The power of GEONET: intelligence, operations and capability in the 2020s and beyond

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Introduction

Anyone with a smart phone is aware of how rapidly the technology to gather, process and share images and data has transformed how we work, interact and perceive the world. And there’s no sign that technology is slowing down. If anything these advances are accelerating. Technological innovation has revolutionised the geospatial sector and will continue to have a profound impact on all we do, empowering the delivery of better intelligence insights, underpinning the conduct of operations, and enabling what modern capabilities can deliver for government. Geospatial information and geospatial intelligence (together GEOINT) can provide a decisive edge in national security competition – for strategic leadership through to tactical commanders. But, simply keeping up with the technological changes will not be enough to take full advantage of this revolution.

The goal of the GEOINT enterprise is to deliver assured information and intelligence to Defence users. To do that, we need to develop and nurture the GEOINT expertise across Defence. GEOINT has to be mainstreamed into Defence thinking and processes from the earliest planning stages so it can deliver the right information at the right time to the right decision-makers.

Geospatial data must be considered as vital an ingredient in operations as fuel. We must consider what types of data we need, where it can be collected, and how it can be shared and fed back into a system that supports superior situational awareness and decision-making. GEOINT cannot be an afterthought; it must become a first order consideration when intelligence is being produced,
operations are planned and conducted, and Defence acquisitions are considered and managed.

Defence took a big step towards this goal this year with the release of *Defence GEOINT 2030 – A Strategy for Defence’s GEOINT Capability*. Through the strategy the Defence GEOINT community – led by the Australian Geospatial-Intelligence Organisation (AGO) – agreed to five strategic goals and committed to working together to achieve them. Integration will be key. As the demand for GEOINT increases, the Defence GEOINT community will need to ensure that the spectrum of data, information, intelligence and services that comprise GEOINT are integrated and service-enabled. Our shared challenges are great, but we also have a real opportunity for the Defence GEOINT community to strengthen its contribution to achieving Defence’s mission.

**What is GEOINT?**

The term ‘geospatial intelligence’ (GEOINT) refers to the collection, analysis and dissemination of imagery and geospatial information to describe, assess and visually depict physical features and geographically referenced activities in the air, land, maritime and space domains. It is intelligence derived from the exploitation and analysis of imagery and geospatial information that informs our understanding of features and events, with reference to space and time.

Imagery collection and analysis is at the historical heart of GEOINT, but the field goes well beyond that. Other data types such as terrain data, human geography, meteorology, hydrography and many more are brought together to make up GEOINT. It is a scientific pursuit. It relies on inputs of data. It relies on making hypotheses and testing them against what is observed. There can be denial and deception, but imagery analysis and the other disciplines of GEOINT that answer questions about the physical environment are expected to provide truth.

Understanding what happens where underpins all strategic and operational level decisions, in peace, war and times of grey zone conflict. And, describing in detail where things are and where events occur is what GEOINT is all about. Delivering authoritative information and intelligence, at speed, to those who need it is the core mission for GEOINT. When fully exploited, GEOINT can provide a powerful decision-making advantage to a nation.

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A short history of GEOINT

Historically, maps have helped people to navigate, to trade, and to define and defend the boundaries of their territory. Once this information was captured in highly abstract maps and charts. Now it is captured in detailed databases to sub-metre accuracy. The capacity to gather intelligence from the air was quickly grasped with the arrival of the aeroplane and the development of aerial reconnaissance in the First and Second World Wars. Then, during the Cold War, with further advances in space-based imagery sensors and satellites, technology not only provided even greater detail of the physical world, it provided the capacity to observe events occurring in inaccessible areas. In the 1970s, a new era of technology emerged, geospatial information systems, as the evolution of computing software ushered in the field of digital geospatial analysis. Now digital geospatial products (maps, imagery and visualisations of data) that provide an ever more sophisticated understanding of the world we inhabit are taken for granted.

Strategic and operational decisions need to be based on the best understanding of the environment. Whoever has the best understanding of the environment has the greatest chance of making the smartest decisions. This is not new. In General Sir John Monash’s autobiographical reflection of his preparations for the Battle of Hamel during the First World War, he described how he gathered his commanders together and, with the benefit of maps, went over the plan for his complex coordinated attack of 8 August 1918. The time he invested in bringing his commanders on the journey of preparation is an important demonstration of the importance of communication in the conduct of any complex operation or activity. The way he ensured that all his commanders shared a common view of the physical world and how events would take place in space and time was decades ahead of its time. Today, the modern commander requires more than a map – commanders need GEOINT.

In 2020, the historical drivers of the need for geospatial information remain as relevant as ever. National boundaries need to be delineated and understood. The technology for acquiring data and processing geospatial information into usable products continues to develop at a rapid and even accelerating rate. The volume and sources of data is exploding. Imagery is cheap and readily available. The tools to process data and imagery are accessible and increasingly powerful. But, what use is this information if it is not fully exploited, communicated and shared, and used to inform decision-making?
And, what does this all mean for Defence?

To deliver intelligence insights we must nurture the GEOINT workforce, reach out across disciplines and drive continuous innovation

GEOINT’s power to provide intelligence insights comes from two key attributes. First, space-based imagery provides a unique source of information on activities, particularly those within denied target areas. Amassed over time, the observations captured from imagery can provide unrivalled insights into patterns of life and early warning of possible threats.

Second, GEOINT can provide a critical value add to all-source analysis by providing the framework to visualise and situate other intelligence. Together, 20 written reports of observations, some open-source reporting and hand-held imagery may provide insights. But, put all those same sources on a base layer map and the patterns readily emerge. And that gives commanders, who are seeking to synthesise huge amounts of information, the power to make better decisions more quickly.

To provide this value add, GEOINT skills must be nurtured.

GEOINT is not a replacement for all-source analysis. Instead, GEOINT is a profession that requires practitioners of all the sub-disciplines – imagery analysts, data analysts, foundation data producers, human geographers, IT managers and developers – to continually build their subject matter expertise. When they have a strong foundation of skills and expertise, GEOINT practitioners then need to reach out from within their discipline not only to other parts of GEOINT but also across the intelligence and operational communities and offer their expertise to assist the development of the most insightful products possible. Raising, training and sustaining an expert GEOINT workforce is essential for Defence. Because those professionals can bring their expertise to the table and work alongside other intelligence disciplines to help deliver insights that are more powerful than any discipline can deliver in isolation.

One of the most important skillsets for GEOINT professionals in the coming years will be data analytics. Ever since the first geographical information systems were developed in the 1970s, GEOINT has been an inherently digital activity. Now, as data sources grow, the sector will increasingly require automation of processing and analysis. There are simply not enough analysts to manually process all of the imagery, let alone to combine it in meaningful ways with other geospatial data to maximise the potential intelligence insights the data can provide. To offer growing value to the intelligence process, GEOINT will have to continue to evolve its tradecraft through an ongoing analytical modernisation effort. The Defence GEOINT community will need to drive continuous GEOINT innovations.
To facilitate deep understanding of the environment operations must plan their COP needs early

GEOINT is not only about understanding the actions of adversaries. It is also fundamental to our own ability to act. In a modern operation, the common operating picture (the COP) upon which commanders base their decisions rests on a foundation of GEOINT. This geospatially based representation of the status of forces – referencing everything in space and time – presents a commander with a deep understanding of the environment and thereby enables sound decisions.

The COP must be capable of showing numerous things: the commander’s own forces; those of their partners and allies; and the disposition of adversaries. In challenging Humanitarian and Disaster Relief (HADR) or recovery operations, it is just as important to be able to include inputs from non-government organisations, civil authorities, and, indeed, from the media. In a complex geopolitical environment, this is even more the case. The COP must provide easy access to intelligence reporting and other layers of data and information. Tactical decisions have strategic consequences. Commanders need to be able to bring together a wide range of data to enrich their understanding of the context in which they operate.

All of this must be on a secure, shared, assured and authoritative foundation layer of geospatial data. The system that is built to deliver the COP must be flexible enough to incorporate data from a wide range of sources – appropriately caveated where necessary. The Defence GEOINT community needs to work together to deliver trusted, assured and secure GEOINT.

To be successful and a value add to the operation, time must be invested early on to define the needs from the COP.

From the moment when an initial planning effort is underway for an operation, the commander must set out what sort of COP is required and what data is needed to fill it. GEOINT subject matter experts can then deliver the system and build in the necessary fields and visualisations. This process also requires the nurturing of GEOINT expertise across the organisation so that the COP can be built and amended as required.

Capability acquisition and sustainment must plan for increasing data demand, volume, speed and accessibility

We are far from reaching the point of peak supply of and demand for data. Fifth-generation platforms will require and produce more data by orders of magnitude than the capabilities they replace. Autonomous systems that are likely to come on line in the decades ahead will also require and collect more data. Newer
and longer-range weapon systems will require more data in shorter timeframes. Potential adversaries will be pursuing superiority in data processing to provide insights.

Having GEOINT is not enough; it has to be shared with those who need it. It has to be absorbed, processed and disseminated across systems and platforms for it to deliver on the promise it offers. Intelligence, surveillance and reconnaissance platforms (ISR), combat platforms and enablers will all need to be able to share their data and access the data they need to operate.

A Joint Strike Fighter without data cannot deliver to its potential. A submarine without data is suboptimal. A soldier without access to the latest GEOINT is not given the best chance to understand the operational environment. Furthermore, if all of these platforms and people do not feed the geospatial information they collect back into the system the opportunity for decision-making superiority may be foregone.

The remedy to this situation is easy to understand but hard to implement. Geospatial data needs must be considered a crucial part of all capability projects and the capability life cycle. To make this happen we need to shift our thinking about geospatial data and Defence capabilities. No project should proceed to acquisition until and unless its data needs are clearly understood, and a plan is in place to provide those inputs. Furthermore, no project should be able to proceed without a clear understanding of how the geospatial data it will collect will be passed back to the centre to be exploited for decision-making advantage. Without sharing of collected data, commanders risk not fighting off the same map.

In addition to formalising the requirement to consider geospatial data needs for all projects, the unique requirements of geospatial data need to be factored into Defence’s computer network designs. Analysing imagery and geospatial data requires computer processing power, storage space and bandwidth. The requirements GEOINT puts on information and communications technology (ICT) systems are unique. The answer is not to simply give everyone access to more computing capability, rather the system needs to factor the needs of GEOINT into its design and architecture. Technological innovation will be required in parallel. Processing of data at the collection point so that only relevant data is transferred back along systems will be one element. Automated processing of data – perhaps remotely – will also assist. But there will need to be greater bandwidth and processing power provided to at least a greater number of nodes.

A networked GEOINT system fully integrated with broader Defence systems will deliver its full potential – a stove piped and firewalled system will not. To get the
best results we will need strong partnerships with industry, academia and our international partners.

**GEOINT must be seen and trusted**

GEOINT must become more visible. The modern origin of GEOINT organisations like the Australian Geospatial-Intelligence Organisation is in imagery analysis, military surveying and hydrography. These are all areas that have been seen as niche specialisations or highly secretive. That frame of mind will not deliver the GEOINT we need.

In the civilian sector, geospatial information has been fully democratised. Google Maps has transformed the way citizens engage with geospatial data. Readily available satellite imagery has demystified imagery analysis. Large, leading edge corporations have instituted data-centric models with geospatial information at the core. The Defence GEOINT community must embrace these innovations.

GEOINT organisations have a key role in driving this change, but it will also require a change in processes and thinking across the breadth of Defence. Maybe an army does march on its stomach. But if it wants to know where it is marching to and what the environment will be on the way, it needs GEOINT.

There are different avenues through which this could be achieved. The importance of geospatial data as a fundamental input to capability should be recognised. The capability life cycle should ensure that data needs are fully captured and articulated as part of the acquisition process. Whichever avenue is chosen the end goal should be clear and brook no argument – geospatial data requirements have to be formally considered and agreed as part of the capability life cycle.

**Conclusion**

If we know where everything is, at all times, we have decision-making advantage. If we have the best understanding of the physical environment we operate in, we have decision-making advantage. If we have a clear understanding of the actions and intentions of an adversary, we have decision-making advantage. GEOINT is fundamental to delivering all of these. But if it works in isolation its contribution is severely limited.

Working with capability programs, other intelligence fields and with decision-makers at all levels, GEOINT can provide a powerful advantage. However, it has to be mainstreamed into deliberations on capabilities, operations and intelligence from the very first discussion in Defence. That is how we can transform Defence GEOINT into an integrated and future-focused capability.³

³ The views in this article are those of the author and do not necessarily represent those of the Department of Defence. The purpose of this article is to stimulate discussion about the role of GEOINT.
What is in a name: discarding the grand strategy debate and seeking a new approach

Jason Thomas

Introduction

In the 19th century, the Prussian Field Marshal Helmuth Von Moltke wrote ‘Strategy is a system of expedients: it is more than a mere scholarly discipline.’¹ Contemporary attempts to define grand strategy become trapped in the same dilemma as any effort to find a conclusive approach to strategy. Those working in the domain of the military and security do not have a monopoly on the fundamentals of strategic thought. Outside the bounds of these sectors, the meaning of strategy is far more varied,² and hence develops many different approaches.³ Security planners would be wise not to neglect this broader understanding of strategy.

The very nature of the subject resists rigid definition and constantly evolves. For the teaching and understanding of strategy, ‘grand’ or otherwise, the use of maxims – short statements expressing a general truth or rule of conduct – is probably all that is possible. Because, the core need of any strategy is to be flexible, and as maxims are only general truths, it will always be necessary to depart from them in specific situations.⁴ The current grand strategy debate is somewhat opaque as it attempts to seek certainty in a fluid context; therefore, the debate

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risks constraining one field of strategic studies into a narrow inflexible discipline of limited utility.

This paper argues that in their pursuit of certainty current attempts to define grand strategy become fragmented due to the very nature of the topic and hence they provide little service to the creation of effective strategies. Therefore, it is necessary to abandon the further development and consideration of a ‘grand strategic’ epistemology. What is required is a broader and more nuanced approach to security strategy, one that may have to depart from the centrality and primacy of an impending conflict. It will be argued in this paper that good strategy is based on expedients that demand the development of specific solutions framed in contextual, temporal, relational and ethical settings.

**Problems of defining grand strategy**

Beyond the classic definition of grand strategy, recent attempts have been diffuse and unhelpful. Apart from the benefits of education and promoting necessary dialogue, what is the further benefit of defining an additional level of strategy as ‘grand’?

An earlier well-developed attempt by Basil Liddell Hart, and further discussed by Colin Gray and Edward N Luttwak, defined grand strategy in the classical sense. These ‘classic’ theorists anchor grand strategy to a description centred on the creation of a national security strategy for a potential or current conflict. Liddell Hart proposes that:

> the role of grand strategy—higher strategy is to co-ordinate and direct all the resources of a nation, or band of nations, towards the attainment of the political object of war—the goal defined by fundamental policy.\(^5\)

Even though Gray is accepting of Liddell Hart’s definition, he, however, remains wary:

> the prime reason why one hesitates to broaden the definition of strategy is that when one discusses grand strategy, the use of all of a security community’s assets as instruments of policy, one is apt to lose sight of the issues distinctive to military power amidst the total items in the crowd of somewhat competing policy instruments.\(^6\)

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Luttwak also points out that achieving such coordination across ‘the highly diversified bureaucratic apparatus of modern states is difficult.’ Hence, like Liddell Hart, Luttwak equates a coordinated national security strategy centred on conflict, with the concept of being ‘grand’.

Williamson Murray views grand strategy as the domain of great states. While being a more restrictive definition, this approach does not resolve the issue of which state is ‘great’ (exceptions to the rule are raised). His definition does, however, lead to some valuable but not necessarily unique ‘grand’ insights. For example, Murray lists characteristics deemed necessary to be successful in the design and execution of grand strategy as: acting beyond the demands of the present; and ‘… recognition of and ability to react to the ever-shifting environments of war and peace.’ While Murray, like Gray, Liddell Hart and Luttwak, remains anchored to a conflict-centric view of strategy, all of these theorists provide invaluable insights for the teaching of military strategy and add to the strategic discourse.

So the classic view provides us with three characteristics of grand strategy. First, the need to coordinate all relevant elements of national power to the strategic challenge. Second, grand strategy encompasses both peace and war, and whatever current fashion says lies in between (i.e. grey zone, hybrid warfare). Finally, it possesses ‘grand’ objectives which to most classic theorists means that it remains in the domain of great powers. However, Norrin Ripsman warns that even these simple definitions do not have universal acceptance:

Grand strategy is an imprecisely used term in international relations. Scholars who use it mean anything from a state’s overall strategy in a war to a long-term blueprint for the state’s foreign relations. Some view grand strategy (GS) as solely encompassing military considerations and means, whereas others incorporate economic and ideological considerations as elements of GS. Furthermore, GS has typically been studied in a strictly national context, with scholars focusing on the GSs of great powers. The few attempts to study states’ strategic behaviour in a comparative context have

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been useful, but may have suffered from a lack of in-depth contextual knowledge of all of the cases.\textsuperscript{13}

Thierry Balzacq, Peter Dombrowski and Simon Reich further define a grand strategy’s purpose to be “the shaping of the global system.”\textsuperscript{14} Ironically, this suggests that recent fragmentation and undermining of global institutions by major powers, or anarchic deconstruction, might therefore be viewed as ‘grand’ acts. The question then remains, what of this definition when the global system no longer exists? Moreover, what level of impact is required for a shaping action to be considered global? For example, while China’s Belt and Road program embodies mercantile initiatives as distinct from its military action in the South China Sea, which initiative has greater global shaping effect? The fixed frame of this definition becomes problematic, for example, when dealing with the emerging issue of control and the use of outer space. Grand strategy could no longer then be described as ‘supra-national’ but rather ‘supra-global.’ In essence, the shaping of the global system as a definition would no longer apply universally.

Balzacq and co-authors develop a comparative framework for grand strategy,\textsuperscript{15} which deserves closer inspection. The framework defines a club of major powers and ‘pivot’ powers that are the players of grand strategy. A cursory inspection of the application of the framework underplays, for example, the effect of the 1956 Suez Crisis on the hegemony of the United Kingdom and France; appears to ignore US influence in Central and South America; and the underpinning of certain ‘pivot’ powers by US, Chinese or Russian support. These are systemic weaknesses in the framework. There are some notable exemptions in the framework: African states, Turkey, Germany, Japan. These gaps are more likely a limitation of written space and the finding of suitable authors but does show that attempts to bring an ordered understanding of the global security system are demanding. Azar Gat reminds us that all strategic paradigms are contextual;\textsuperscript{16} to develop an all-encompassing framework is therefore incredibly challenging.

Nina Silove’s commendable contribution to the debate is that grand strategy has evolved into three ‘distinct meanings’: grand principles, grand plans and grand

\begin{footnotes}
\footnotetext[15]{Balzacq, Dombrowski, and Reich, ‘Comparing Grand Strategies in the Modern World’.

\footnotetext[16]{Azar Gat, \textit{A History of Military Thought: From the Enlightenment to the Cold War}, Oxford University Press, 2001, p 516.}
\end{footnotes}
behaviours.\textsuperscript{17} If such meanings are present, Silove accepts that small nations can implement grand strategy, an approach which is analogous to Luttwak’s need for coordination in grand strategy. The trouble with such an approach is that it gives little credence to the importance of context. It assumes adherence to meanings as a gateway to ‘grand’ outcomes, thereby running the risk of entering the dangerous ground of strategic self-delusion. While the meanings are well-grounded in grand strategic writing, they are not in themselves independent of sound strategy in general. The Australian strategist Peter Layton adopts a similar paradigm to Silove in his attempt to have Australia develop an independent and less alliance-dependent approach to emerging regional threats.\textsuperscript{18} While commendable, and offering important benefits, both theories of grand strategy fall short of proffering an alternative to the classic definition or resolving Ripsman’s concern.

Several writers have identified problems with the grand strategy debate. Andrew Carr, for one, has developed a temporal approach to assist in understanding strategy. Carr posits that the duration of a strategy becomes a key consideration. Considering the time (the duration/life) of a strategy would enable any strategic planner to look past the myopia of the military-inspired end-state,\textsuperscript{19} perhaps helping to avoid the post-invasion question, ‘What do we do next?’ Carr’s contribution to strategy is of great merit and worthy of further investigation. It is highly notable that Carr, for the sake of developing his ideas and for clarity, explicitly excludes the consideration of grand strategy in his paper.\textsuperscript{20}

The label of ‘grand’ risks turning a strategy into what Richard Rumelt terms ‘fluff,’\textsuperscript{21} further concealing it with a mask of unfamiliar definitions and terms, which so often abound in epistemology; something that Silove attempts to contain. In addition, grand strategic debate and definitions further the likelihood of it becoming cloistered: of being protected from scrutiny. The use of exclusive language would lead to a lack of criticism and problems in translation and understanding.

\begin{thebibliography}{10}
\bibitem{CarrPaper} Carr, ‘It’s about Time: Strategy and Temporal Phenomena’.
\end{thebibliography}
Gray was particularly wary of *concepts du jour* – current strategic trends – which ‘will be tomorrow’s stale leftover, until it is re-discovered, recycled and revealed as a new truth.’ This is an accurate observation of how military and security concepts are either recast enduring maxims and principles or new technologies claiming overstated advantages, or both. Recent security dialogue has seen the return of phrases such as ‘great power competition,’ and the ‘the great game’ – *concepts du jour*. The current grand strategic discussion, which utilises such continuous recycling and revelation, exhibits the same shortcomings as a *concept du jour* and therefore remains of limited value.

Discourse does not have to be diffuse and complicated. Richard Betts, in his critique of the overblown nature of the grand strategic debate, posits that ‘a concept should not be simplistic, but should be as simple as possible,’ which echoes the dictum of Karl Von Clausewitz that ‘everything is very simple, but the simplest thing is difficult.’ Both are cogent reminders that unnecessary dialectic does little to ensure the achievement of good outcomes as we can see considerable academic horsepower has been, and continues to be, applied in an attempt to establish some form of anchored ontology. The problem with such an approach is that strategy is deeply rooted in the human condition and therefore inherits the same problem organisational theorists wrestle with. As Karl Weick puts it:

> Theories are built on regularities among events, people, and relationships, not on sporadic, infrequent and explosive episodes…
> It is these irregularities which are absent from many case studies.

This inability to deal with irregularities is the one big thing wrong with the grand strategy literature: it is seeking a universal conflict-based view. It lacks emphasis on strategy as a system of contingencies and is lacking in a diversity of possible perspectives.

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The need for diversity

In the 1990s, the Copenhagen School opened a broader security perspective by providing a new set of lenses for any security challenge that, among other things, presents security matters where conflict-based approaches are untenable. However, even its founders, Barry Buzan and Ole Waever, recognise that this more diverse approach is not the answer to all security challenges. They aver:

Most worrying…[is the] implicit argument that there is only one correct way to study security. We believe that there are many ways to understand security, and that each will have its merits and its drawbacks. Focusing on any one element will always make some things clearer at the cost of obscuring or distorting others.28

In proposing the exigent need for a diversity of views, the Copenhagen School increases the range of expedients—viable outcomes—that can become available. While an effective strategy is dependent upon a diverse set of options being developed, there is little point in considering numerous approaches if they are all contextually indistinguishable. Furthermore, if the problem is cast too narrowly ergo narrow options and narrow outcomes will ensue. Empirical studies by Varda Liberman, Steve Samuels and Lee Ross demonstrated that the way a problem is framed does significantly affect both the approach taken and the outcome reached.29

While Gray was not a supporter of the Copenhagen School;30 this paper proposes that framing security issues diversely both inside and outside of the presumption of conflict is essential. This broadened approach does not run contrary to his maxim ‘military power is trumps in politics,’31 to use a game metaphor, the player can still choose no trumps. It has been argued here that the conflict-centred, and increasingly turgid grand strategy debate is now redundant, and must be replaced by a more diverse approach that is tailored to each specific context. Strategic planners must learn from but then move beyond the military roots of strategic study and practice.

30 Ripsman, ‘The Emerging Sub-Field of Comparative Grand Strategy’.
31 Gray, Fighting Talk, p 97.
Strategy as a set of expedients

Von Moltke clarifies the importance of expedients by stating:

Strategy is a system of expedients. It is more than a discipline; it is the transfer of knowledge to practical life, the continued development of the original leading thought in accordance with the constantly changing circumstances.\(^{32}\)

Expedients are intrinsically flexible and contextually dependent, and Von Moltke’s definition does not imply that expedients are solely reactive to changing circumstances. Despite this enlightened stance, he is unlikely to have accepted that strategic context could shift away from the lens of conflict.\(^{33}\)

By employing phenomenological underpinnings, the strategist can employ contextual, temporal, relational and ethical considerations in developing successful expedients. Adding to the work of Carr’s ‘temporal’ and Gat’s promotion of the importance of context, this paper proposes two additions: relational and ethical, drawn from both personal experience and the literature.

The following anecdote illustrates the importance of relational insight. Many years ago, at an Indo-Pacific security conference, a South Korean professor gave a remarkably lucid presentation. During question time, a student asked, ‘What is the current South Korean strategy towards North Korea?’ Sage minds in the audience would have jumped to a shopping list of strategies: engagement, appeasement, containment or deterrence. The initial response from the professor, ‘Whatever works,’ illustrates, undeniably, how outcomes can be affected by leadership and are therefore relational.

It is necessary to consider another underpinning: that of ethics. To illustrate in a security setting, the long-term failure of the Arab Spring, and in its wake emerging instability, shows a paucity of ethical deliberation. There is a foundation for the centrality of ethics in strategy as articulated by President John F Kennedy.\(^{34}\)

An ethical framework does not exist to develop moral codes to underpin the legitimacy of previously chosen action but to advance ethical actions which are proximal to the strategy.

These underpinnings alone are insufficient to avoid the same confusion that has clouded the recent debate on grand strategy because a specific focus is

\(^{32}\) Moltke, Moltke on the Art of War: Selected Writings, p 67.


required to correctly frame temporal, contextual, relational and ethical settings of the strategic challenge at hand. The use of these phenomena does not mean the abandonment of ‘classic’ strategic considerations such as geography because geography is contextual with relational and temporal effects.

The accurate labelling of a strategy will additionally greatly assist in achieving this specific focus and avoids the amorphous application of ‘grand’ or any other abstract descriptor. To illustrate hypothetically, the Australian Military Strategy, the United States National Security Strategy and the Chinese Indo-Pacific Economic Strategy more accurately describe the functions of these strategies, rather than using value-laden adjectives such as ‘grand’. Interestingly, these titles are also geographically bound. This proposal to reinforce the discipline of naming strategies based on function is designed to bring clarity as well as to add to the lexicon and adds a specific focus.

In executing strategy, avoidance of the abstract is of exceptional merit, but the military origin of strategy can hinder this. It automatically places strategic design into a frame of conflict and, accordingly, subsumes military concepts, ideas and assets into all manner of security issues: to illustrate, ‘the war on drugs,’ ‘the war on cancer’ and the ‘war on hunger’. This ‘war’ on abstract nouns is what Sir Michael Howard and Terry Jones, both coming from different disciplines, tell us is deeply perilous. Thus, by using military terms (in this case ‘war’), in what are broader problems, the tone immediately becomes adversarial. Furthermore, there is a raft of security areas such as health security, gender security and food security, where military expertise, metaphors and resources are not automatically helpful.

In the context of expedients chosen to address COVID-19, a commentary by Joseph Nye highlights the shortcomings in contemporary American strategy towards what he considers to be adopting a broader view. Nye states:

> This administration has shown an inclination toward short-term, zero-sum, transactional interpretations, with little attention to institutions and allies. “America First” is defined too narrowly … On transnational issues like COVID-19 and climate change, power becomes a positive-sum game. It is not enough to think of American power over others. We must also think in terms of power to accomplish joint goals, which involves power with others. On

many transnational issues, empowering others helps us to accomplish our own goals.\textsuperscript{36}

While Nye’s proposition is insightful in a classic grand strategic sense, it is siloed contextually and ethically. He views the COVID-19 crisis to be about national power and strategic competition. Undoubtedly, there is an impact on national power because of major economic and social shifts. However, the statement is not suitable as the primary, or even secondary contextual lens, for what was a predictable health security threat—to say nothing of the ethical issue of minimizing human suffering. To return to Von Moltke’s admonition that a system of expedients is at the core of strategy, Nye’s statement suffers from a fixed original leading thought that is not context dependent. It fails to consider the transfer of scientific knowledge about the virus, the continually changing circumstances of the pandemic and their impact. The narrow definition of a problem overly relies on the certainties of the past and, to a certain extent, stifles the ability to think creatively. In an age of uncertainty, this can result in overly simple solutions being offered to complex problems.

\section*{Conclusion}

This paper proposes four underpinnings that should be considered for the creation of a security strategy. These contextual, temporal, relational and ethical underpinnings are necessary for the design of a strategy, and whose title should reflect its’ specific focus. This is a phenomenological framework which uses a diversity of viewpoints and conditions; and departs from a narrow, classic sense of strategy. However, it is not a radical departure because it seeks to build on the fundamentals of strategy.

An essential element in this proposal is the need for specific rather than umbrella strategies of the type inspired by the shifting paradigm of grand strategy. Specificity may often demand a departure from the traditional default of the presumption of conflict and competition. More importantly, specific strategies provide greater utility.

The classic definition of grand strategy and ongoing debate is doing little to improve the quality of strategic planning and, most importantly, its execution. It is undesirable and impossible to arrive at a universal description because strategy will always be fluid and case dependent. Contemporary efforts to do so are detrimental to the sharp and dynamic focus that is essential to the development of an effective strategy.

Gray believed in the primacy of effective strategy, and that ‘prudence is the supreme virtue in statecraft and strategy’\textsuperscript{37} – a warning against narrow viewpoints and fixation upon desirable goals.\textsuperscript{38} Von Moltke’s broad view of strategy as a system of expedients resists such a narrow approach. A system of expedients demands flexibility, diverse knowledge and the courage to depart from existing approaches. Then we might have strategies that could genuinely be considered ‘grand’.

\textsuperscript{37} Gray, \textit{Fighting Talk}, p 131–133.

\textsuperscript{38} Gray, p 131.
The near simultaneous introduction of machine-learning technologies into the heart of traditional command and control arrangements coupled with the operational challenges inherent in executing complex missions, such as hypersonic missile defence, poses unique risks and opportunities to today’s military commanders. This commentary explores this challenge from two perspectives. The first is the technological positivist perspective of US Army General William Westmoreland, which holds that military command and control functions can and should be automated to the highest degree possible to increase operational efficiency. The second is the more sceptical perspective of Dr Charles Perrow, which holds that interactively complex systems with tightly coupled components are inherently prone to unexpected and often dramatic failure. By incorporating both these perspectives into the design and operation of modern command and control systems, the author hopes these systems can be made to operate safely and more effectively.

In October 1969, standing behind a podium at the Sheraton Park Hotel in Washington DC, Army Chief of Staff General William C Westmoreland presented his vision of the future of warfare to the assembled attendees of the Annual Luncheon Association of the United States Army.

On the battlefield of the future, enemy forces will be located, tracked, and targeted almost instantaneously through the use of data links, computer assisted intelligence evaluation, and automated fire control … I see battlefields or combat areas that are under 24-hour real or near real time surveillance of all types. I see battlefields on which we can destroy anything we locate through
instant communications and the almost instantaneous application of highly lethal firepower.¹

Westmoreland presented this vision, this dream, years before the US Department of Defense (DoD) embarked on its Second Offset Strategy, which was designed to leverage the US's superiority in science and technology to overcome the Soviet advantage in raw troop numbers in Europe, and decades before the US would first operationalise this approach to warfare during the first Gulf War. In his speech, Westmoreland was describing ‘network-centric warfare’ almost 30 years before the idea would gain broad acceptance in the Pentagon in the late 1990s.

In April 2017, the Pentagon established the Algorithmic Warfare Cross Functional Team, also known as Project Maven, to integrate:

computer-vision algorithms needed to help military and civilian analysts encumbered by the sheer volume of full-motion video data that DoD collects every day in support of counterinsurgency and counterterrorism operations.²

Maven would later begin a second series of initiatives designed to bring not only Silicon Valley’s technology but also its approach to developing and deploying software into the heart of the US military. Eventually the whole of Project Maven would be absorbed into the much larger Joint Artificial Intelligence Center, a new organisation with the express goal of bridging the gap between DoD and Silicon Valley. A close collaboration between the brightest minds in academia, the commercial world and national security, this too was Westmoreland’s dream.

Though many facets of Westmoreland’s dream have since come to pass, the late 1960s were in many ways a high-water mark for this brand of technological positivism, the practical philosophy that holds that almost any environmental, technological or social problem can be overcome if you throw enough resources, computing power and engineers at it. The 1970s and 1980s saw a fairly radical paradigm shift in thinking about complex adaptive systems, such as weather patterns, animal populations and human-machine hybrid organisations like air traffic control systems. In the mid-1970s, research in physics and mathematics by Benoit Mandelbrot, Mitchell Feigenbaum and others laid the groundwork for a new way of thinking about complexity, chaos and the basic nature of the

universe. This vein of research – which eventually entered into mainstream culture with the popularisation of concepts such as fractals, ‘sensitive dependence on initial conditions’ and the ‘butterfly effect’ – set limits on what could be reliably known, modelled or predicted about the world at any given time. And, it placed hard limits on Westmoreland’s techno-optimistic vision of the future. Engineers designing complex systems, and the technicians and managers responsible for operating them, began to gain a fuller appreciation for the many devious and difficult to predict ways glitches, friction, malfunctions, turbulence, poor design choices and interactive complexity could cause a system to underperform expectations or in certain cases fail all together.

One of the first researchers to incorporate the lessons from chaos and complexity research into the design and operation of complex systems was Charles Perrow. Perrow, in effect, made his career studying disasters. In 1984, he published Normal Accidents: Living With High Risk Technologies, which explored the root causes of industrial disasters, such as the partial meltdown of a nuclear reactor at Three Mile Island complex near Harrisburg, Pennsylvania. Perrow identified two factors which, when combined, increase the risk of a system failing catastrophically: tight coupling and interactive complexity. The ‘normal’ in normal accidents is a synonym for ‘inevitable.’ Normal accidents in a particular system may be rare (‘it’s is normal for us to die, but we only do it once’) but the system’s design and configuration make it more likely such accidents will occur. Perrow identifies systems at risk of normal accidents as ‘high risk systems.’

Interestingly, Perrow released his book two years before the 1986 Soviet nuclear disaster at Chernobyl but it subsequently became the normal accident par excellence, providing students of industrial design with an easy shorthand to reference normal accident risk. Today, it is chilling to read Perrow’s description of a normal accident knowing what happened in Chernobyl a mere two years later.

We need two or more failures among components that interact in some unexpected way. No one dreamed that when X failed, Y would also be out of order and the two failures would interact so as to both start a fire and silence the fire alarm. Furthermore, no one can figure out the interaction at the time and thus know what to do. The problem is just something that never occurred to the designers... This interacting tendency is a characteristic of a system, not of a part or an operator; we will call it the “interactive complexity” of the system.

...But suppose the system is also “tightly coupled” that is, processes happen very fast and can’t be turned off, the failed parts cannot be isolated from other parts ... operator action or the safety
system might make it worse, since for a time it is not known what the problem really is.\textsuperscript{3}

When the reactor crew at Chernobyl disabled the automatic shutdown mechanisms in preparation for a test and a previously undiscovered flaw in the control rod design caused hot nuclear fuel to rapidly mix with reactor cooling water which led to a rapid increase in pressure within the reactor, this was Perrow’s nightmare.

Chernobyl isn’t the only example from the late Soviet Union where an interactively complex and tightly coupled system catastrophically malfunctioned, causing near-instant death and destruction. In the early morning hours of 1 September 1983, Korean Air Lines Flight 007 (hereafter KAL007) departed Anchorage for Seoul. At the start of the flight, the flight crew made a fateful error; instead of selecting the Inertial Navigation System, which would have steered the plane on the proper route, the autopilot was instead set at a constant magnetic heading. This may have been caused by the failure to twist a knob one position further to the right. KAL007 drifted off course, unnoticed by the flight crew or any civilian air traffic controllers, eventually entering into Soviet air space near Kamchatka.

Ground-based Soviet air defence operators in the region had previously been tracking an American RC-135 spy plane (a converted Boeing 747) that had been tasked with observing a Russian missile test. The missile test was postponed and the RC-135 was told to return to base. As the RC-135 began its return trip to Alaska, Soviet air defence operators confused the two aircrafts’ radar tracks and began tracking KAL007 as though it were the RC-135. Eventually, as KAL007 unknowingly moved closer to Russia, Soviet air defence operators scrambled three interceptor aircraft in order to visually identify the wayward aircraft and attempt to communicate directly with the aircrew and guide the trespassing plane down onto a Soviet airfield. However, once aloft none of the three interceptors were able to visually confirm whether the aircraft was an RC-135 or a civilian aircraft, nor were they able to make radio contact with KAL007’s aircrew. At 3:25am local time, the pilot of one of the interceptor aircraft, an Su-15, was given the order to shoot down the non-responsive aircraft. He launched two air-to-air missiles which struck the KAL007 and caused it to crash into the sea, killing all on board, including a sitting member of the US House of Representatives.\textsuperscript{4}


Perrow studied whether these types of air traffic control or air defence systems should be considered ‘tightly coupled.’ His conclusion was yes, though less so than automatic mechanical systems such as those found in nuclear reactors.

Tight coupling reduces the ability to recover from small failures before they expand into large ones. Loose coupling allows recovery. Time constraints are tight; the (air traffic control) system is … moderately tightly coupled.\(^5\)

Should the Soviet air defence system in this scenario be considered interactively complex? Certainly. The land based military air traffic controllers (ATCs) relied on a combination of radars and interceptor aircraft to gather information on what was happening in the air. These inputs would be delivered to the ATC in a variety of different formats – radar tracks appearing on a screen, interceptor updates relayed via radio – and the ATCs had to convert them into a workable approximation of reality in their heads.

The Soviet air defence example above highlights the essentially dualist nature of modern military command and control; it is a mission, something commanders do, but it is also ‘a thing’ – a set of modern communication technologies without which it would be impossible for the commander to do anything. Exercising command and control (C2) therefore is as much about aligning responsibilities and functions within a command hierarchy as it is about utilising digital technologies to gather information about one’s operating environment and to maintain clear lines of communication and feedback between the different nodes within the chain of command. This challenge – to construct and maintain a robust, resilient information architecture that can keep everyone informed and ‘in the loop’ about what’s happening in the battlespace – gets more difficult, perhaps exponentially so, as we get closer to achieving Westmoreland’s dream.

The battlespace of the 2020s is one in which the United States, its allies and its competitors will field hypersonic munitions, robust offensive cyber and electronic attack capabilities, as well as autonomous lethal weapons systems. To direct these forces quickly and effectively militaries across the world are investing in modernising their C2 systems and associated intelligence, surveillance, and reconnaissance (ISR) capabilities. Military leaders in the US are openly discussing when and how they should integrate machine-learning systems into kill chains. At first glance, all this seems to be the ultimate expression of Westmoreland’s dream, a military technopia where cutting edge Made-in-America science and technology relieve command staffs

\(^5\) Perrow, Normal Accidents, pp 4–5.
of the grunt work of running the war and allow commanders to focus on their real passion – strategy.

However, the battlespace of the 2020s will also be an interactively complex and increasing tightly coupled affair – a hugely scaled up version of Perrow’s nightmare. To understand why this trend towards tight coupling is accelerating let us consider military C2 at the most basic, functional level.

To command, a commander must first be able to perceive their operating environment, make decisions about it and finally pass orders back to their subordinates. That is the bare minimum. Today there are tools to assist commanders and their staffs in these tasks such as intelligence satellites, classified networks and information technologies, for example the Windows Office suite. However, the technological state of the art in 2020 poses unique challenges to command as well. The speed of modern weaponry, such as ballistic or hypersonic missiles and cyber attacks, reduces human response time. There is also the uncomfortable fact that many of these weapons, specifically cyber attacks, are optimised to attack command structures directly instead of deployed units i.e. why waste time and resources wiping out an army in the field when you can remotely destroy command headquarters and throw the army into disarray?

These challenges have led military commanders to seek out automated solutions to speed up the different command functions. During the Second World War, few C2 functions would be considered tightly coupled in the modern sense. They were based around humans sharing information with one another and humans inherently lack the ability to transfer huge amounts of complex information quickly. We can only absorb and retain so much, and pay attention for so long. The ‘Information Age’ (roughly 1970 to 2010) saw the integration of machine-to-human information transfers across military command structures, mostly in the form of classified networks and desktop computers. This changed the calculus, as at least one component in the equation (the machine) could pass large amounts of information instantaneously. Humans, however, still needed time to absorb information and make sense of it. This has kept most processes slow enough to be managed effectively. Military operations in the 2020s, by contrast, will be defined, in part, by increasing reliance on instantaneous machine-to-machine connections to support different command functions, reducing or removing the human component entirely for the sake of speed and efficiency.

How does this look in practice? Consider the evolution from a Second World War scout plane to a modern unmanned aerial system (UAS). A scout plane would report back what it was seeing – ideally via radio – to the command staff. In many cases however, radio was not a viable option (it could be broken or the
pilot’s plane could be out of radio range) so the pilot would have to land back at base first and be physically debriefed about what they had seen during their flight. This introduced at least two information transfer challenges, the first was that the information was time-late and the second was that the commander did not see exactly what the pilot saw. Instead, the commander received a report of what the pilot thought they saw. The pilot and the commander were forced to construct a common mental picture of events via dialogue, based on the pilot’s recollection.

Today, the drone pilot ‘sees’ what the UAS sees, and sees it instantaneously – even if they are half the world away from one another. This connection is still subject to constraints, however. The video feed from the UAS is bandwidth heavy, which requires its ground station to be equipped with special gear to receive the feed. The feed can also be disrupted which, in many cases but not all, forces the UAS to land, effectively ending its mission. There is also the requirement that a human being constantly watch the video feed to generate a report for the commander.

Advances in machine-vision technology are such that it is now possible to pre-program a UAS so that it is able to see and understand the environment it is operating in (i.e. identify the difference between different types of buildings and vehicles, read licence plates, figure out if a person is holding a weapon, etc.) using software installed directly on the UAS. In this scenario, there would then be no need to pass a constant, bandwidth-intense video feed back to a human operator. Instead, the UAS could fly on autopilot, collect all the information it needed to and send that information directly into a battle management network via bit-sized chunks of text data so that the commander’s picture of the world could be updated instantly.

A UAS configured in this manner could also pass that information to a second, third or fourth UAS thereby allowing multiple units to automatically share information about the battlespace without the need for a human to facilitate that sharing. Different UAS could be outfitted with different types of sensors, one UAS collects imagery while another collects electronic signals intelligence (SIGINT). Algorithms on board each UAS could merge this information via multi-sensor fusion so that each UAS had a layered, complex picture of the battlespace. Some UAS could be equipped with weapons so that they could automatically utilise this robust picture to deliver effects on the battlespace. This of course is what Westmoreland meant when he dreamed ‘we can destroy anything we locate through instant communications and the almost instantaneous application of highly lethal firepower.’ The only difference is that, at this stage in technological development, human action is no longer required beyond the mission planning stage.
While this proliferation of artificial intelligence throughout C2 structures can positively impact the ability of commanders to perceive and understand their operating environments, it also becomes a major driver of tight coupling, highlighting the possibility that realising Westmoreland’s dream risks simultaneously birthing Perrow’s nightmare. However, before pressing this point any further it is important to differentiate between two different types of artificial intelligence, the latter of which is a more serious risk driver of interactive complexity in C2 systems.

Expert systems are attempts to reproduce human decision-making in mechanical form. The ‘decision trees’ that form the backbone of expert systems are based on the types of if/then propositions a human mind goes through when completing a complex task (i.e. if the ball is red then put it in the bucket, if not drop the ball on the floor). Most military systems that incorporate artificial intelligence today (such as the US Navy’s AEGIS combat system) are expert systems.

Machine-learning (ML) algorithms are not generally concerned with replicating human thought patterns, they just want to find the ‘right’ answer. ML algorithms are fed a data and then instructed to complete tasks. If they complete the task successfully, they are rewarded, if not they are punished. Over time these systems can become very good at completing tasks but the ‘thought patterns’ that led them to the right answer over and over again are often completely foreign to human beings.

In the last two decades, systems built around ML have displaced expert systems as the artificial intelligence approach of choice in the commercial world. It is cheaper and easier to generate a solution that simply works than to spend time trying to replicate human behaviour and thought patterns. Most language translation programs are based around a type of ML, as are most visual recognition technologies and fraud detection systems. However, ML continues to present challenges in human endeavours where the stakes are literally life and death, such as military options.

This is because the information that feeds a military commander’s decision-making process is should be traceable, verifiable and intelligible (though the ‘fog of war’ ensures that is rarely the case in practice). Verifiability is the ability to ascertain whether or not information is correct. Traceability is the ability to identify where information came from (Which UAS detected this?). Intelligibility is the ability to understand the thought process that led to a decision (Why did the UAS classify this wi-fi signal as a cell phone?). The challenge of obtaining reliable, traceable information will be exacerbated as ISR sensors based on ML proliferate throughout the world’s militaries. This will in turn drive normal accident risk.
A single ML-based ISR sensor in a broader information architecture (one sensor on a single UAS for example) is unlikely to be a significant driver of normal accident risk by itself. Intelligibility may be a challenge as a human being may never know exactly ‘why’ a specific sensor is providing erroneous data but it should be easy enough to trace the error to that the one sensor that is known to have a mind of its own. Verifiability too may be easier than it initially appears because when ML-based systems fail they tend to do so in unexpected and occasionally dramatic ways that do not mimic human failure modes.

The challenge is when multiple ML-based sensors are linked to one another within an architecture to facilitate multi-sensor fusion, as in the UAS example above. While the goal of the fusion process is to instantly provide a detailed, multi-faceted picture of the operating environment to the commander, it also creates a complex mini-system with several tightly coupled components.

The question becomes: if ML-based multi-sensor fusion introduces so much normal accident risk into a C2 system, why would a military commander ever choose to rely on it? There are several understandable and perhaps justifiable, if not altogether comforting, reasons why this might be the case. It might be because:

- the system’s designers or operators have insufficient understanding of normal accident risk
- there is no one ‘designer’ of the C2 system, as multiple designers contribute components that, when combined, create a system of systems with a high level of risk
- the system never ‘failed’ in testing so the risk has never been identified
- the commander inherited a C2 structure dependent on multi-sensor fusion and is not aware of it
- designers, operators and military commanders are aware of the risk but feel they need to rely on the system to accomplish their mission.

The last reason – that the risk is known but it is balanced against the advantage offered by multi-sensor fusion – is worth further consideration. It points to a broader challenge for military commanders in the 2020s; critical modern warfighting functions, such as defensive cyber operations and high-speed frequency hopping to avoid communication jamming, occur faster than human perception and therefore must be automated to a high degree. Commanders, consciously or not, will be forced to make trade-offs between possessing a battlespace awareness based on verifiable, traceable and intelligible information on the one hand and operational speed and efficiency on the other.
Recent work by Olivia Garand and B.A. Friedman has explored how modern information technologies are driving commanders towards over-centralisation and depriving subordinates of the ability to exercise ‘mission command’ (effectively ‘command at the lowest possible level’). They note that this is particularly dangerous in a world where lower echelon units may be cut off from higher headquarters and be forced to act on their own.\(^6\)

While this assessment is broadly accurate (and should be adopted where applicable), re-emphasising the advantages of mission command in military operations is not a panacea for the challenges of C2 in the age of modern era. Certain missions, like hypersonic missile defence, manoeuvrer warfare in the electromagnetic space or the synchronising cyber and physical attacks in real time, rely on the ability of commanders to coordinate the activity of multiple actors spread out over time and space. In cases like these, subordinate units will very likely be subjected to a very high degree of centralised C2.

In closing, the military technologies coming fully online in the 2020s (hypersonics, cyber and electromagnetic warfare) are so fast that in many cases they prevent human operators from acting ‘in the loop’. These capabilities will therefore be reliant on the use of non-human intelligent agents, likely powered by ML, to coordinate effectively. The full effects of the increased use of these intelligent agents across C2 structures is unknown at this stage but Perrow’s research shows us that when it comes to interactively complex, tightly coupled systems, systemic failure is a question of when, not if. Militaries the world over are engaging in a titanic struggle to build the largest, most capable and wide-ranging battle management systems they can while defending against adversary cyber and physical attacks designed to directly target the heart of those systems. Additionally, mitigations will need to be put in place to ameliorate the normal accident potential inherent in the systems themselves. Exercising effective command and control in the modern era will therefore be a delicate balancing act, poised between the \textit{yin} of Westmoreland’s dream and the \textit{yang} of Perrow’s nightmare. Both perspectives will need to be considered and constantly revisited if we are to successfully navigate this challenge.

Reviews
Active Measures: The Secret History of Disinformation and Political Warfare

*Thomas Rid*


Reviewed by Zac Rogers

Few subjects seem more central to our current condition than disinformation. Media of various types repeat familiar tropes – we are suffering a crisis of truth – the once purportedly distinct line between fact and fiction has been blurred indefinitely. Our capacity to navigate the information environment and discern truth from lie has been breached, and the very fabric of democracy is imperilled.

Thomas Rid’s excellent *Active Measures* offers readers a trove of meticulously researched historical examples of modern disinformation operations – active interventions in the information environment intended to deceive, distort and disorient the political community at which they are targeted.

*Active Measures*’s most important contribution, however, is in how it frames the subject. Rid has a warning about the history of disinformation for open democratic societies worth repeating here. He notes with curiosity that, aside from a handful of infamous examples, much of this rich history has been ignored. He warns that ‘Ignoring the rich and disturbing lessons of industrial-scale Cold War disinformation campaigns risks repeating mid-century errors that are already weakening liberal democracy in the digital age.’

Usefully, Rid structures his historical sweep by way of four waves. Modern disinformation began in the 1920s. The interwar years saw the first wave of disinformation emerging from the Bolshevik Revolution in Russia, leveraging the popularity of journalism and radio as amplifying agents. New media and mediums, and their role in the subject at hand, is a central theme throughout the book. The second wave emerged after the Second World War – the CIA professionalised what it labelled ‘political warfare’ while the Eastern bloc before the Wall was rife with disinformation. (Notably, Rid considers this period the only time the West has been in the disinformation ascendency.)

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The third wave rose in the late 1970s, which Rid describes as the time when ‘active measures’ were at their most active and most measured. Disinformation was refined into an operational art as the nascent digital revolution, driven by advances in solid-state electronics, brought computational power and with it the prospect of more raw fuel – information – to the fore. The fourth wave was defined by the rise of the internet and brings us to our present moment. Here we discover how quickly the assumptions of the Information Age have turned inward. Rid argues the Internet Era has put a question mark over the very concept of disinformation operations. Internet-era operations are increasingly active while becoming markedly less measured and measurable – a conundrum that opens the way to some of the book’s core insights. The art and science of disinformation are disintegrating just as it becomes more dangerous.

If we are falling into error as we contend with contemporary disinformation, what is the error? Rid flags a pervasive presentism – ‘The sense of novelty is a fallacy, a trap’ – as the chief obstacle preventing clearer understanding of the nature, threat and opportunities to counter disinformation. Rid reminds us of a crucial axiom. Disinformation – at least of the most effective kind – has never been merely a bunch of lies masquerading as facts, cleverly deceiving the unwitting victim or victims. Rather, effective disinformation has always been a weaving of fact and fiction together, a way of making the two categories indiscernible from one another and deploying that amalgam against the already existing binaries and fissures every society accommodates. Here, Rid rightly identifies the ultimate target of active measures as an attack on the ‘epistemic order of liberal society,’ which is based on openness, convention and trust. An unutterable truth may follow. The internet, which Rid rightly identifies as a machine optimised for mass disinformation, may simply be incompatible with such an order.

Tropes about fake news and post-truth are therefore not merely descriptions of disinformation but are themselves affectations, obscuring a more nuanced and perhaps dissonant situation. Better fact-checkers and devoted truth-stewards will not stave off the effects of disinformation. This expresses another of the book’s most important insights: disinformation can be most effective when it self-perpetuates and takes on a life of its own. In other words, disinformation about disinformation may now be the ultimate active measure. Rid explains:

What made an active measure active was not whether a construction resonated with reality, but whether it resonated with emotions, with collectively held views in the targeted community, and whether it managed to exacerbate
existing tensions – or, in the jargon of Cold War operators, whether it succeeded to strengthen existing contradictions.\(^2\)

The internet may be one such contradiction. True, the epistemological foundations of open democratic societies have themselves been destabilised for some time, a discussion Rid enters at the conclusion of the book that is arguably its most consequential. The source of instability in western societies is not chiefly the work of foreign agents, nor is it in the familiar can-carrier of post-modernity. It is not simply a product of post-structuralism or the social justice theory it elevates and propels – nor the sometimes spoiled and myopic woke-warriors who seem to carry it forward.

Paradoxically, the most destabilising forces undermining the episteme of open democratic society have come, rather, from its very successes. Postwar science, in particular the cognitive neurosciences, have delivered multiple blows against the epistemological foundations of the modern western settlement. Cognitive science shatters the Aristotelian mirage of the unitary and continuing Self – yet our social and political systems labour under full-scale assault from a heavily manipulated internet – a business model designed specifically to turn neuro-chemical addiction triggers against this Aristotelian ‘person’ – in order to predict, shape and nudge behaviour for commercial or political gain. The very concept of free will and its corollary – agency – has been scattered against the gale of an increasingly manipulation-based society. These are the true ‘existing contradictions’ the adversaries of open society have succeeded in targeting, and will continue to.

In short, the increasingly insecure cognitive environment – and our vulnerability to unsophisticated but high-volume disinformation – is a symptom of our cultural-political malaise, before it is the work of Machiavellian operatives lurking in cyberspace. The undercurrent of Rid’s history of disinformation suggests an uncomfortable truth. It has been the inability of open, rule-of-law, democratic societies to process and incorporate these existential blows emerging from the very forces modernity was so successful at propelling – science and technology – that has led to our current perilous condition. The status and function of truth and falsehood is just one of high modernity’s many casualties. Adversarial operations have simply ‘nudged’ open society towards a more acute awareness of its own contradictions. Disinformation about disinformation does the rest, closing the loop on unreality and thus closing off the means by which open societies mediate conflict and change.

\(^2\) Rid, *Active Measures*. 

It does not take a scholar of Sun Tzu to recognise that our strengths have been deployed against us. Compounding the problem, the insights of postwar science have been directed against the citizen/consumer in open society, largely in the form of tools and methodologies developed in the private sector for ostensibly commercial objectives, absent any meaningful democratic oversight. Worse again, when the state agencies which govern open society feel compelled to engage in mass manipulation – to game the gamers, as it were – Rid’s warning about the protean nature of disinformation in the digital age resonates. Accidents and side effects abound on the back of hubris about the boundaries, both spatial and temporal, of unrestricted manipulation.

This risk is summed up in the book’s most evocative and important passage: ‘It is impossible to excel at disinformation and at democracy at the same time.’ Let that stand as a crystal-clear warning to Australia’s national security community. As Rid explains:

Disinformation operations, in essence, erode the very foundation of open societies – not only for the victim but also for the perpetrator. When vast, secretive bureaucracies engage in systematic deception, at large scale and over a long time, they will optimize their own organisational culture for this purpose, and undermine the legitimacy of public administration at home… being at the receiving end of active measures will undermine democratic institutions – giving in to the temptation to design and deploy them will have the same result.  

Active Measures also leaves us with some much-needed clarity in terms of the techno-political trajectory open societies have taken to this point. The national security state in the US, while often seed-funding the tools and methods of dual-use manipulation, has lost control in terms of its capacity to bend those instruments towards the greater social good. As the 21st century dawned, libertarian crypto-anarchist subculture combined with myopic Silicon Valley utopianism to produce ideal conditions for the active measures of foreign adversaries, whose chief strategic aim was to thwart the generation of strategic value that the US expected to accrue from the its multi-decade investment in digital technologies. The fact that these communities were then, and remain today, the chief locus of tech innovation is a paradox the US polity is struggling to deal with effectively, as China’s authoritarian model of tech innovation gathers momentum and, among autocratic like-minds, admirers.

On the commercial abuse of the information environment by Big Tech, and

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the relationship with the absence of political will to erect corporate guard rails as custodians of democracy, *Active Measures* is largely silent. This leaves an important question hanging if we are to begin the gigantic task of recovering the capacity to restore a semblance of coherence to our sociopolitical fabric in the digital age. Thankfully, other works fill this gap successfully, such as Zuboff’s *Age of Surveillance Capitalism*, Sadowski’s *Too Smart*, Foer’s *World Without Mind*, and a litany of others. Alongside *Active Measures*, these works make required reading for practitioners, elected officials, industry and citizens interested in arresting the slide of democratic society further into incoherence and, ultimately, into strategic peril.

**History’s Fools: The Pursuit of Idealism and the Revenge of Politics**

*David Martin Jones*

Hurst & Company, Oxford, 2020

Reviewed by Mark Beeson

Realists have never had it so good; or, perhaps that should be, so bad. However we describe the relationship between scholars of a realist bent and the times they inhabit, many of their central arguments and assumptions about the world look alarmingly persuasive, even prescient. By contrast, this is not a good time to be a cosmopolitan or an idealist. Indeed, it may never be so again. The world seems more troubled and disorderly than it has for decades, and this provides the backdrop for David Martin Jones’s timely tome, *History’s Fools*.

Anyone who is familiar with Jones’s work will have a shrewd idea what to expect from a volume that draws, in part, on previously published work. Even if you haven’t read any of his work before, you might want to take a look at this. The volume is by turns polemical, confronting, impressive, infuriating and scholarly – to the point of showing off. This is not an irrelevant or flippant point. Jones is scathingly dismissive of many of his academic peers and is certainly not hesitant to put the intellectual boot in when he judges it efficacious and/or deserved, which turns out to be quite a lot.

Jones makes quite a display of his erudition, which is fair enough – given that he does know a lot about political theory. While you may not like some of his ideas and conclusions about the state and direction of contemporary scholarship, it’s hard to argue that his arguments aren’t well-grounded in the literature. The first chapter on ‘the end of history and the Kantian moment’ is quite the tour de force and would be a useful, if polemical, addition to any political theory course. As the title suggests, Fukuyama gets quite a pounding as he’s emblematic of everything Jones thinks was wrong and misguided about ‘the West’s’ hubris and complacency in the aftermath of the Cold War’s unexpected ending.

Two of the principal targets of Jonesian invective are liberal academic intellectuals and radical Islam. As far as Jones is concerned they are interconnected in potentially fatal ways:

The evolving progressive response to Islamically-sanctioned, catastrophic violence of the al-Qaeda and IS variety thus entailed a far from compelling mix of queasy agnosticism, euphemism, moral equivalence and logical non sequiturs.¹

This has led those with ‘progressive minds’ to underestimate and misconstrue the threat posed by Islamism, Jones argues, because of ‘an official tendency to mistake terrorism’s limited means for limited ends.’² The consequence of such short-sightedness, especially when combined with a misguided belief in the salutary impact of multiculturalism and social inclusivity, has led, Jones suggests, to ineffective policies ‘that treat the homegrown threat as a community relations problem, rather than an ideology that threatens the internal stability and integrity of secular politics.’³

Whatever you think about his claims regarding the extent and nature of the threat posed by Islamism, there is little doubt that even the most ‘progressive’ governments, such

as Sweden’s, have struggled to manage large scale immigration from countries that have different values and belief systems. Although there is some brief discussion of the rise of populism, Brexit and – of course – the problems afflicting the European Union, the migration issue doesn’t feature as prominently as we might expect. In part, this is explained by the fact that Jones is primarily interested in explaining the rise, and what he considers the misguided and unrealisable ambitions of the ‘new liberalism,’ embodied in Tony Blair’s ‘Third Way’ in particular and globalisation more generally.

Authors have their own predilections, no doubt, but it is still surprising that many observers, including Jones, fail to consider adequately the material conditions in which some theories and political ideals come to exercise an influence. The classic case in point is the natural environment and its increasingly visible impact on the international system and domestic politics. A fellow realist, Anatol Lieven, has persuasively argued that ‘existing nation states may well eventually collapse due to climate change, but the result will not be world government but universal chaos.’

In this context there may, indeed, be an argument to be made about “the West” being deluded and needing to “de-radicalize” its own progressive thinking,” but not simply because of the supposed threat posed by other civilisational and/or religious values. On the contrary, as Jones perceptively – and rightly, in my view – points out, “the structural implications of the intangible economy increasingly favour what Robert Michels identified as an "iron law of oligarchy: in a twenty-first century networked form".”

Likewise, Jones’s critique of ASEAN’s failings and the significance of the China challenge may be familiar to some readers, but they are not without merit: ‘China is busily rewriting the rules of international trade, gradually constructing a Sinocentric regional order…[and] finds ASEAN-style norms hugely conducive to promoting its national interest.’

Quite so.

In the face of all these challenges, Jones advocates something he describes as “prudential realism,” which is characterised not by “justness or rightness” but timeliness, necessity and above all prudence. Given some of the epic strategic follies of recent years there are worse

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6 Jones, History’s Fools, p 172.

7 Jones, History’s Fools, p 203.
principles to live by, perhaps. The implication is that:

The search for a grand master strategy is therefore as elusive as the quest for grand utopian schemes of cosmopolitan justice. Unlike normative grand theorizing, however, prudent statecraft adjusts morality and law as circumstances and interest dictates.\textsuperscript{8}

John Mearsheimer has recently developed similar sorts of arguments about the seemingly unachievable goals of liberal internationalism and the folly of idealism.\textsuperscript{9} Looking around the world today, it’s hard not to concede that the likes of Jones and Mearsheimer have a point, no matter how bleak its implications may be. And yet, some commentators think that climate change will not only eventually compel states to rethink their view of sovereignty and the basis of economic organisation, but also that this may not be a bad thing.\textsuperscript{10}

However, there is nothing more irritating for authors than reviewers telling them what they should have written about rather than considering what they actually did write about, so I shall refrain. One thing that Jones did write about that merits comment, though, is the rather mean-spirited afterword, which is a diatribe about the supposed ‘erosion of academic integrity.’ Numerous scholars are implicated in this process, most of whom have received entirely undeserved recognition, reward and, most galling of all, research funding, Jones claims.

It’s worth pointing out that the Department of Defence doles out large amounts of money to ‘suitable’ projects with much less scrutiny than demanded by the likes of the Australian Research Council; and yet, conservative commentators and politicians aren’t queuing up to criticize security agencies. Consequently, this all sounds a bit like tendentious sour grapes and adds nothing to an otherwise important, albeit provocative, contribution to what is often a surprisingly uncritical, uniform and self-referential debate.

This is a book that will no doubt get mixed reviews, as they say, but it’s none the worse for that. There is much with which I disagree, and the general tone of intellectual condescension can get a bit wearing at times. But we need contrarians and original thinkers, especially in times like these. Cosmopolitans and idealists – of whom there are still some stellar and rather inspiring examples\textsuperscript{11}

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– should read *History’s Fools*, if only to sharpen their own arguments. I’ve benefited over the years from reading Jones’s work, even if my blood pressure hasn’t; better that than the pious, politically correct, bland uniformity that passes for much supposedly ‘critical’ scholarship these days. There are worse things than being challenged, surprised and even outraged by authors with whom one may not instinctively agree.

**Civil–Military Relations: Control and Effectiveness Across Regimes**

*Thomas C Bruneau and Aurel Croissant (eds)*

Lynne Rienner Publishers, Boulder CO, 2019

Reviewed by Michael Evans

The field of civil–military relations is an important part of interdisciplinary strategic studies. Yet it is one in which most research is narrowly conceived and often concerned with relations between political systems on one hand and the armed forces on the other. There is far less research conducted on military interaction with civil bureaucracies in producing strategy or with the outcomes of military effectiveness.

During the Cold War era, much of the civil–military relations literature from Samuel Huntington through Morris Janowitz to Amos Perlmutter was concerned with what American scholar, Peter Feaver defined in the mid-1990s as the ‘civil–military
problematique’ – that is how to reconcile protection by the military with protection from the military. In the twenty-first century, such a focus is far too conceptually restrictive. This is especially true of established liberal democracies with militaries that are fully reconciled to civil control. In liberal democracies, the military is itself a state bureaucracy and while it may be neutral in terms of the dynamics of party politics, it is never apolitical in outlook. Military establishments have their own institutional interests and goals to pursue, which range from budgets to equipment acquisition and the making of strategy. As a result, the pattern of civil–military relations existing in any modern state produces a defence output, namely the efficacy of national defence strategies, operational capabilities and military organisational systems at any given time. It is this broader subject of effectiveness that is the concern of the essays compiled in Civil–Military Relations: Control and Effectiveness Across Regimes, edited by Thomas C Bruneau and Ariel Croissant. Both scholars are leading experts in civil–military relations and their edited book explores the importance of effectiveness in defence and military outputs.

The editors mount a powerful case that ‘the civilian control and military effectiveness nexus’ is understudied in civil–military relations and requires ongoing research effort by scholars. The book defines effectiveness as the capability of the military to achieve politically desired outcomes across a spectrum of activities ranging from conventional warfighting, counterinsurgency and counterterrorism, and internal security through to peace operations and the provision of humanitarian and disaster relief. These roles are, in turn, measured by three main indicators of military effectiveness. The first indicator is the presence of defence planning processes (white papers and national security strategies). The second indicator is the existence of proper organisational structures (departments of defence, joint military staffs and interagency national security coordination). The third indicator is the systematic allocation of sufficient resources to ensure that the military is equipped for the missions it may have to undertake. The editors recognise that military effectiveness as a process links itself to a distribution of political power. This distribution ranges from the polar opposites of civilian control existing in liberal Western democracies through one party control such as that in China to outright military dictatorship of the kind found in today’s Egypt.

With the above analytical framework in place, the international contributors to the volume develop a comparative analytical approach to the control and effectiveness relationship. Essays range from examining control and effectiveness in consolidated democracies such as the United States, Japan and Germany, through such
emerging democracies as Chile, Indonesia and Tunisia to the authoritarian political regimes of Russia, Turkey, Egypt and China. While in all cases, the relationship between state, society and armed forces is of fundamental importance, the differences identified in regime type determine a variety in civil–military patterns of control and effectiveness.

Thomas-Durell Young’s chapter on the United States presents a case study of control and effectiveness in an advanced democracy. However, Young identifies a striking contradiction in that while the US Congress advocates military unity and jointness, its political practices and lobbying procedures all but ensure that the Department of Defense remains in ‘a state of bureaucratic disaggregation.’ This situation serves to hamper the operational effectiveness of America’s armed forces.

In his chapter on Japan, Chiyuli Aoi, notes that, until the 1990s, the country possessed a system of ‘bureaucratically-managed civil–military relations’ in which career civil servants managed both the national security agenda and the Japanese Self-Defense Forces (SDF). This situation is a direct outcome of Japan’s post-1945 pacifist constitution whereby for half a century, the bunkan tosei system of bureaucratic civilian control by the Defense Agency’s Internal Bureau Operations and Planning Division dominated the military at the expense of the influence of Japanese politicians. In the twenty-first century, with the rise of China and a deteriorating international security environment, Tokyo shifted towards much stronger political control of the Japanese defence system. The Japanese government dissolved the Internal Bureau’s Operations and Planning Division, strengthened the Joint Staff and created a National Security Council. Nonetheless, Japan’s transition of protection from the military to protection by the military remains a work-in-progress given the residual strength of Japan’s culture of anti-militarism. While the Japanese SDF is well trained and equipped, its transition towards the status of a ‘normal’ military power is uneven with Japanese forces untested in their military effectiveness beyond peace support operations.

In Germany, similar concerns about military effectiveness are apparent with the Bundeswehr existing as the unwanted stepchild of German democratic politics. In his essay, Sven Bernhard Greis suggests that Germany is the classic ‘civil–military problematique’ that asks ‘how to reconcile a military strong enough to do anything the civilians ask them to do with a military subordinate enough to do only what civilians authorise them to do.’ In the post–Cold War era, German strategic culture has embodied the idea of Zivilmacht (civilian power) with the Bundeswehr systematically downsized and underfunded.
by German politicians into a state of organisational dysfunction. German military undertakings occur at the request of allies rather than following any coherent national strategy. At the same time, the Bundeswehr’s self-concept of *Innere Führung* (citizen soldier) contributes to an image of the German armed forces as a ‘gigantic and self-referential bureaucracy’ run by careerists rather than an effective military force controlled by dedicated military professionals. From this perspective, President Donald Trump’s belief that Germany does not pull its financial and military weight in NATO appears to have considerable justification.

Ofer Fridman’s chapter on Russia presents an analysis of the Russian military as the historic defenders of the motherland. Despite a long history of autocracy and authoritarianism, Russia has never suffered direct military rule but the military has always been a political actor in the shadows. After suffering deep neglect under Boris Yeltsin, the Russian armed forces have been rehabilitated, reformed and revitalised by President Vladimir Putin. Russian military actions in Georgia, Ukraine, Crimea and Syria demonstrate a level of effectiveness that testifies to the success of Putin’s defence reforms.

Further chapters on Indonesia, Turkey and Egypt serve to illustrate how regime type creates a pattern for the unfolding of civil–military relations. Both Indonesia and Turkey have long traditions of military involvement in politics but in both countries, military effectiveness is only apparent in internal security and counterinsurgency operations. Since the 1990s, the Indonesian military, while still a political actor, has accepted the primacy of democratic institutions. In contrast, Turkey has slipped into neo-Ottomanism under the executive presidency of Recep Tayyip Erdoğan with its military involved in operations in northern Syria, with uncertain outcomes. Robert Springbord’s chapter on Egypt presents a case study of where direct military rule has led to a poor capacity by the Egyptian armed forces to undertake conventional military operations. As Springbord observes Egypt’s modern military history ‘demonstrates that running a country and being an effective military are incompatible roles.’

You Ji’s chapter on China emphasises how the creation of a highly effective military has been a key driver of China’s transformation since 1978. The Chinese Communist Party (CCP) and the People’s Liberation Army (PLA) represent a symbiotic relationship of shared strategic interests that dates back to the anti-Japanese war of the 1930s. This civil–military symbiosis is described as a ‘historically-embedded and special lip-and-tongue integration of the party and the armed forces.’ In Xi Jinping’s China, the goal is the realisation of a ‘superpower military’ by 2050. There is dialectic
between control and effectiveness at work in China because as the country has become an economic powerhouse so too has the PLA benefited from a largesse promoting military modernisation and professionalism. As You puts it, ‘the nexus of military effectiveness and war preparation is organic for the PLA’s modernization.’

The PLA has gone from a strategic posture of ‘defensive defense’ to one of ‘defensive offense’ while moving from a focus on continental military concerns towards a much greater concentration on maritime warfare and anti-access operational strategies. You believes that the evolution of the CCP–PLA relationship will be decisive in China’s ambition of achieving global superpower status. Currently, there is a control–effectiveness nexus based on CCP rule and continuing PLA professionalism in a coalition of interests. However, You sounds a note of caution. He warns that since the PLA serves both the party and the nation, any divergence between party and populace automatically threatens the dialectic between political control and military effectiveness. At some point in the future, the PLA might face the choice between being the political instrument of an unpopular party or the professional servant of a population demanding political change.

In their conclusion, Bruneau and Croissant highlight the myth that it is only in democracies with civilian control that military effectiveness flourishes. The illiberal regimes of Russia and China demonstrate that authoritarian civilian control can produce effective military establishments. In a clear reference to the wars in Iraq and Afghanistan, the editors go on to note that ‘despite a defense budget that is more than twice as large as the combined budgets of Russia and China, the US armed forces have not been particularly effective in many of the conflicts in which they have been involved for some years.’ Similarly, the armed forces of both Germany and Japan possess untried militaries due to legacies of pacifism, bureaucratic control and political indifference. The overall conclusion of the book is that while ‘civilian control may be a necessary condition for military effectiveness, democratic civilian control is not.’

The material gathered in this volume is a useful reminder of the paucity of research conducted into Australian civil–military relations since the 1980s. This is a perplexing situation in that knowledge of the theory of civil–military relations define both the character and culture of modern defence organisations and the direction of policy and strategy. As Eliot Cohen puts it, ‘a theory of civil–military relations contains within it a theory of strategy.’ Such an approach to defence organisation is not evident in twenty-first century Australia. Accordingly, both the ADF and Canberra’s policymakers would benefit from a renewed focus on civil–military relations, beginning with reading this book.
The Battles for Kokoda Plateau

David W Cameron

Allen & Unwin, Sydney, 2020

Reviewed by Kate Tollenaar

The Australian experience in the Second World War features many myths, and in the last 20 years, Kokoda has grown in significance in Australian popular cultural memory. The story of the battle to hold the Kokoda Plateau has been the focus of many recent works, with over nine books published since 2000 and many articles debating the place of Kokoda in Australia’s military history and remembrance. The movie Kokoda was released in 2006, introducing the story to a new generation. Many Australians walk the Kokoda Track each year and this experience is often framed in the language of pilgrimage.

David W Cameron’s The Battles for Kokoda Plateau is a contribution to the field that focuses on individual truth and much of the account is drawn from letters and diaries. After capturing Singapore in early 1942, Japanese forces landed at Papua New Guinea in July 1942, not to establish a base from which to invade Australia as was thought at the time but with the intent to isolate Australia and New Zealand from the United States. The Japanese intended to capture Kokoda and the airstrip and then advance overland to capture Port Moresby. Over the next five months, Japanese forces advanced along the Kokoda Track, fighting Australian and Papuan forces, until they were defeated at Oivi-Gorari in November 1942.

The Battles for Kokoda Plateau, however, recounts the events of three weeks of the battle between July and August 1942, when the 39th Battalion, supported by 1st Papuan Infantry Battalion and Royal Papuan Constabulary fought the Japanese I/144th Battalion. These events are divided chronologically into five chapters: Preparation, Invasion, the First and Second Battles for Kokoda and Lines of Escape. This detailed account illuminates one part of the theatre which General Sir Thomas Blamey and General Douglas Macarthur oversaw.

The Battles follows the same approach of drawing on unpublished first-hand accounts focused on particular timeframe that Cameron’s has used in some of his previous works such as on the battle for Lone Pine at Gallipoli in the First World War and
the Battle of Long Tan in the Vietnam War. This allows for a deep dive into the actions and reactions of individuals that were part of these events.

The reader follows the experience of several commanders, senior non-commissioned officers, a medical officer, an American airman and Australian missionaries who move along the Kokoda Track. The narrative weighs heavily on several narrators, but this does not detract from a sense of the broader experience. Relying on individual letters written during the period, or recollections afterwards, the account bring a sense of immediacy to their experience. Wanting to know what happens to these people compels the reader to read on.

David Cameron writes about the human experience of war, which makes this account easy to read without the need to decipher dense tactical details or force dispositions. Cameron focuses on the experience of these men and women in arduous conditions, battling the infamous terrain over the Owen Stanley Ranges, which all believed impassable, in difficult weather and coping with disease, including dysentery and cholera, and critical shortages of ammunition and food.

The author also writes with empathy for the families of the deployed personnel who waited for years to learn what had happened to their loved ones. This approach makes The Battles a deeper and broader account, encompassing social as well as strictly military history. Part of this social history approach is the addition of brief but absorbing recollections of some veterans who reflect on their experience at Kokoda over 30 years later. These examples demonstrate the often pervasive nature of wartime service and the way that memories can change over time, as well as influence collective memory and myth.

An important part of the mythology of Kokoda has been that the Australians were fighting against tremendous odds, vastly outnumbered by the Japanese. Some accounts claim it was up to ten to one at the first Battle of Kokoda and in The Battles Cameron asserts the Australians were outnumbered by at least three to one. However, this number has been contested by a number of historians. For example, Peter Williams in The Kokoda Campaigns 1942: Myth and Reality debunks eight common myths about Kokoda including the myth that the Australians were constantly outnumbered by Japanese. It is true that during skirmishes in July, Japanese forces were superior but it seems likely this was not significantly more than one to one, certainly less than two to one. The size of Japanese
forces at Kokoda remains contested in historical and popular accounts.

Cameron is an experienced historian, and this is a strong historical work. One of its particular strengths is the inclusion of letters and diary entries from Japanese soldiers and officers, which provide additional insights into the Japanese experience of Kokoda. There are also several interesting facts in the book from Cameron’s research which would warrant additional research for a reader wanting to know more. These facts include the misinformation provided to the Australian public from Headquarters about what was occurring at Kokoda, the press-ganging of 100 Sydney men to enlist and make up the numbers of a Darwin battalion, and accounts of mistreatment and exploitation of the local carriers who assisted the men of the 39th Battalion to carry supplies over the Owen Stanley Ranges during the three-week period.

The tone of the book is imbued by the many accounts of violence by Japanese forces towards civilians and military personnel. These depictions are graphic and include Japanese forces’ executions of Australian prisoners, missionaries and local civilians by gunshot and bayonet. Some of the executions were botched, or deliberately cruel, exacerbating the trauma for the victims and witnesses. Although true and important, these parts of the book make for difficult reading. The first chapter opens with these events, which sets the tone for a sombre and occasionally grisly read. There are some moments of humour; however, overall the account is evocative and challenging.

Readers wanting to know more about this time period will find excellent source material in The Battles, and some companion reading, such as the Williams account mentioned earlier, would help more fully explore the Kokoda experience.

The Battles meets its intent to honour voices of the men and women who fought in July and August 1942 at Kokoda. Their bravery and fortitude is clear. This book is a worthwhile read for those interested in the individual experience of war in Papua New Guinea during the Second World War.
Why We Write: Craft Essays on Writing War

Randy Brown and Steve Leonard (eds)

Middle West Press LLC, Johnston IA, 2019
Reviewed by Imogen Mathew

As a lecturer in professional military education on the Australian Command and Staff Course, my day-to-day work involves helping Defence personnel with their academic writing. Many of my students left secondary school early to join the forces; a quarter of our cohort comes from an ESL background; and those with a tertiary education favour STEM disciplines. In this context, writing an essay on the Peloponnesian War or Social Identity Theory is hard work: students must produce thesis statements and topic sentences; their writing must be clearly signposted, follow a logical structure, and be supported by appropriate and credible evidence. There are important reasons to write in this way, but my goal is not to create league upon league of scholars. Rather, I hope to imbue my students with a passion for writing that extends beyond the marking rubric to something more personal and long-lasting. And in this, the spirit that animates my daily work is shared by the editors of Why We Write: Craft Essays on Writing War.¹

Why We Write is an anthology of essays published under the aegis of the Military Writers Guild in late 2019. Randy Brown and Steve Leonard edit the collection; both are veterans who have parlayed their military experience into successful writing careers. Brown has published several poetry collections as well as embedding with US forces as a civilian journalist in Afghanistan. Leonard is a lecturer at the University of Kansas and a senior fellow at the Modern War Institute at West Point. Between them, Brown and Leonard have gathered together a multitude of voices (military, ex-military and civilian), all of whom explore the meaning writing has for them in their professional and personal lives. The contributors to this collection are predominately US-based, although there is a sprinkling of Australian authors. At 61 essays, the number of contributions is quite high for an edited collection; and, coming in at a total of 225 pages, the length of

¹ Jonathan Baxer, ‘Dreaming of Ishtar In the Land of Two Rivers’ in Randy Brown and Steve Leonard (eds), Why We Write: Craft Essays on Writing War, Middle West Press LLC, Johnston IA, 2019, p 168.
Why We Write: Crafting Essays on Writing War

Each essay is correspondingly short. Yet length constitutes one of this collection’s chief attractions: these bite-sized essay morsels are accessible and engaging, and their brevity allows readers to dip in and out of the anthology with ease. This collection thus has a broad appeal, and will be of interest to civilians and military professionals alike: a relatively low time investment (say, an empty 5 minutes between zoom meetings) will yield a highly satisfying reading experience.

Many of the essays engage directly with the question ‘Why I write?’, and the answers are as individual as each author. Some contributors emphasise the professional benefits that accrue to those who write: for Mick Ryan, ‘being a better writer makes me a more thoughtful leader.’ In other essays, writing represents a powerful therapeutic ‘tool for processing loss, grief, and change.’ Some write to ensure forgotten voices are heard: for instance, Hugh Martin writes to create a ‘more multi-vocal, polyphonic tapestry’ of the Iraq War. There are those who write for the ‘rush,’ “to create a legacy,” or “to give [their] life meaning.” Writing may not come easy, but it is as essential as a good night’s sleep.

A smaller selection of essays are as interested in the process as they are in the outcome, and offer valuable insights into the how of writing. Josh Powers offers a particularly evocative example:

I try to write every day. Most mornings, I am awake at a time that feels unnatural yet efficient, an old habit from years of early mornings. With a cup of hot coffee in hand, I reflect on the previous day’s notes. I might read a few business or military articles. I capture some fragments in a separate section of my notebook, with pages reserved for reflection, thoughts, and lessons-learned.

Then, I consider these elements in the light of this question: Which of

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2 Mick Ryan, ‘Writing and Our Profession’, in Randy Brown and Steve Leonard (eds), Why We Write: Craft Essays on Writing War, Middle West Press LLC, Johnston IA, 2019, p 44.
3 Colin D Halloran ‘The Warrior-Poet and an Unexpected Journey’ in Randy Brown and Steve Leonard (eds), Why We Write: Craft Essays on Writing War, Middle West Press LLC, Johnston IA, 2019, p 201.
4 Hugh Martin, ‘An Iraq War Veteran Reads the Iraq War’ in Randy Brown and Steve Leonard (eds), Why We Write: Craft Essays on Writing War, Middle West Press LLC, Johnston IA, 2019, p 208.
5 Carmen Gentile, ‘Some True Lies about Conflict Reporting’ in Randy Brown and Steve Leonard (eds), Why We Write: Craft Essays on Writing War, Middle West Press LLC, Johnston IA, 2019, p 82.
6 Joe Byerly, ‘Pressing the Button’ in Randy Brown and Steve Leonard (eds), Why We Write: Craft Essays on Writing War, Middle West Press LLC, Johnston IA, 2019, p 16.
7 Baxter, ‘Dreaming of Ishtar’, p 68.
8 Tom McDermott, ‘Armour Against Atrocity: Writing to Find One’s Moral Compass’ in Randy Brown and Steve Leonard (eds), Why We Write: Craft Essays on Writing War, Middle West Press LLC, Johnston IA, 2019, p 93.
9 Matt Condon, ‘Writing Myself to Sleep’ in Brown and Leonard (eds), Why We Write: Craft Essays on Writing War, pp 70-5.
these thoughts could benefit some- one else?\textsuperscript{10}

Here, there are no rules on how to write, just principles and lessons learned. The tone is free of didacticism, and Powers makes no attempt to coerce the reader into his daily rituals. Rather, Powers’s reflections are generous and giving; he shows the reader what works for him in an effort to highlight one of the many paths that could begin a writing journey.

The key argument pursued by the editors of this collection relates to the centrality of writing in the development of modern Western militaries. While there is already a notable amount of scholarship that addresses the importance of reading to the profession of arms (see, most prominently, The Leader’s Bookshelf by James Stavridis and R. Manning Ancell, and The Challenge of Command by Roger Nye), writing is given considerably less attention. This is where the originality of Brown and Leonard’s collection comes fully into view. Why We Write is unique in the way it promotes the act of writing to military professionals. By making an argument for the importance of writing, the editors also make an implicit argument for the importance of individuality, creativity and self-reflection within the profession of arms. This approach introduces a note of vulnerability into our understanding of the profession of arms:

Many junior leaders perceive the Army as “zero defect,” where mistakes are unacceptable or seen as weakness. I once shared these fears. Now, I write to demonstrate to others that not having all of the answers is OK. … My writing stems from personal shortcomings and professional failures, and growing from those experiences.\textsuperscript{11}

This approach also recognises that each person ‘[has] a story to tell’ and that this story is ‘unique’ to the individual,\textsuperscript{12} and refuses to view Defence personnel as uniform and homogenous.

This anthology’s main audience (like the majority of its contributors) is military professionals. And it is this audience who will gain the most from this book; indeed, it seems that the intention underlying this anthology is to transform an audience of readers into an active community of writers. As Charles G Ingram puts it in his Introduction, ‘Our hope is that one of these writers will inspire you to tell [your] story, in your own way.’ Thus, beyond profiling the work of a dynamic community of practice, the intent behind this collection is to

\textsuperscript{10} Josh Powers, ‘Operationalizing “The Field Grade Leader”’ in Randy Brown and Steve Leonard (eds), Why We Write: Craft Essays on Writing War, Middle West Press LLC, Johnston IA, 2019, p 159.

\textsuperscript{11} Powers, ‘Operationalizing “The Field Grade Leader”’, p 159.

\textsuperscript{12} Christopher G. Ingram, ‘Introduction’ to Randy Brown and Steve Leonard (eds), Why We Write: Craft Essays on Writing War, Middle West Press LLC, Johnston IA, 2019, p 1.
entertain, encourage and, above all, inspire would-be writers. This is no mean feat when the potential audience for this book may have chosen a military career precisely because they lacked confidence or ability in their writing skills. Thus, a key function of Why We Write is to render accessible a practice that may not be an obvious or especially comfortable bedfellow for its intended audience. Further to this, the editors of Why We Write work hard to remove any sense of hierarchy from the practice of writing. In this sense, it is impressive that the writers are identified by name only; there are no prefixes of rank or learning (for example, either MAJGEN or Dr) in the authors’ by-line. Essays by well-known and widely published authors, such as Peter W Singer, Max Brooks, Kori Schake and Thomas E Ricks, rub shoulders with the work of little-known veterans who now work as marketing executives or run manufacturing businesses. This is in keeping with the general ethos of the book, which aims to democratise the act of writing. You don’t need to be a highly literate academic or extensively published author for your story to be of value. The message here seems to be that if you can write, you should write.

All contributors to this collection are alike in their endorsement of writing, both as a process and as an object that circulates in the world. In both these views, to write is to enact change on a scale that ranges from the infinitesimally small to the wholesale re-visioning of self, nation and history. This type of insight is not new: writing on writing is a widely recognised and popular genre. Julia Cameron’s The Artist’s Way, Anne Lamott’s Bird by Bird, Stephen King’s On Writing, and Haruki Murakami’s What I Talk About When I Talk About Running are just four of the many titles that explore the writing process. And these are just the single-authored texts; collections such as Meredith Maran’s Why We Write feature interviews with some of the most experienced and successful practitioners in the business including Jodi Piccoult, Isabel Allende, Terry McMillan, Ann Patchett, and Jennifer Egan. Those in search of writing advice and inspiration would do well to consult any of the texts mentioned above. Given the scholarship that already exists in this genre, the true value of Brown and Leonard’s Why We Write lies less in its reflections on the writing process, and more on the way it makes a substantive case for military personnel of all levels to embrace writing as part of their ongoing professional development.13

It is not sufficient, this collection argues, to concentrate the core business of the military on a panoply of hardware. This argument coheres strongly

13 Thomas E Ricks, “Babylon Revisited” in Brown and Leonard (eds), Why We Write: Craft Essays on Writing War, p 222.
with messaging from the Australian Department of Defence regarding what it calls the Joint Professional Military Education Continuum. In a recently released guidebook, we are told that ‘the Australian Defence Force cannot rely on a long term capability edge, as regional military modernisation has started to diminish Australia’s advance. Therefore, the greatest opportunity to generate advantage over the adversary is through an intellectual edge.’ The Australian Defence Force offers many ways to obtain this intellectual edge, including through participation on the Australian Command and Staff Course, or the Defence and Strategic Studies Course. However, this intellectual edge can be honed just as sharply through the informal and accessible writing practice demonstrated in *Why We Write*.

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The Australian Journal of Defence and Strategic Studies (AJDSS) is the flagship journal of the Australian Defence Force. The AJDSS encourages contributors and readers from across the professional military, academic, government and industry sectors. The AJDSS welcomes submissions considering contemporary and future concerns relevant to the defence and strategic outlook of Australia and the Indo-Pacific region.

**Submissions Deadlines**
Submission are accepted at any time, however, please note the issue deadlines below:

- **Vol 3. No. 1** 1 February 2021
- **Vol 3. No. 2** 31 May 2021
- **Vol 4. No. 1** 27 September 2021

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- Academic articles of 4000 to 7000 words
- Commentary and opinion essays of 2000 to 4000 words
- Reviews and review essays (generally by commission) of 1000 to 2000 words
- Correspondence in response to articles of 1000 to 2500 words

Submissions should be original, clearly argued and demonstrate appropriate levels of research and evidence. Academic articles undergo a double-blind peer review process. This process can be lengthy and reviews may recommend revision and resubmission.

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All submissions should be anonymised and accompanied by a cover letter that clearly states the type of submission word count and declarations; an abstract; and biographical and contact information on all credited authors, as outlined in the submission guidelines on the website. Submissions should be submitted by email to: cdr.publications@defence.gov.au

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