of social media to observe or investigate their actions.

Once these powerful actors come to grips with the impact of social media noted in *LikeWar*, how long will it be before access to social media in a local area is regularly blocked during operations like the raid on Bin Laden's compound, or the information available to groups like Bellingcat is removed, or manipulated, to the point that their work is impossible? Indeed, since *Like-War*'s release, we have seen examples of states responding to the power of social media. In Indonesia, for instance, the government recently slowed down access to influential social media services, like Instagram and Whatsapp, to prevent images and videos being shared during protests over the presidential election result.5 Emerging examples of this sort make it worth asking how many of the examples evident in the book will still be possible in the social media environment of 2025?

3   Ibid., 262.

4   Kori Schake, 'Social Media as War?', War on the Rocks, 5 September 2019, https://warontherocks.com/2018/09/social-media-as-war/

5   Coconuts Jakarta, 'Indonesian gov't temporarily blocks certain features on social media to limit spread of hoaxes', Coconuts Jakarta, 22 May 2019, https://coconuts.co/jakarta/news/indonesian-govt-temporarily-blocks-certain-features-on-social-media-to-limit-spread-of-hoaxes/

It would be unfair to suggest that Singer and Brooking do not consider this possibility—indeed, *LikeWar* is very conscious of the way state governments and social media companies will shape the future social media environment. Chapter 4, for instance, details the means by which states like China are already censoring social media and using it for their own purposes. Yet some of the most novel aspects of the book's analysis rely on the idea that social media currently offers a unique environment where individuals and ad hoc groups can play a role in analysing information or even shaping it. The authors boldly argue, for instance, that: 'Attacking an adversary's most important center of gravity – the spirit of its people – no longer requires massive bombing runs or reams of propaganda. All it takes is a smartphone and a few idle seconds. And anyone can do it'.[6] It seems likely that this observation represents a momentary state of affairs before otherwise powerful actors catch up.

Setting aside this point, I would argue that *LikeWar*'s most important contribution is in Chapter 6 where the authors shift their focus to the elements that determine the success of political actors in developing convincing appeals through social media: what the authors call the 'weapons that win *LikeWar*.'[7]. A case study of ISIS provides an important starting point for discussing five key elements: narrative, emotion, authenticity, community and inundation. The authors observe that it is not just international terrorists who can draw on these elements to create convincing appeals. Indeed, one of the highlights of this part of the book is the analysis of Taylor Swift's use of Instagram and what it tells us about the power of establishing a sense of authenticity on social media.

In the supposed age of 'post-truth' politics, a high level of cynicism has emerged regarding the ease of shaping the public's perception. This theme was even reflected in the recent Marvel film, '*Spiderman: Far from Home*', in which one character argues: 'People, they need to believe. And nowadays, they'll believe anything'. Yet as Singer and Brooking remind us, being able to collect, produce and publish information is not the same as shaping ideas. Not every political actor can shape a compelling narrative, appear authentic or successfully draw on emotional connections. In this important section of *LikeWar*, the authors demonstrate that while accessing social media might only take a 'few idle seconds', developing compelling ideas takes some skill, thought and usually a significant amount of experimentation. This experimentation in a competitive ideational environment is a constant theme in many of the case studies presented by the authors.

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6    Singer and Brooking, LikeWar: the Weaponization of Social Media, 18.

7    Ibid., 154.

'Ideational competition' would have been, of course, a less sexy title than *LikeWar*, but it captures an important theme present in the book that deserves credit and further analysis. The elements of narrative, emotion, authenticity, community and inundation provide a framework to better analyse examples used in the remainder of *LikeWar*, including the online battle between the Israeli Defence Forces and Hamas on Twitter[8] or the battle of narratives between Russian and Ukraine.[9] One notable quote regarding the war in Ukraine, from an interview with journalist David Patrikarakos, captures the importance of ideas:

> I began to understand that I was caught up in two wars: one fought on the ground with tanks and artillery, and an information war fought… through social media…and, perhaps counterintuitively, it mattered more who won the war of words and narratives than who had the most potent weaponry.[10]

Whether or not *LikeWar* demonstrates an enduring change in the nature of politics or war, the way in which the book discusses the resonance of ideas has significant value for the national security community in a nation like Australia. Through concepts like political warfare, information warfare and hybrid warfare, the strategic use of information outside of major wars has again become fashionable to discuss. Yet too often, the use of these concepts focuses narrowly on information access and control rather than whether the use of information is successful in reshaping perceptions or ideas. It is worth following Singer and Brooking's lead to better understand the psychology of belief and the nature of what Carstensen and Schmidt have called 'ideational power': the power of political actors to 'influence other actors' normative and cognitive beliefs' through the use of information and ideas.[11] Singer and Brooking's analysis suggests that the ideational power of political actors is likely to be crucial in understanding and responding to the future security environment.

Finally, the contribution of the book is not limited to addressing the threat of '*LikeWar*'. Battles over ideas are not just about defending against foreign powers or terrorist organisations; as the work of Yuval Noah Harari has recently reminded us, they are also central to how we as humans define ourselves and develop a common sense of purpose.[12] Whether fighting a war or pursuing national political and econom-

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8   Ibid., 193-201.

9   Ibid., 203-211.

10  Ibid., 205.

11  Martin B. Carstensen and Vivian A. Schmidt, 'Power through, over and in ideas: conceptualizing ideational power in discursive institutionalism', Journal of European Public Policy, 23:3 (2016):321.

12  See: Yuval Noah Harari, 21 lessons for the 21st century, (New York: Spiegel & Grau, 2018).

ic goals, it is important to consider the shared myths that bring us together to achieve difficult tasks.

Do Australia's institutions and leaders possess the ability to develop a compelling ideational foundation, one that will sufficiently unite us in what may be an increasingly competitive ideational environment? *LikeWar* suggests that other global actors are active in exploring the use of social media to shape ideas and are learning through experimentation, making it even more important for a middle power with lofty ambitions not to be left behind. As Lesley Seebeck has recently argued, 'Articulating a broader, more coherent strategic vision that aligns with our core values—those that people would fight for—is needed to bring others along on that path'.[13] *LikeWar* is essential reading for understanding the contribution social media might make in establishing, debating and protecting that strategic vision within an increasingly competitive ideational environment.

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13  Lesley Seebeck, 'Repositioning Australia to face its future: It's time we stepped up', APPS Policy Forum, 8 July 2019, https://www.policyforum.net/repositioning-australia-to-face-its-future/amp/?__twitter_impression=true

# Bring the War Home: The White Power Movement and Paramilitary America

*Kathleen Belew*

Harvard University Press, 2018

Reviewed by Kristy Campion



Historian Kathleen Belew, an American Studies expert with the University of Chicago, is an important new voice for research into right-wing extremism. Belew's new book, Bring the War Home, provides an in-depth history of the white power movement in the United States between the 1980s and late 1990s. Spanning the Ku Klux Klan and its affiliates, skinhead groups, neo-Nazis and paramilitaries, the study frames intergroup alliances as a cohesive social movement, wrought by extremists and activists through a series of unifying narratives. Significantly, the Vietnam War provided a unifying narrative for right-wing extremists, some of whom were veterans who would later play key roles in the movements' development. These veterans felt that the United States' government had failed them in the Vietnam conflict by limiting their use of force and thus preventing them from dealing with the so-called communist problem. Anti-establishment and conspiratorial narratives soon developed, which, for select right-wing extremists, justified bringing the fight home against communist opponents domestically. The Greensboro Massacre in 1979 was one such expression of lethal violence by the extreme right against left wing opponents.

Bring the War Home provides a wealth of data on key leaders in white supremacist circles such as Louis Beam, Richard Butler, Don Black, Glenn Miller and Robert Miles; paramilitary figures such as Tom Posey and Michael Perdue; and right-wing terrorists like David Lane and Timothy McVeigh. Organisations such as the John Birch Society, the Knights of the Klu Klux Klan (KKKK), the Aryan Nations, Civilian Military Assistance (CMA) and The Order, all figure prominently. The harassment of the Vietnamese community on the Texas coast, the Morningside Homes shooting in Greensboro, The Order's terrorist campaign, Waco Siege, Ruby Ridge and the Oklahoma City Bombing are among the important events explored in meticulous detail. Belew's overarching argument is that the narratives of the Vietnam War functioned as a social cohesive, allowing the white supremacist, paramilitary and other subcultural movements to unite and execute violent acts, which eventually escalated to the Oklahoma City bombing.

The primary contention offered in *Bring the War Home* is that the Vietnam War united the many diverse factions on the American extreme right— even those who had not served in the military. The theory is a novel one and worthy of investigation. While it is discussed intermittently early on, the argument gains traction in Chapter 6, 'Weapons of War'. Although active service personnel participation in hate groups was discouraged, Belew demonstrates that the white power movement was able to leverage networks and sympathisers within the armed forces to obtain its objectives. This included the acquisition of explosives. In 1986, a Congressional Report on Fort Bragg found that sixty-seven kilograms of plastic explosive, sixty-four kilograms of TNT, over three hundred metres of detonating cord, thirteen hand grenades and thirty-five antipersonnel devices, were missing and possibly in the hands of extremists. At least US$50 000 of equipment was known to be obtained by Glenn Miller's White Patriot Party through a network of military sympathisers. It was not until December 1995, when active service white supremacists murdered two black people, that decisive action was taken to prohibit service personnel from joining hate groups.

The book moves on from resource acquisition and theft from military ordnance through to the role of white women, and then the impact of the

Waco Siege and Ruby Ridge. It ends with the Oklahoma City bombing on 19 April 1995 by Gulf War veteran Timothy McVeigh. Belew demonstrates the bombing was the 'fulfilment of the revolutionary violence wage by white power activists' by demonstrating the immersion of McVeigh in the American white power milieu.[1] She casts this as the dreadful culmination of the war against the United States government that Glenn Miller and his allies had declared on 6 April 1987.

Belew's objectivity in exploring and explaining the occasionally emotionally evocative concepts in the right-wing nexus testifies to her skill as a historian. She aims for accuracy and provides surplus detail to support her assessments of now-notorious individuals. Extensive archival research was undertaken, which added depth and nuance to important figures and leaders in the American extreme right. In particular, the detail documented on Louis Beam, who originally popularised the concept of leaderless resistance as an organisational model for violent groups, and David Lane, author of the 'Fourteen Words' and member of the terrorist group The Order, represents one of the most comprehensive reviews of these figures to date.

New scholars to the field will find Belew's portrayal gives all the foundational knowledge they require on these personalities. Her writing is accessible, and

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1    Kathleen Belew, *Bring the War Home: The White Power Movement and Paramilitary America*, (Cambridge: Harvard University Press, 2018), 236.

American-specific nuances are often explained for international audiences. Moreover, her engagement with policy positions, errors, and miscalculations in state and policing responses provides a useful compendium on what to avoid for policy makers today. There are many lessons to be learned from this book namely in how excessive or weak government responses or inaction can have a damaging effect on community cohesion, and create an environment where right-wing extremist subcultures can thrive.

Further discussion was needed to orientate the terminology. While the foreword stipulated that 'white power' would be the encompassing term to refer to the movement/s, it needed to be critically established. Closer delineation of the right-wing extremist nexus in the US, notably regarding the divisions between the white supremacist movement, libertarians and the sovereign movement, would have circumvented any over-generalisation regarding ideological homogeneity. It was unclear at times whether the focus was on the white supremacist movement proper, as symbolised by David Lane, or the broader militia and sovereign movement. While these two movements are inherently connected, their distinctions are nonetheless worthy of note.

Kathleen Belew should be commended for her extensive research into the extreme right in the United States of America. *Bring the War Home* is an important resource for readers into the American extreme right in the context of the Vietnam War. It provides detailed, accurate and timely insight into important actors and events which influenced not only the evolution but also the endurance of right-wing extremism, which Belew attributes to poor prosecution efforts, a misinformed public and limited state action. In conclusion, Bring the War Home will become an essential resource for both students and scholars investigating right-wing extremism in the American subcultural context.

# The Big Nine: How the Tech Titans and Their Thinking Machines Could Warp Humanity

*Amy Webb*

Hachette Australia, 2019

Reviewed by Mark McCallum
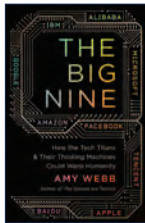
Building an understanding of the possible applications of artificial intelligence and what their impact may be is a challenging task. One that Amy Webb, quantitative futurist and professor of strategic foresight at NYU Stern School of Business, approaches by asking: 'What happens when we transfer power to a small group of people who are designing and building these systems?' This is the basis of her book, *The Big Nine: How the Tech Titans and Their Thinking Machines Could Warp Humanity*. The 'small group of people' she is referring to are the nine corporations that currently hold the majority share of the market in global data trade: the US-based tech giants Microsoft, IBM and Apple and the e-corporations Amazon, Google, Facebook, and their China-based analogues, Tencent, Baidu and Alibaba. Given that the value of the global trade in data recently surpassed that of oil,[1] her question is an important one. However, her US-centric approach and somewhat less than rigorous treatment of the subject matter detracts from what is offered. Having said that, for a critical reader this approach could provide insight into how a general audience may consider these issues.

The book has three parts that consider in the simplest terms: the past, potential futures, and solutions. 'Part I: Ghosts in the Machine' presents a short history of philosophical discussion around AI and the philosophy of thinking machines, the culture of the Big Nine and then highlights some contemporary undesirable consequences of the technology. This provides the reader with a foundation for the rest of the book. In 'Part II: Our Futures', three future scenarios are presented, which form the basis of Webb's recommendations in 'Part III: Solving the Problems'.

From the introduction the reader is presented with a bi-polar world of competition between the US and China. The narrative is familiar and echoes recent US criticism of China's approach to economic advancement. China's strategy for economic growth, including the One Belt and Road initiative, is portrayed as a strategy to '…increases

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1    https://www.economist.com/leaders/2017/05/06/the-worlds-most-valuable-resource-is-no-longer-oil-but-data

the CCP's influence around the world in opposition to our (US) current liberal democratic order', where the AI race is a proxy for other strategic competition. Given this premise, Webb is critical of the lack of a US national AI strategy, declaring that the US government has divested its responsibility to six companies. Given that this approach, as enabled by the 1980 Bayh-Dole Act, has led to the US being the foremost technologically innovative nation in the world, this is a somewhat ironic criticism. The rise of China and decline of the US is a theme that Webb returns to throughout the book, as if the fate of humanity will be determined by the success or otherwise of the United States' competition with China in the area of AI development. Although this may have been used as a motivational hook for US readers it distracts from the central question the book purportedly seeks to answer. Additionally, there are significant steps being taken in other parts of the world on this very issue, such as the European Union's General Data Protection Regulation; and the consequences of the application of these technologies may be more significant, both positively and negatively, in other parts of the world.

The first section of the book, *Ghosts in the machine*, consists of three chapters. Chapter 1 'Mind and Machine: A Very Brief History of AI' opens by presenting a history of philosophical debates on the nature of intelligence and the mind—and therefore the ability

of a machine to replicate human intelligence—and current developments in AI technologies. Much of the history presented is extraneous to the motivating question; although for a reader new to these ideas it may be a useful introduction. However, I would argue the content was overly selective to ensure that the assumptions relied upon later in the book were not challenged or undermined. Alternative views, such as the acknowledgement by AI pioneers of how challenging creating a machine intelligence actually is, or those who would counter the possibility of ever realising artificial general intelligence or artificial superintelligences (both of which appear prominently in the scenarios in Part II), would have made this section more complete. Instead, the reader is left to accept this technological outcome as a given.

Chapter 2, 'The Insular World of AI's Tribes', presents a general critique of the corporate culture of the Big Nine corporations. The picture we are painted, however, is of a culture no different from most corporations in that they suffer from a lack of diversity in gender, race and education, and therefore perspectives. Although these issues require attention, the link to the undesirable scenarios presented is not well formed. Webb should have made more of how corporate profit motive, entrepreneurial hubris, and social and psychological factors that have allowed possibly unscrupulous and unethical business models to flourish.

Part I concludes in Chapter 3, 'A Thousand Paper Cuts: AI's Unintended Consequences', with insights into how AI can get it wrong, from the inconsistent sentencing of criminals to the misidentification of genders. Unfortunately, at the conclusion of this part the reader is no wiser as to what AI actually is. Throughout the rest of the book this shortcoming is further amplified as the machine is regularly anthropomorphised, implying capabilities such as awareness or conscience. These instances only shroud rather than reveal the true nature of AI.

'Part II: Our Futures' employs three scenarios—*Thriving in The Third Age of Computing: The Optimistic Scenario, Learning to Live with a Millions of Paper Cuts: The Pragmatic Scenario, and The Réngõng Zhinéng Dynasty: The catastrophic scenario*—in order to guide our thinking about AI. In each scenario, we must buy into the premise that artificial general intelligence and artificial superintelligence will be realised and ubiquitous in some of our lifetimes. This premise is still the subject of much debate. If you, like me, believe that either being achieved is highly unlikely, then this section will seem more like a collection of science fiction short stories. For instance, in Chapter 7's catastrophic scenario the CCP as dystopian overlord is ascendant, US liberal democracy is in ruins, and corporate greed and misconduct runs rife as they profit from attending to natural human desires and weaknesses. All of the scenarios are very US-centric, largely ignoring how

these scenarios might play out in other nations with needs and challenges different to those of middle America. When these scenarios are measured against the characteristics of plausibility, utility, probability, and precedence, all but the pragmatic scenario offer little to inform real world choices about the implementation or application of AI technologies.

The final 'Part III: Solving the Problems' is a single chapter, 'Pebbles and boulders: How to fix AI's problems'. Unfortunately, most of what is offered fails to acknowledge the realities of how the world works and is therefore largely aspirational. Fifteen principles are proposed to ensure that AI is developed and implemented in a way that is ethical. These principles are a sound list of behaviours we might desire in those delivering AI technologies. However, how Webb proposes we instil these behaviours is unrealistic and her recommendation that regulation should not be used to control undesirable misuse of personal data is somewhat naïve. If a small percentage of outcomes presented in the scenarios in Part II were to come to pass it would be negligent of any government to not regulate the use of personal data or the application of AI technology. Instead, Webb offers a call to arms for users to modify their behaviour to send a message to the Big Nine that they are not happy with how the Big Nine is using their data. This is an important and desirable behaviour to encourage in those whose data is being acquired. However, consumer ac-

tion does not need to be independent of regulation. In fact, these same users should be calling for stronger regulation to protect their rights as consumers and private citizens. However, given the demonstrated behaviour of the public in their willingness to give up their data for a desirable service, this call to arms will likely be a weak and possibly ineffective signal to the Big Nine.

Webb comes to the subject, with a stated bias and upfront declaration that she believes, 'Fundamentally, AI is a force for good'. Consequently, the arguments and scenarios presented hinge upon the assumption that AI has almost omnipotent and unbounded powers to solve the world's problems. This position is taken without any consideration of the limitations of the technology, or its dependencies on other scientific advances and investment in enabling infrastructure for much of what is proposed to transpire.

This book is not aimed at an informed reader, consequently, I found the level and tone somewhat dissatisfying and felt the content suffered from the choices made in this regard as it reduced the rigour of the argument: details that I would consider important to the point being offered were glossed over. The value of The Big Nine, is that it asks the right questions and identifies future challenges. Unfortunately, I came away dissatisfied with the answers and solu-

tions offered. Instead of insights into *How the Tech Titans and Their Thinking Machines Could Warp Humanity*, the reader is offered failings common to almost all corporations and only one useful scenario. That being said, security professionals might gain insights into the macrostructures and motivations of the companies most likely to be providing AI services to their organisations. This insight provides the opportunity to consider how weaknesses resident in the architectures and motivations of the Big Nine might generate weaknesses in capabilities that rely on these systems—or what opportunities exist for potential adversaries to exploit these weaknesses.

I came away from *The Big Nine* without a clear and convincing answer to the question, 'What happens when we transfer power to a small group of people who are designing and building these systems?'. However, sometimes the value of a question is not in its answer but the awareness it builds of the problem, and the emerging public awareness and concern about the use of personal data might make the question mute. Although this is not the book for an informed reader, it could serve as a useful introduction to a reader willing to follow up on the assertions made and the questions asked to seek alternative views and a fuller analysis.[2]

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2   To gain a better understanding of what AI is, the technology behind it and how it can fail, presented in an accessible way, I recommend, *Made by Humans*, by Ellen Broad, Melbourne University Press, 2018, ISBN 13: 9780522873313.

# The Four Flashpoints: How Asia Goes to War

*Brendan Taylor*

LaTrobe University Press, 2018

Reviewed by Ahmed S. Hashim

According to Brendan Taylor, Professor of Strategic Studies at the Australian National University, Asia is currently the most critical flashpoint in international relations. In his recent book, *The Four Flashpoints: How Asia goes to war*, he marshals considerable evidence to show how and why this is so.

While, in the early Cold War period Asia barely registered as a global hot spot, it is unequivocally clear that it now commands everyone's attention. It has come into its own, no longer a subsidiary battleground in the ideological conflicts of other powers. Asia, argues Taylor, is hardly a 'pacific' continent, no pun intended. Contemporary tensions should be seen against the backdrop of the continent's wars of decolonisation, the Cold War battlegrounds of the

Korean and Vietnam wars, the Chinese Civil War of 1945–1949 and continuing insurgency and counterinsurgencies. The continent contains the fastest growing economies in the world, which has allowed many Asian countries to engage in arms procurement and the development of sophisticated defence industries. Alarmingly, there has also been a rise in strident nationalism and xenophobia. And then there is China, which has risen 'faster, further and across more dimensions of power than any country in history'[1]. Asia, however, is not important merely because of the factors mentioned above. Taylor is clearly worried that major inter-State or conventional war, or wars, could occur in the region. In this context, he poses and seeks to answer three questions: (i) how probable is *major war* in Asia? (ii) where is conflict most likely to originate? and (iii) what can be done to prevent it?

The continent, writes Taylor, is home to four critical flashpoints that flare up into crises now and then, each of which could lead to a deadly war:

- the Korean peninsula, where the US and South Korea face North Korea across one of the most militarised borders in the world
- the East China Sea (ECS), where a conflict over 'rocky outcrops'—Senkaku/Diaoyu—pit China and Japan, bitter historical enemies, against one another

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1   Brendan Taylor, *The Four Flashpoints: How Asia goes to war* (Melbourne: LaTrobe University Press, 2018), 4.

- the South China Sea (SCS), where several littoral states lay claim to portions of the sea and certain islands and reefs; and where China, has militarised several artificial islands

Taiwan, which China regards as a 'renegade province' that should return to the motherland (by force if necessary) even though the island itself endeavours to shape an independent identity.

Each flashpoint is discussed in a detailed chapters, which trace the origins and evolution of the conflict, the potential for war breaking out, and the prospects for a diplomatic solution or grand bargain. While these conflicts are not new they are becoming serious flashpoints, not because the protagonists are heavily armed but because they involve major powers, China and the United States. A powerful and assertive China is directly involved in three of the four flashpoints Taylor identifies: the SCS, the ECS and Taiwan. China is also involved in the fourth flashpoint—the Korean peninsula—because of its relationship with the reclusive regime of the Democratic Republic of Korea (DPRK). What China thinks and does concerning the Korean peninsula affects the calculations of Pyongyang, Seoul, Washington DC, and even Tokyo. The United States also has a stake in all of these flashpoints, although its interest in each conflict is not equal across the board. The US alliance with South Korea and Japan is well-known; but it seems ambivalent about the SCS. Despite insisting, like other West-

ern nations on freedom of navigation through the SCS, it is clear, that neither the United States nor the other parties involved believe that what China has achieved in the SCS can be reversed.

Taiwan, writes Taylor, is the trickiest and most dangerous of the four flashpoints. It is a 'core interest' for the People's Republic of China (PRC). They simply cannot allow Taiwan to declare independence, as that would constitute a threat to the territorial integrity of the Chinese state and the legitimacy of the Chinese Communist Party (CCP), which is built not only on economic success but also on nationalism. However, is Taiwan really an existential matter for the United States? Can it forego Taiwan in return for a quid pro quo elsewhere? The absorption of Taiwan would increase China's power, its prestige and strategic reach. If the US were to walk away from Taiwan it would affect US status in Asia and its allies would question its commitments. What about what the Taiwanese think? If the international system is based on certain norms and order, surely, the fact that Taiwan is charting its own independent democratic path is worth considering.

Although I enjoyed reading, and profited from, The Four Flashpoints, there were some general and specific weaknesses in the book. First, a book like this, focused on current affairs, suffers from in-built obsolescence as it can be overtaken by changing circumstances. The dizzying turn of events in the Korean peninsula—as a result of the

peculiar *bromance* between two mercurial leaders, Trump and Kim, and of inter-Korean dialogue—could not have been predicted by Taylor as he was finishing his book, although he was not optimistic about any solid outcome coming from the Trump-Kim summit in Singapore.

Second, I was not convinced by Taylor's methodological and conceptual approach; not because it was faulty, rather because it didn't seem to be well structured. Of course, a policy book like this should not get mired in political science jargon; however, a more integrated understanding of the author's chosen methodology and conceptual framework could have been achieved if the introduction had been incorporated into the beginning of Chapter 1, rather than the pastiche of terms loosely used in both sections. Chapter 1 was better constructed, but here again it was unclear how Taylor differentiated between flashpoints and the structural foundations of wars, a matter of debate that goes back to Thucydides' *Peloponnesian War*. Surely, the structural foundations of wars are more significant than flashpoints, as the former are the symptoms of deeper problems.

A third weakness is that the book ignores the two flashpoints on the Indian subcontinent: the Indo-Pakistani and the Sino-Indian flashpoints. He makes no mention of the former but argues that while a Sino-Indian war is 'conceivable', it would be unlikely to draw in 'other major powers'. If as Taylor argues, Asia has become important in and of itself as a key player in the international system, why then would two potentially deadly flashpoints become significant only if other major powers get involved? If Asia's other four flashpoints are significant only because of the potential involvement of other major powers, then the importance of Asia has been overstated? But that was not Taylor's claim at the beginning of the book when he clearly articulates Asia's importance.

Moreover, who are these other major powers? And why would they not get involved? We are discussing three significant nuclear powers: China, Indian and Pakistan. China, is a great power, steadily progressing towards superpower status, and despite the structural problems of the Indian armed forces, particularly in power projection, a new Sino-Indian war would be deadly. It is worrisome that some Chinese observers seem to think that the Indian armed forces 'could be easily handled'. Chinese optimism might lead to a miscalculation here. On the other hand, India could fare badly in an encounter, whether it is a major naval clash in the Indian Ocean or anywhere along their lengthy and mountainous border. What would prevent New Delhi from pleading for help from 'other major powers'? Why would that help not be forthcoming? Similarly, why would an Indo-Pakistani war not involve other powers? On paper, India has an overwhelming conventional advantage over Pakistan; in reality though, it might be hard-pressed

to deal that country a truly serious blow conventionally. However, let us assume India prevails conventionally and Pakistan begins to buckle: might Pakistan entertain the use of nuclear weapons? Will other major powers sit by with folded arms? I doubt it. In short, as long as India and Pakistan skirmish within the realm of sub-conventional war—however irritating it is for India—and as long as Indian and People's Liberation Army (PLA) soldiers literally shove each other along poorly defined border posts, then yes, the chances of other major powers getting involved is minimal—unless each flashpoint escalates.

Fourth, and finally, there is a major flashpoint that Taylor does not write about: the superpower flashpoint between the United States and the PRC. Readers of this review might think I am being unfair here; given the rivalry between the two permeates the book. This is perfectly true. But the potentially dangerous interactions Taylor discusses between the two is *derivative* of the four flashpoints that constitutes the foundation of his book. There is a stand-alone rivalry between the US and the PRC—between a rising power suffused with anger about the 'century of humiliation' and angst about where it is going, and whether it will reach its destination—and one which has been involved in the Pacific region as a great power even before the Spanish–American War of 1898, as American historian Edward Mead Earle, a key founder of strategic studies, pointed out long ago. Does not the United States also suffer from angst concerning its seemingly diminishing clout in Asia? Of course by their very nature, historical what-ifs are difficult to prove, but if these four flashpoints did not exist would that have precluded a structural situation of a rising China challenging the status quo power, the United States? To be sure, the PRC has 'entangling conflicts' in Asia and the US has 'entangling alliances', but I am not convinced they would not have emerged as rivals in the absence of these conditions. Their rivalry with one another deserves *independent consideration* in a book of this calibre: these are the two colossi of Asia.

In summary, the book has strengths and weaknesses. It is well-written and extremely readable. It is also a well-detailed policy analysis of the flashpoints in the Indo-Pacific, each of which could lead to a catastrophic war. The book, however, is not a scholarly history like those of Christopher and Margaret MacMillan, whom Taylor mentions in the Foreword. Nor, do I suspect this was Taylor's intention. Rather, what he has given us is an eminently readable and up-to-date analysis of major conflict zones in Asia. Policymakers, academics, military personnel and students can benefit from it.

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