AUSTRALIAN
DEFENCE FORCE

# Australian Journal of Defence and Strategic Studies

Vol. 3 No. 2

# Australian Journal of Defence and Strategic Studies

**Vol. 3 No. 2**

ADC Publications
Centre for Defence Research
Australian Defence College
PO Box 7917
CANBERRA BC ACT 2610

Email: cdr.publications@defence.gov.au
Website: defence.gov.au/ADC/publications/AJDSS

Editor: Dr Cathy Moloney
Managing editor: Fiona Mackrell
Designer: Michelle van der Linden, Linden Graphics
Printed in Australia by Clarke Murphy Printing
Front cover image by lim_pix under licence via Shutterstock (ID 1020754705)

The *Australian Journal of Defence and Strategic Studies* is published twice a year by the Department of Defence. It is the flagship academic journal of the Australian Defence Force.

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ISSN 2652-3728 (PRINT)
2652-3736 (ONLINE)


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# Editorial

In our first issue of the *Australian Journal of Defence and Strategic Studies* (AJDSS) in 2019, I wrote that the journal aimed to 'encourage and raise the level of intellectual thinking among our defence forces' by bringing together the wealth of knowledge within the Australian Department of Defence, academia and wider policy and security communities domestically and internationally. The new AJDSS was tasked with informing debate and honing the intellectual edge within Australian Defence Force.

This challenge was led by Commander of the Australian Defence College, Major General Mick Ryan. His vision to instil robust and contextually driven conversation by and for defence and national policymakers, decision changers and academics has seen the journal reach a broad audience within Australia, amongst our partners and allies, and across our region. Moreover, the journal now attracts world expert contributors from across multidisciplinary domains, driving the conversation and sparking debate. We will continue to bring together a wealth of debate that is much needed now and certainly into the future and build upon the AJDSS's vision of being a platform for addressing critical issues relevant to defence and national interests. These conversations will build, drive and nurture our current and future critical thinkers and decision-makers.

Against this backdrop, the concluding chapter of Major General Ryan's term chairing the journal, we present a concert of articles, commentaries, reviews and correspondence addressing issues relevant to Australia's defence and strategic interest and fitting of the vision that first inspired the launch of the new AJDSS.

We begin your summer reading with Michael Clarke's 'What type of revisionist is China (and why it matters)?' Clarke brings nuance to the academic debate

on how the international relations concept of revisionism is applied to China, which is far too often described in simplistic binary terms in media and political commentary. Further, his paper provides insight into how China's position has shifted over the past 70 years and informs how we might better perceive (and respond to) contemporary Chinese rhetoric and foreign policy.

In the following article, Natalia Jevglevskaja and Bianca Baggiarini consider the range of potential effects artificial intelligence (AI) may have on military recruitment and retention, force structure and military readiness. As AI transforms the way we work, it will affect not just combat systems but logistics, cyber defence, transportation and administration tasks, to name just a few. But attracting, retaining and nurturing the workforce skills to operate and complement these AI systems will be just as important as the technology. Riding this wave of technological change successfully will bring opportunities and challenges but militaries must shift their thinking and start to prepare now.

The national security threat of supply chains has been all too apparent during the COVID-19 pandemic. In their timely article, Andrew Dowse, Tony Marceddo and Ian Martinus raise the issue of sovereign capability in cybersecurity. The cyber risk posed by vulnerable supply chains, at both the hardware and software levels, is just one of the threats that demand a more strategic approach to resisting cyberattacks. Making cybersecurity a sovereign industry capability priority may support greater resilience in Australia's national defence systems, helping to ensure that ADF units are not 'taken out of any meaningful fight before they even get to it'.

In our commentary section, we open with Ahmed S Hashim's provocatively titled 'Can Asians fight? Organisational-cultural impediments to the conduct of high-tech conventional warfare.' Hashim considers the Indian, Japanese and Chinese's militaries capability in combined arms and jointness. He identifies bureaucratic bottlenecks, different strategic outlooks and service histories and particularly inter-service rivalries as factors that have impeded military effectiveness. Despite rapid modernisation programs, deficiencies in joint warfare capabilities may still have strategic implications for each country's ability to project power in defence of their interests.

We are pleased to have two commentaries in this issue from students in the 2021 Australian War College's Defence and Strategic Studies program. In reflecting on the *2020 Defence Strategic Update,* a year after its release, Colonel Kane Wright evaluates its effectiveness as a guiding document for Defence and where modifications to it various elements might enhance Australia's ability to purse its national interests. This is followed by Captain Andrew Willis's 'Australia's polar attraction: Antarctica strategy 2001–2021'. Willis argues that Antarctica matters

to Australia, in terms of our historical connections, territorial claims, its potential resources, including as a source of scientific knowledge, and national security. However, if geopolitics shifts in the region, Australia's Antarctic strategy will need to adapt.

In our reviews section we have Yun Jiang review of Peter Martin's *China's civilian army: the inside story of China's quest for global power*; Elena Collinson reviews Emma Shortis's *Our exceptional friend: Australia's fatal alliance with the United States;* Ross Boyd reviews General Sir Peter Cosgrove's memoir, *You shouldn't have joined*; Andrew Maher reviews Stephen Biddle's *Nonstate warfare: the military methods of guerrillas, warlords, and militias*; and Darren Cronshaw reviews the *Handbook of veteran and military suicide: assessment, treatment, and prevention*, edited by Bruce Bongar, Glenn Sullivan and Larry Charles James.

We end the issue with a spirited debate between two world renowned experts on the challenge of the Sino-Russian relations and its strategic implications for Australia. Challenging aspects of Alexey Muraviev's article from our previous issue, Matthew Sussex draws out the nuances of the argument to which the author responds in a robust and lively dialogue, which is sure to delight those who have an interest in this thought-provoking area.

It was a pleasure to have Major General Ryan lead the strategic vision of the first three volumes of the AJDSS. His unwavering thirst for knowledge and insatiable drive to encourage intellectual mastery within the profession of arms leaves an indelible legacy. The team here at the Centre for Defence Research thank him for his encouragement and drive as Commander Australian Defence College and as the chair of the editorial review board.

We wish Mick and his family all the best. Likewise, we wish all our readers a wonderful (southern) summer. We hope 2022 sees the return of a sense of freedom and joy which we have had to set aside over the last two years of the pandemic. So please, relax, read and enjoy.

**Dr Cathy Maloney**
Editor
Head of the Centre for Defence Research

# What type of revisionist is China (and why does it matter)?

*Michael Clarke*

## Abstract

This paper seeks to explain what China is dissatisfied with and why, and what this means for the United States and allies such as Australia. To do so the paper proceeds in three parts. Part one examines the predominant approaches to the concept of revisionism in the international relations literature and presents a case for 'disaggregated revisionism' that identifies four distinct types of revisionist behaviour. Part two then measures the evolution of China's foreign policy since the establishment of the People's Republic of China (PRC) against this typology of revisionist behaviour. Here, the paper argues that Chinese behaviour affirms the notion that revisionism is neither an "all or nothing" proposition nor is it static. Rather, the evolution of Chinese foreign policy demonstrates that it has traversed in succession, the revolutionary, reformist and positional revisionist categories. The paper concludes that China's simultaneous pursuit of 'reformist' and 'positionalist' revisionism under Xi Jinping's leadership – and American reactions to it - has encouraged Australia to move toward an overt balancing strategy against China, a choice that it has hitherto sought to avoid.

## Introduction

Longstanding debates in international relations and China studies about whether China is a 'revisionist' or 'status quo' power in international politics have, once again, become prominent.[1] The reasons for this are unsurprising. Ongoing controversies regarding the origins of the novel COVID-19 pandemic, the Chinese Communist Party's (CCP) influence operations around the world, territorial disputes in the South China Sea and along the Sino–Indian border, and China's detention of over one million Turkic Muslim minorities in Xinjiang in 're-education' camps have convinced many to doubt Beijing's intentions.[2] The United States (US) administrations of the former president Donald Trump (2017 to 2020) and current President Joseph R Biden have been clear they believe China is the major challenger to the existing international order. The Biden administration's *Interim National Security Strategic Guidance*, states that China 'is the only competitor potentially capable of combining its economic, diplomatic, military, and technological power to mount a sustained challenge to a stable and open international system'.[3]

Such rhetoric is symptomatic of deploying a common but incomplete understanding of 'revisionism', which implies the assertion that the US, in contrast to China, is, in fact, a status quo power. However, leaving aside the problematic nature of this particular claim,[4] it is nonetheless the case that the Trump and Biden administrations have assumed China is (in the language of revisionism) 'dissatisfied' and willing to bear the costs to change the international order, while

1 For a small sample of this debate, see Alastair I Johnston, 'Is China a status quo power?', *International Security,* Spring 2003, 27(4): 5–56, https://doi.org/10.1162/016228803321951081; Jeffrey W Legro, 'What China will want: the future intentions of a rising power', *Perspectives on Politics*, September 2007, 5(3): 515–534, https://doi.org/10.1017/S1537592707071526; David C Kang, *China rising: peace, power, and order in East Asia*, Columbia University Press, New York, 2007; Ren Xiao, 'A reform-minded status quo power? China, the G20, and reform of the international financial system', *Third World Quarterly*, December 2015, 36(11): 2023–2043, https://doi.org/10.1080/01436597.2015.1078232; Brantly Womack, 'China and the future status quo', *Chinese Journal of International Politics*, Summer 2015, 8(2): 115–137, https://doi.org/10.1093/cjip/pov001

2 See, for example, Shadi Hamid, 'China is avoiding blame by trolling the world', *The Atlantic*, 19 March 2020, https://www.theatlantic.com/ideas/archive/2020/03/china-trolling-world-and-avoiding-blame/608332/; Michael Clarke, Jennifer S Hunt and Matthew Sussex, 'Shaping the post-liberal order from within: Chinese influence and interference in Australia and the United States', *Orbis*, 2020, 64(2): 207–229, https://doi.org/10.1016/j.orbis.2020.02.005; Adrian Zenz, '"Thoroughly reforming them towards a healthy heart attitude": China's political re-education campaign in Xinjiang', *Central Asian Survey*, 2019, 38(1): 102–128, https://doi.org/10.1080/02634937.2018.1507997

3 Joseph R Biden, *Interim national security strategic guidance*, The White House, Washington, March 2021, p 8, https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/03/interim-national-security-strategic-guidance/

4 For an interpretation of post-Cold War American grand strategy as revisionist, see, Jennifer Lind, 'Asia's other revisionist power: why US grand strategy unnerves China', *Foreign Affairs*, March/April 2017, https://www.foreignaffairs.com/articles/asia/2017-02-13/asias-other-revisionist-power

the US is 'satisfied' and prepared to bear the costs to defend it.[5] However, revisionism as a strategy in international politics and China's revisionism, in particular, is not such an 'all or nothing' proposition. Rather, China has exhibited different revisionist behaviours at different times. A more accurate understanding of the factors that have driven Beijing's transition between different *types* of revisionist behaviour provides greater insights into what drives such behaviour.

This paper seeks to explain *what* China is dissatisfied with and *why*, and *what* it may choose to do to redress such dissatisfaction in the immediate future. Thus, this paper proceeds in three parts. Part one examines the predominant approaches to the concept of revisionism in the international relations literature and presents a case for adopting Cooley, Nexon and Ward's notion of 'disaggregated revisionism' that identifies four distinct types of revisionist behaviour.[6] Part two measures the evolution of China's foreign policy since the establishment of the PRC against this typology of revisionist behaviour. It is argued that Chinese behaviour affirms the notion that revisionism is neither an 'all or nothing' proposition nor static. Rather, the evolution of Chinese foreign policy demonstrates that it has traversed, in succession, the revolutionary, reformist and positionalist revisionist categories. Of particular note in this context is a consistent pursuit of positionalist revisionism under Deng Xiaoping, Jiang Zemin and Hu Jintao (i.e., roughly 1978 to 2012). More recently, under Xi Jinping's leadership (2013 to present), China has manifested both reformist and positionalist revisionist tendencies, opening pathways towards revolutionary revisionism. This paper concludes by discussing the major implications of China's simultaneous pursuit of reformist and positionalist revisionism for the US and its allies in the Asia–Pacific, such as Australia.

## Revisionism in international relations: the case for disaggregated revisionism

He, Feng, Chan and Hu noted that there are three common uses of revisionism.[7] The first establishes a simple binary in international politics whereby states labelled as 'revisionist' are dissatisfied and destructive of the international order. Thus, they are counterpoised to status quo states, which are framed as satisfied and constructive. This simple binary usage of revisionism is arguably

5 Randall L Schweller, 'Bandwagoning for profit: bringing the revisionist state back in', *International Security*, Summer 1994, 19(1): 72–107, https://doi.org/10.2307/2539149

6 Alexander Cooley, Daniel Nexon and Steven Ward, 'Revising order or challenging the balance of military power? An alternative typology of revisionist and status-quo states', *Review of International Studies*, October 2019, 45(4): 689–708, https://doi.org/10.1017/S0260210519000019

7 Kai He, Huiyun Feng, Steve Chan and Weixing Hu, 'Rethinking revisionism in world politics', *Chinese Journal of International Politics*, Summer 2021, 14(2): 159–186, p 163, https://doi.org/10.1093/cjip/poab004

the most commonly deployed in contemporary media and political commentary on Chinese foreign policy. However, it is problematic for a variety of reasons. For instance, such an understanding of revisionism explains nothing about what the revisionist state is dissatisfied with or the thorny question of the international order itself. This understanding of revisionism also occludes critical analyses of the role of status quo states. Indeed, the use of the simple descriptor 'status quo' elides the basic fact that it refers to the distribution of power that existed 'at a particular point in history' and assumes that states so defined (i.e., as status quo) will always remain satisfied.[8]

This binary and static understanding of the revisionist–status quo binary has become a staple of much media and political commentary on contemporary geopolitics. However, it is ahistorical and unsophisticated in its understanding of the possibility for different states to exhibit different types of revisionist behaviour over time. Although the US is considered a status quo power by most contemporary commentators, it demonstrably acted in revisionist ways during its rise to great power status during the nineteenth century[9] and has had a clear record of using its pre-eminent power during the post-Cold War period to 'revise' the 'rules of the game' of international politics to suit its interests and prerogatives.[10]

The second type of revisionism assumes a normative or moral dimension to the revisionist–status quo binary. Turner and Nymalm demonstrated that the status quo designation in the international relations literature from the twentieth and twenty-first centuries represents an 'ordering narrative' of 'morality and progress' in which revisionism is primarily framed as a 'disruptive' force primarily emanating from non-Western states 'amidst a fundamentally moral Western order that represents civilizational progress'.[11] However, such ordering narratives ignore 'serious consideration[s] of how the global manufacturing of "order" by European colonial powers and, later, the US, in the Americas, Africa, Asia' and elsewhere actually 'constituted radical and widespread revisionism'.[12]

8 Hans J Morgenthau, *Politics among nations: the struggle for power and peace*, (4th ed), Knopf, New York, 1967, p 37.

9 See, for example, Kori Schake, *Safe passage: the transition from British to American hegemony*, Harvard University Press, Cambridge, 2017.

10 For post-Cold War American 'revisionism', see, Ian Hurd, 'Breaking and making norms: American revisionism and crises of legitimacy', *International Politics*, February 2007, 44(2): 194–213, https://doi.org/10.1057/palgrave.ip.8800184; Ryder McKeown, 'Norm regress: US revisionism and the slow death of the torture norm', *International Relations*, March 2009, 23(1): 5–25, https://doi.org/10.1177%2F0047117808100607; Carlos L Yordán, 'America's quest for global hegemony: offensive realism, the Bush doctrine, and the 2003 Iraq War', *Theoria: A Journal of Social and Political Theory*, August 2006, 53(2): 125–157, https://ssrn.com/abstract=1285185

11 Oliver Turner and Nicola Nymalm, 'Morality and progress: IR narratives on international revisionism and the status quo', *Cambridge Review of International Affairs*, June 2019, 32(4): 407–428, p 409, https://doi.org/10.1080/09557571.2019.1623173

12 Turner et al., 'Morality and progress'.

There have been multiple examples of the deployment of such ordering narratives regarding China. In the 1990s, as it emerged from the fallout of the 1989 Tiananmen Square massacre and Western-imposed sanctions, there were numerous assertions in the policy and scholarly realms that Beijing was 'swimming against the tides of history' by re-establishing the CCP's dominance over Chinese society and reaffirming its model of 'socialism with Chinese characteristics'.[13] Indeed, for then US president, George H W Bush, the events in Tiananmen Square were evidence that only one path would deliver prosperity and human dignity to the Chinese people: 'free markets, free speech, free elections'.[14] However, the durability of Marxism–Leninism and China's continued economic growth and development trajectory indicated the potential for future revisionist behaviour. For example, Segal noted in 1996 that 'China still feels that it has legitimate claims to territory and to increased status in East Asia and the wider world' and as China's economic power increased, its ability to satisfy such claims would correspondingly increase. Such a scenario would make China a 'powerful' and 'unstable non-status quo power'.[15]

Variations of this particular theme – that the CCP's continued rule combined with economic growth and China's claims to territory and status was a recipe for revisionism – continued throughout the 1990s and into the 2000s.[16] In recent times, a particularly extreme version was sketched by Kiron Skinner, the director of policy planning at the US Department of State under the Trump administration in April 2019.[17] Skinner described strategic competition with China as an order of difficulty not previously confronted by the US. This was because China (in contrast to the Soviet Union) was economically successful and 'a really different civilization'.[18] Thus, Skinner claimed – omitting the confrontation with Japanese militarism during the Second World War – that this would be 'the first time that we will have a great power competitor that is not Caucasian'.[19] She noted that

13 See Mark Blecher, *China against the tides: restructuring through revolution, radicalism and reform*, (2nd ed), Bloomsbury Publishing, London, 2003.

14 See George H W Bush and Brent Scowcroft, *A world transformed: the collapse of the Soviet Empire. The unification of Germany, Tiananmen Square, The Gulf War*, Knopf, New York, 1998, pp 87–89.

15 Gerald Segal, 'East Asia and the "constrainment" of China', *International Security*, Spring 1996, 20(4): 107–135, p 108, p 111, https://doi.org/10.2307/2539044

16 See, for example, Thomas J Christensen, 'Posing problems without catching up: China's rise and challenges for US security policy', *International Security*, April 2001, 25(4): 5–40, https://doi.org/10.1162/01622880151091880; Aaron L Friedberg, 'The future of US–China relations: is conflict inevitable?', *International Security*, October 2005, 30(2): 7–45, https://doi.org/10.1162/016228805775124589

17 Joel Gehrke, 'State Department preparing for clash of civilizations with China', *Washington Examiner*, 30 April 2019 12.00 am, https://www.washingtonexaminer.com/policy/defense-national-security/state-department-preparing-for-clash-of-civilizations-with-china

18 Gehrke, 'State Department'.

19 Gehrke, 'State Department'.

the Cold War was really 'a fight within the Western family' because the Soviet Union's ideology (Marxism–Leninism) was ultimately grounded in classical Western philosophical thought.[20] Thus, Skinner's identification of China as a civilisational challenge rather than an ideological one was revealing; although the CCP is an avowedly Marxist–Leninist party, its *non-Western* nature apparently lay at the root of its disruptive potential.

The third usage of the revisionist label assumes that desire equates to conduct; because a state or its leaders have a stated desire for particular outcomes that suit their preferences and values, this *automatically* translates into action. However, we can confidently say that while most states in the international system would like to operate in an order that aligns more closely with their own specific preferences and values, such desires are not translated into actual behaviour in most cases.[21] This observation leads to the question: how can we determine what factors encourage a state to act on its desires? Intent without capability is exactly that (i.e. an unconsummated desire). Intent *with* capability offers the *potential* to translate desires into actual behaviour. However, the problematic nature of accurately determining intent presents dilemmas because a 'state with revisionist desires or intentions may hide its agenda until presented with an opportunity to act' and other states may 'misperceive its intention, whether making the error of mistaking a status quo power for a revisionist one or vice versa', while 'seeking to determine another state's intentions by interpreting its behaviour … risks the danger of self-fulfilling prophecy' if that interpretation is inaccurate.[22] Nevertheless, the bases of revisionism arguably lie in 'both capabilities and desire (or motivation) to effect change'.[23]

Another important question relates to the target of the revisionist state's desires and behaviours. That is, what does it seek to change? Is the revisionist seeking to change the interstate distribution of power or the institutions and norms of the existing international order? Of course, these are not mutually exclusive, as demonstrated by the rise of the US as a great power, in which its accretion of material and military power from the late nineteenth to early twentieth centuries translated into the increasing capability to reshape the institutional and normative architecture of the international order in ways conducive to its interests and values.[24] However, this also does not explain *when* exactly intent/desire overlap sufficiently with the capability to effect change.

20 Gehrke, 'State Department'.

21 He et al., 'Rethinking revisionism in world politics', p 164.

22 He et al., 'Rethinking revisionism in world politics', p 164.

23 He et al., 'Rethinking revisionism in world politics', p 164.

24 See, for example, Schake, *Safe passage*, pp 205–210

This highlights the importance of Kai et al.'s definition of revisionism as comprising 'a state's *perceived* intention and its *actual* observed behaviour' to affect the distribution of power and the institutional and normative architecture of the extant order.[25] In the example of the US above, it could be argued that this moment of overlap between perceived intent and actual behaviour occurred in at least two instances during the twentieth century: Woodrow Wilson's decision in 1917 to intervene on the allied side during the First World War and, during the Second World War, bookended by Franklin D Roosevelt's 29 December 1940 'Arsenal of Democracy' speech and August 1941 'Atlantic Charter' and the Bretton Woods Conference of July 1944.[26] This brief example highlights that 'the intensity of states' desires to change or maintain the status quo have varied according to their assessments of the benefits and costs of particular courses of action at particular points in time.[27]

Hence, there are problematic aspects to the revisionist–status quo dichotomy regarding the ascription of roles (satisfied or dissatisfied), normative implications of such roles (revisionists as disruptive agents), assessment of intent and identifying when and under what circumstances intent and capabilities translate into action. One method scholars have applied to mediate such problems is constructing typologies of revisionist and status quo behaviours. For example, Morgenthau, the father of classical realism, famously asserted that *all* politics – domestic and international – tended to produce three types of political phenomena: actors that 'seek either to keep power, to increase power, or to demonstrate power'.[28] For Morgenthau, these types of actors exhibit 'three typical' foreign policy behaviours: a state focused on *keeping* power tends to pursue policies that maintain the distribution of power in its favour, affirming the status quo; a state that seeks to *acquire* more power and alter the distribution of power in ways favourable to it 'pursues a policy of imperialism'; and a state that seeks to *demonstrate* its power, to either maintain or increase it, pursues a policy of prestige.[29]

While this typology is a useful starting point, it does not provide insights into the when, why and how of revisionism. More recently, Cooley et al. proposed a typology of disaggregated revisionism that directly addresses these questions by distinguishing 'between two distinct dimensions along which states can seek

25 [Emphasis added] He et al., 'Rethinking revisionism in world politics', p 164.

26 See Michael Clarke, *American grand strategy and national security: the dilemmas of primacy and decline from the founders to Trump*, Palgrave Macmillan, Cham, Switzerland, 2021, pp 131–142 and pp 187–210, https://doi.org/10.1007/978-3-030-30175-0

27 He et al., 'Rethinking revisionism in world politics', pp 165–166.

28 Morgenthau, *Politics among nations*, p 36.

29 Morgenthau, *Politics among nations*, p 37–38.

change: the international order and the distribution of military capabilities'.[30] Their approach allows us to think more clearly about the relationship between sources of dissatisfaction and how it affects revisionist strategies. Four 'ideal typical orientations' based on this two-dimensional power–order framework emerge: (1) *status quo* powers satisfied with the international order and distribution of power; (2) *reformist* powers satisfied with the current distribution of power but who seek to change other elements of the international order; (3) *positionalist* powers satisfied with the international order but who aim to shift the distribution of power; and (4) *revolutionary* powers who aim to overturn both the international order and distribution of power.[31]

This typology allows greater specification regarding what 'causes rising powers to mount different kinds of revisionist challenges' and 'why some states shift from what are often limited attempts to improve their positions in the world towards more radical challenges to the broader order'.[32] For example, a reformist revisionist will pursue 'counter-order' strategies, while a positional revisionist will pursue 'counter-hegemonic' strategies (i.e., seek to shift the distribution of power). However, as noted above in the example of the US' rise to great power status, such behaviours are not static. Rather, a state that is focused on building its capabilities may reach a point where attempts 'to further shift the balance of capabilities in order to more effectively challenge the order [will] shift from a reformist to a revolutionary orientation'.[33] Disaggregating revisionism in this manner allows us to observe revisionist behaviour as less an 'all or nothing' strategy than a continuum along which states may move, presenting several possible pathways to or from revolutionary revisionism (i.e., behaviour that seeks to enhance a state's capabilities *and* reshape order).

Contemporary debates about Russian and Chinese revisionism highlight the need to distinguish between types of revisionist behaviour. Concerning Russia, some observers argue that Moscow's aggressive behaviour, such as its annexation of Crimea, is driven by a desire for status. Here, its disruptive behaviour is a response to the constraints imposed on Russia by the US-led order because Moscow has decided it must alter the balance of power to achieve status.[34] Alternatively, Russian actions have also been considered security-seeking

30 Cooley et al., 'Revising order', p 690. They note that they use 'distribution of military capabilities' interchangeably with the 'balance of power'.

31 Cooley et al., 'Revising order', p 695.

32 Cooley et al., 'Revising order', p 693.

33 Cooley et al., 'Revising order', p 697.

34 See, for example, Deborah W Larson and Alexei Shevchenko, 'Status seekers: Chinese and Russian responses to US primacy', *International Security*, April 2010, 34(4): 63–95, https://doi.org/10.1162/isec.2010.34.4.63

behaviour prompted by the twin challenges of NATO's expansion and the latent threat to the domestic order of Putin's regime from the eastward expansion of the 'liberal order' associated with NATO.[35] Thus, each explanation highlights different types of revisionist behaviour, with the former reflecting a positionalist–revolutionary pathway and the latter a reformist–revolutionary pathway. This is significant in terms of policy prescription. If, for instance, it is judged that Russia is moving along the positionalist–revolutionary pathway (i.e., generated by status-seeking), the US (and its allies) could ameliorate Russian behaviour by recognising 'the rising state's more positive identity and status' through accepting/acknowledging its contributions to the international order.[36]

## Chinese revisionism, 1949 to 2021: from revolutionary to positionalist revisionist and back again?

While there are similarities in scholarly and policy debates about the bases and implications of Chinese revisionism with those focused on Russia, the Chinese case arguably suggests a qualitatively different pattern. China over the past two decades may reflect a pattern in which a rising power – confident that the balance of power is shifting in its favour – has 'less reason to behave in revolutionary ways, in relative terms, than weaker or declining states' and, thus, faces 'less pressure towards the positionalist dimension of revisionism'. The upshot is that such a state may 'have incentives to bide their time before pursuing serious challenges to the other elements of order'.[37] Such a scenario regarding China would theoretically suggest that there could be 'opportunities for adjustment and bargaining' between China and the US.[38] However, is China traversing such a path? This is the central question that this paper will now address.

### Mao: revolutionary revisionist

During much of the Maoist era (1949 to 1976), China met the criteria for the revolutionary revisionist ideal type because it sought to overturn the existing international order and the distribution of power. From 1949 to the mid to late 1950s, this was manifested most immediately in Beijing's 'leaning to one side' (i.e., overt alignment with Moscow) in the emergent US–Soviet Union Cold War. In hindsight, 'leaning to one side' was inevitable because Mao considered that

35 For a discussion of security-seeking behaviour in general, see, Jeffrey W Taliaferro, 'Security seeking under anarchy: defensive realism revisited', *International Security*, January 2001, 25(3): 128–161, https://doi.org/10.1162/016228800560543. For the Russian example, see, Andrey A Sushentsov and William C Wohlforth, 'The tragedy of US–Russian relations: NATO centrality and the revisionists' spiral', *International Politics*, March 2020, 57(3): 427–450, https://doi.org/10.1057/s41311-020-00229-5

36 Larson et al., 'Status seekers', p 67.

37 Cooley et al., 'Revising order', p 698.

38 Cooley et al., 'Revising order', p 698.

solidarity with Moscow contributed to the core domestic and foreign policy goals of the PRC.[39] Domestically, an alliance with the Soviet Union would contribute to the 'momentum of China's internal revolutionary process' towards surmounting the 'three big mountains' of 'imperialism, feudalism and bureaucratic capitalism' and constructing socialism 'on the basis of a planned, state-owned economy and a Leninist political system'.[40] Meanwhile, in the realm of foreign policy, an alliance with the Soviet Union provided material assistance to rebuild China's economy and military hardware and 'ideological legitimacy' by integrating the PRC into 'a community with the elect' (i.e., the 'vanguard' of world revolution in Moscow) and 'a sense of historical vindication' for the CCP's decades-long struggle for power.[41] Thus, 'leaning to one side' promised to enhance the PRC's 'international influence, stature and security' and assist the CCP to 'propel the rest of humanity towards a socialist world'.[42]

An outgrowth of this latter dynamic was a diplomatic narrative through which Mao and the CCP sought to carve out a leading role for themselves in the 'world revolution' based on the CCP's unique revolutionary experiences. This was driven by the CCP's foundational belief that the 'interests of the Chinese revolution were fundamentally compatible with those of the world revolution' and that 'the interests of the Chinese revolution were subordinate to and, therefore, should serve the interests of the world revolution'.[43] In the short term, this entailed Beijing's acceptance of the Soviet Union's leadership of the socialist world and its active support for the revolutionary efforts of others. However, in the long term, Mao and the CCP drew on the specific lessons of the Chinese revolution to assert their claim to be the vanguard of the revolutionary forces of the world to replace the revisionism that Mao perceived in the post-Stalin Soviet Union. Here, the CCP highlighted the greater applicability of the Maoist model of a peasant-based revolution for the 'toiling masses' of the decolonising and developing worlds. From the Maoist perspective, the relative absence of urban proletariats in such societies was an advantage for a *class-based* revolution because the peasantry tended to be 'the most oppressed and, therefore, the

39 See Chen Jian, *Mao's China and the Cold War*, University of North Carolina Press, Chapel Hill, 2001.

40 John W Garver, 'The opportunity costs of Mao's foreign policy choices', *China Journal*, January 2003, 49: 128–135, https://doi.org/10.2307/3182198

41 Lowell Dittmer, 'China's search for its place in the world', in Brantly Womack (ed), *Contemporary Chinese politics in historical perspective*, Cambridge University Press, New York, 1991, p 210.

42 Garver, 'The opportunity costs', p 128.

43 Chen Jian, 'Bridging revolution and decolonization: the "Bandung discourse" in China's early Cold War experience', *Chinese Historical Review*, 2008, 15(2): 207–241, p 209, https://doi.org/10.1179/tcr.2008.15.2.207

most revolutionary group in society'.[44] Thus, the role of the Marxist–Leninist vanguard party in this context was to mobilise and harness the energies and resentments of the peasantry towards the twin objectives of national liberation from imperialism and socialist revolution.[45]

This perspective underpinned one of the major foreign policy concepts of the high Maoist era during the 1960s: the intermediate zone theory, which was based on Mao's ruminations about the shape of the coming post-Second World War world during a speech to the 7th National Congress of the CCP in April 1945.[46] In its initial formulation, Mao simply asserted that after the war, the struggle 'between the forces for democracy and the forces against democracy, and between national liberation and national oppression will prevail in most parts of the world'. He subsequently argued that while the defining characteristic of world politics appeared to be the emerging Cold War between the US and the Soviet Union, these two powers were actually separated by 'a vast zone which includes many capitalist, colonial and semi-colonial countries in Europe, Asia and Africa' and that the US would have to 'subjugate' the countries in this zone before it could attack the Soviet Union.[47]

For Mao, the Cold War's outcome would be 'decided by the struggles between the peoples of the intermediate zone and the reactionary US ruling class, rather than between capitalist America and the socialist Soviet Union'.[48] Significantly, this betrayed a certain ethnocentrism because Mao and the CCP perceived China as occupying a central position in the intermediate zone and, therefore, 'the development of the Chinese revolution would play a central role in defining the path or even determining the result of the global Cold War'.[49] Thus, in this schema, China was conceived of as providing a successful model of national

44 Chen, 'Bridging revolution', p 210. This 'heresy in action' regarding Leninist revolutionary strategy (as Schwartz characterised it) proved to be Mao's signature 'innovation' to the canon of 'Marxism–Leninism', see Benjamin I Schwartz, *Chinese communism and the rise of Mao*, Harvard University Press, Cambridge, 1951, pp 188–204.

45 This, not incidentally, had been the strategy pursued by Mao during the struggle for power and underpinned much of the CCP's early mass campaigns once the PRC was established to eradicate a range of the regime's perceived enemies from 'remanent nationalist forces' to expropriation of 'landlords' and 'bourgeois elements'. For a detailed discussion of the mass campaigns of the early 'post-liberation' years, see Frank Dikötter, *The tragedy of liberation: a history of the Chinese revolution, 1945–1957*, Bloomsbury Press, London, 2013, pp 84–102.

46 Mao's initial formulation of April 1945 was made in Mao Zedong, 'On Coalition Government'; it was further elaborated in 'Talk with Anna Louis Strong (August 1946)', in *Selected Works of Mao Zedong*, (vol IV), Foreign Languages Press, Peking, 1969; Lu Dingyi, 'Explanations of several basic problems concerning the post-war international situation', *Renmin Ribao* [*People's Daily*], 4–5 January 1947. Lu was the then head of the party's Propaganda Department.

47 See 'Talk with Anna Louis Strong'; Lu, 'Explanations'.

48 Chen, 'Bridging revolution', p 213.

49 Chen, 'Bridging revolution', p 214.

liberation and revolution that other states in the developing world might emulate and possessed a unique leadership role for encouraging such states' resistance to imperialism.

Thus, China's foreign policy, in part, amounted to a form of 'national identity implementation', whereby Beijing's official foreign policy discourse for much of the Maoist era reflected its self-identification as a core constituent part and leader of the 'revolutionary masses' of the intermediate zone of Asia, Africa and Latin America.[50] A 'common sense of deprivation and exploitation at the hands of the rich and powerful' united the 'new China' and such disparate peoples.[51] In concrete terms, as Lovell meticulously documented, this solidarity informed the PRC's concerted efforts throughout the 1950s, 1960s and into the 1970s to provide material support and foreign aid to national liberation and/or Marxist movements and non-aligned movement states throughout the intermediate zone and actively proselytise the Maoist model of revolution.[52] Products of Beijing's activities included enormous foreign aid budgets characterised by 'credits, loans, and outright gifts' to a range of states, particularly in Africa;[53] the provision of weapons and Chinese advisers/instructors to national liberation movements in Africa, Asia and the Middle East;[54] and the establishment of a training and indoctrination school in Beijing for members of 'fraternal' communist parties.[55] These activities were not designed to achieve 'the expansion of China's political and military control of foreign territory or resources' but rather 'the spread of their influence to other "hearts and minds" around the world' because 'only when China's superior moral position in the world had been recognized by other peoples would the consolidation of his [sic] continuous revolution's momentum at home be assured'.[56]

50 Peter Van Ness, 'China as a third world state: foreign policy and official national identity', in Lowell Dittmer and Samuel S Kim (eds), *China's quest for national identity*, Cornell University Press, Ithaca, 1993, p 200, https://doi.org/10.7591/9781501723773-010

51 Samuel S Kim, 'China and the third world: in search of a peace and development line', in Samuel S Kim (ed), *China and the world: new directions in Chinese foreign relations*, Westview Press, Boulder, 1989, p 148.

52 See Julia Lovell, *Maoism: a global history*, Bodley Head, London, 2019.

53 Lovell, *Maoism*, pp 185–222.

54 For China's efforts in the Middle East, see Mohammed Turki Alsudairi, 'Arab encounters with Maoist China: transnational journeys, diasporic lives and intellectual discourses', *Third World Quarterly*, 2021, 42(3): 503–524, https://doi.org/10.1080/01436597.2020.1837616

55 For the CCP's cultivation of 'foreign friends' see Anne-Marie Brady, 'Red and expert: China's "foreign friends" in the Great Proletarian Cultural Revolution 1966–1969', *China Information*, July 1996, 11(2–3): 110–137, https://doi.org/10.1177%2F0920203X9601100208

56 Chen, *Mao's China*, p 15.

## Deng, Jiang and Hu: positionalist revisionists

Following Mao's death in 1976 and the re-emergence of Deng, China swapped revolutionary revisionism for reformist and positionalist forms of revisionism. Under Deng, China – in a reformist fashion – temporarily accepted the bipolar reality of the late Cold War to ensure the security, economic development and recognition of China's status as a major and legitimate actor in international affairs. Although this was driven by the logic of Deng's 'reform and opening' program domestically (i.e., China required a stable and peaceful international order in which to focus on economic development), it was also reinforced by perceptions about the global balance of power. In this context, Deng, much as Mao before him, maintained that the Soviet Union remained the pre-eminent threat to China because of the residual effects of the Sino–Soviet Union split and more immediate developments, such as Moscow's 1979 invasion of Afghanistan and alliance with Vietnam.[57] In contrast, China's relations with the US were improving with the normalisation of relations finalised in January 1979 and capped by Deng's visit to the US.

China's rapprochement with Washington was driven by its fear of Moscow, which was underlined by Deng's subsequent comments to President George H W Bush in February 1989. After he enumerated the grave historical wrongs done to China by Tsarist Russia and the Soviet Union and the threat still then posed by Moscow's current strategic encirclement of China, the leader asked rhetorically, 'How can China not feel that the greatest threat comes from the Soviet Union?' For Deng, opening to the US in 1971 to 1972 was a 'strategic decision' based on 'a consideration of China's own interest'; it 'was not a question of playing cards, and it was not a question of expediency'.[58] China's relations with the Third World also improved as Beijing jettisoned pretensions to lead such states to a revolution in favour of 'claiming only fellowship with that group' and expressing a desire for 'anti-hegemonism' that could be interpreted as desiring subordination to neither the US nor the Soviet Union.[59] Finally, China's relationship with the institutional and financial architecture of the post-1945 international system underwent major reorientation, with Beijing becoming an avid joiner to 'facilitate access to credit, capital and technology markets'.[60]

57 David Shambaugh, *China's leaders: from Mao to now*, Polity, London, 2021, pp 120–121.

58 *Memorandum of conversation: President Bush's meeting with Chairman Deng Xiaoping of the People's Republic of China*, Great Hall of the People, Beijing, 26 February 1989, 11.00 am–12.00 noon, published online via George H Bush Presidential Library & Museum, https://bush41library.tamu.edu/archives/memcons-telcons

59 See Herbert S Yee, 'China: de-Maoization and foreign policy', *World Today*, 1981, 37(3): 93–101; Joseph Y S Cheng, 'China's foreign policy in the 1980s: from anti-hegemony to modernization diplomacy', *China Report*, May 1985, 21(3): 197–222, https://doi.org/10.1177%2F000944558502100301

60 Dittmer, 'China's search', pp 240–241.

This trend towards a more pragmatic Chinese foreign policy was accelerated by the major domestic and international developments at the end of the 1980s. Domestically, the June 1989 Tiananmen Square massacre made Beijing the target of international opprobrium and Western-led economic sanctions. During the immediate aftermath of the massacre, Beijing found itself diplomatically isolated to an extent it had not been since the early years of the PRC. Internationally, Iraq's invasion of Kuwait in 1990 (and the subsequent Persian Gulf crisis) and the collapse of the Soviet Union in 1991 had enormous effects on China's foreign policy. In the short term, China recognised the former as an opportunity to reverse its isolation by supporting a US-led multilateral response. However, China's perceptions of the long-term implications of these twin developments were not as sanguine as the US military superiority displayed against Iraq and the collapse of the Soviet Union augured a post-Cold War world characterised by American predominance.

Beijing needed to resolve a significant immediate dilemma regarding the Persian Gulf crisis: would it jettison its ideological and rhetorical commitment to the Third World to rehabilitate its standing as a major power after the Tiananmen Square massacre? Beijing's foreign policy line during the Iran–Iraq War (1980 to 1988) had been one of neutrality based on the logic of the intermediate zone theory (i.e., that conflict among the Third World states only benefited the hegemony of the superpowers). Thus, acquiescing to US-led military action against Iraq by not exercising its veto power in the United Nations (UN) Security Council risked undermining decades of diplomatic rhetoric in the Middle East. Beijing's solution was to pursue two tracks.

First, it simultaneously designated Iraq as an opportunistic 'little hegemonist' that had taken advantage of the waning of the bipolar international order to pursue territorial aggrandisement and the US as a 'big hegemonist' reasserting itself as 'the predominant superpower'.[61] Second, Beijing voted in favour of the first 11 UN resolutions that condemned the Iraqi invasion of Kuwait but abstained from the 12th (UN Resolution 678) on 29 November 1990, which set a deadline for Iraqi withdrawal and authorised UN members to adopt necessary measures (including force) to restore peace.[62] This approach was guided by Beijing's concern to protect its self-cultivated image in the Middle East (and throughout the Third World) and a desire to ensure that the UN would not be used in the

61 Yitzhak Shichor, 'China and the Gulf crisis: escape from predicaments', *Problems of Communism*, November 1991, 40(6): 80–90, p 82.

62 Hwei-ling Huo, 'Patterns of behavior in China's foreign policy: the Gulf crisis and beyond', *Asian Survey*, 1992, 32(3): 263–276.

emerging 'new world order' 'as a tool to interfere in regional affairs around the world or in other countries' domestic affairs by the use of force'.[63]

From Beijing's perspective, such world order anxieties were justified because the Soviet Union collapsed and the US military displayed its harnessing of the revolution in military affairs (RMA) against Iraq in 1991.[64] For Deng, the former demonstrated the necessity of simultaneously maintaining firm one-party rule and economic 'reform and opening', while the latter underlined the technological gap between the People's Liberation Army and the US military.[65] Strategically, the First Gulf War demonstrated that the nature of warfare had shifted from 'the application of masses of manpower and equipment' to high-technology local wars involving 'the large-scale use of information technology, advanced materials, aerospace systems, and other advanced technologies in weapons systems'.[66] Significantly, such combinations required 'not only traditional land, sea, and air forces, but also missile forces, special operations forces, and psychological warfare units', highlighting the role of advanced technological capabilities.[67] In this context, the regime's survival was now the pre-eminent concern of the CCP and had an immediate effect on China's foreign policy.

China required a stable international environment to achieve Deng's goal of coupling the one-party rule with continued reform and opening. Although China had hoped that multi-polarisation would come to characterise international politics (before the Soviet Union collapsed and the First Gulf War), the emergence of US unipolarity and its RMA required a pragmatic foreign policy focused on developing multiple regional and global linkages to accelerate economic growth, resolve longstanding disputes with neighbours and combat the perceived ill effects of continued US predominance.[68]

63 Hwei-ling, 'Patterns of behavior', p 271.

64 For the effects of RMA on the First Gulf War, see, for example, Stephen Biddle, 'Victory misunderstood: what the Gulf War tells us about the future of conflict', *International Security*, October 1996, 21(2): 139–179, https://doi.org/10.1162/isec.21.2.139. For an analysis of RMA's effects on Chinese military thinking, see John Arquilla and Solomon M Karmel, 'Welcome to the revolution … in Chinese military affairs', *Defense Analysis*, 1997, 13(3): 255–269, https://doi.org/10.1080/07430179708405736

65 For an example of Chinese military views, see Wang Pufeng, *Information warfare and the revolution in military affairs* [*Xinxi zhanzheng yu junshi geming*], Military Sciences Publishing House, Beijing, 1995.

66 Dean Cheng, 'Chinese lessons from the Gulf wars', in Andrew Scobell, David Lai and Roy Kamphausen (eds), *Chinese lessons from other peoples' wars*, Strategic Studies Institute, US Army War College, Carlisle, 2011, pp 158–159; Arthur S Ding, 'China's growing military capability in search of a strategy', *International Spectator*, June 2009, 44(2): 97–100, https://doi.org/10.1080/03932720902909233. For a contemporaneous Chinese military view, see Wu Jianchu, 'Joint operations – the basic form of combat on high-tech terms', *China Military Science*, 1995, 4, Foreign Broadcast Information Service – China, April 1996.

67 Cheng, 'Chinese lessons', p 159.

68 Bates Gill, *Rising star: China's new security diplomacy*, (2nd ed), Brookings Institution Press, Washington, 2010, pp 22–25.

Deng's successors, Jiang and Hu, in turn, pursued forms of positionalist revisionism whereby China broadly benefited from the 'hierarchy of prestige' and 'rights and rules' of the existing order – for example, accession to the World Trade Organization in 2001 – but aimed to leverage this to shift the distribution of power. The strategy and discourse of 'peaceful rise/development' that emphasised, on the one hand, that China would continue to pursue development through further integration with economic globalisation to 'catch up with medium-level developed countries' and, on the other, preferences for cooperation, multilateralism and regionalism within the practice and discourse of its foreign policy were symptomatic of this approach.[69] This was designed 'to maintain the conditions conducive to China's continued growth' while reducing 'the likelihood others would unite to oppose China'.[70]

Simultaneously, Beijing also sought to channel its growing economic power into military modernisation during this era, framed as necessary to catch up with the RMA that underpinned US military predominance and protect its expanding regional security interests.[71] The US' continued military predominance was underlined by its intervention in Kosovo in 1999, which some Chinese observers characterised as the quintessential non-contact, high-technology local war, whereby the US leveraged its enormous technological superiority to subdue Slobodan Milošević's Federal Republic of Yugoslavia without recourse to the deployment of ground forces.[72] More broadly, Kosovo was perceived as demonstrating that the US would 'contain, besiege, and even launch pre-emptive military strikes against any country which dares to defy the US world hegemony or which has constituted a latent challenge' to the US.[73]

Some Western observers suggested that 9/11 could serve as a 'circuit breaker' for Sino–US ties, whereby Beijing and Washington could find common ground

69 For the full enunciation of 'peaceful rise' by the concept's pre-eminent spokesman, see Zheng Bijian, *China's peaceful rise: speeches of Zheng Bijian, 1997–2005*, Brookings Institution Press, Washington, 2005. For a critical assessment, see Bonnie S Glaser and Evan S Medeiros, 'The changing ecology of foreign policy-making in China: the ascension and demise of the theory of "peaceful rise" ', *China Quarterly*, June 2007, 190: 291–310, https://doi.org/10.1017/S0305741007001208

70 Avery Goldstein, 'The diplomatic face of China's grand strategy: a rising power's emerging choice', *China Quarterly*, December 2001, 168: 835–864, p 837, https://doi.org/10.1017/S000944390100050X

71 See Andrea Ghiselli, *Protecting China's interests overseas: securitization and foreign policy*, Oxford University Press, Oxford, 2021, pp 50–52.

72 See June Teufel Dreyer, 'People's Liberation Army lessons from foreign conflicts: the air war in Kosovo', in Andrew Scobell, David Lai and Roy Kamphausen (eds), *Chinese lessons from other peoples' wars*, Strategic Studies Institute, US Army War College, Carlisle, 2011, pp 33–40. Beyond issues of military strategy and capability, US intervention in Kosovo was also considered problematic because it was feared it created a precedent that could be followed in the future vis-à-vis core Chinese interests regarding Taiwan, Tibet and Xinjiang.

73 Wang Jincun, 'New changes in international situations viewed from NATO's aggressive war against Yugoslavia', *Qian Xian*, 5 July 1999.

for limited security cooperation in combating international terrorism.[74] This assessment was given some weight by several early post-9/11 developments, such as China's support for the US invasion of Afghanistan and acquiescence to establishing a significant US military presence in Central Asia. Simultaneously, however, the dominant view of Chinese observers was that Washington's insertion into Central Asia/Afghanistan would accentuate the constraints imposed on China by the US global primacy. Thus, Washington would simply seek 'to take the advantage of anti-terrorism' to dominate Central and Southern Asia and 'promote its plan of pushing for a unipolar world'.[75] The subsequent US-led invasion of Iraq in March 2003 also did little to dispel this interpretation.[76]

However, a more optimistic scenario was also expressed by some Chinese observers during the immediate aftermath of 9/11. For example, in 2002, He Dalong suggested that US intervention in Afghanistan and its 'global War on Terrorism' would ensure 'the tip of the US spear is not all pointed at China', providing China with 'a rare opportunity for us to concentrate on economic construction and create beneficial international and neighboring environments'.[77] This assessment that the unilateralism of the Bush administration provided China with a strategic opportunity played a significant role in shaping China's evolving foreign policy throughout the remainder of the 2000s. It informed China's diplomacy under President Hu, where there was much emphasis on the assertion that China's core goal was to ensure its 'peaceful rise/development' rather than challenge US hegemony. Zheng Bijian, one of the architects of the 'peaceful rise' approach, articulated that the essence of the concept was that China would independently build 'socialism with Chinese characteristics, while participating in *rather* than detaching from economic globalization'.[78]

Concern among China's leadership that the term 'rise' was unnecessarily provocative ultimately resulted in the term being abandoned. Its replacement by the more anodyne term 'peaceful development' in 2006 did not alter the essence of the strategy. Indeed, in 2007, Premier Wen Jiabao asserted that

74 See, for example, David M Lampton, 'Small mercies: China and America after 9/11', *The National Interest*, 1 December 2001, https://nationalinterest.org/article/small-mercies-china-and-america-after-911-396; Aaron L Friedberg, '11 September and the future of Sino-American relations', *Survival*, 2002, 44(1): 33–50, https://doi.org/10.1080/00396330212331343222

75 Rosalie Chen, 'China perceives America: perspectives of international relations experts', *Journal of Contemporary China*, 2003, 12(35): 285–297, p 295, https://doi.org/10.1080/1067056022000054623

76 Peter H Gries, 'China eyes the hegemon', *Orbis*, July 2005, 47(4): 617–627, https://www.fpri.org/article/2005/07/china-eyes-hegemon/

77 He Dalong, '9.11 hou guoji xingshi d zhongda bianhua' ['Major changes in international situations after 9/11'], *Shishi ziliao shouce* [*Handbook on Current Affairs*], October 2002, 4: 12–15.

78 See Zheng Bijian, 'A new path for China's peaceful rise and the future of Asia', in *China's peaceful rise: the speeches of Zheng Bijian*, Brookings Institution Press, Washington, 2005, pp 13–17. Zheng was a former vice-president of the Central Party School of the CCP.

a posture of peaceful development would send 'a clear message to the world that China will achieve its development mainly through its own efforts' and mitigate 'misgivings in the international community that China is bound to engage in external plundering and expansion when it reaches a certain stage of development'.[79] This rationale was also evident in President Hu's subsequent 'harmonious world' rhetoric in which harmony signified 'the importance of the coexistence of diversified civilizations' and 'consultation among all of the countries involved, rather than unilateralism driven by hegemonic ambitions'.[80] Therefore, under Jiang and Hu's leadership, China displayed a quintessentially positionalist form of revisionism focused on utilising its continued enmeshment in the existing global institutional and economic order to enhance its capacity to challenge the balance of power.

## Xi: reformist and positionalist revisionist

When Xi emerged as the new general secretary of the CCP and president of the PRC in 2012 to 2013, Beijing – while more proactive and assertive than in the immediate past – appeared to be still hewing closely to a strategy that sought 'to maintain the conditions conducive to China's continued growth' while reducing 'the likelihood others would unite to oppose China'.[81] Xi's era demonstrated, among other things, that while the CCP has (since Deng's reform and opening) discarded much of the Marxist content of its Marxist–Leninist ideology, it has steadfastly retained the Leninist state – the 'political half of the Lenin–Stalin model imported circa 1950'.[82] Greer argued that a consequence of this is the CCP's continued belief that *only* a disciplined vanguard party can deliver modernisation and the 'China Dream' of national rejuvenation.[83] While circumstances have dictated 'temporary cooperation with the self-interested capitalists', the CCP believes 'that they lead an ideological-political system distinct from and in opposition to those of the capitalist world' and these 'two worlds cannot be permanently reconciled'.[84] Such a calculus has been the key continuity linking China's post-Mao rulers. However, the uneasy balance between the retention

79 Wen Jiabao, 'Our historical tasks at the primary stage of socialism and several issues concerning China's foreign policy', *Beijing Review*, 12 March 2007, http://www.bjreview.com.cn/document/txt/2007-03/12/content_58927_3.htm

80 Suisheng Zhao, 'Chinese foreign policy under Hu Jintao: the struggle between low-profile policy and diplomatic activism', *Hague Journal of Diplomacy*, January 2010, 5(4): 357–378, p 363, https://doi.org/10.1163/187119110X531840

81 Goldstein, 'The diplomatic face', p 837.

82 John W Garver, *China's quest: the history of the foreign relations of the People's Republic of China*, Oxford University Press, Oxford, 2016, pp 779–780.

83 Tanner Greer, 'China's plans to win control of the global order', *Tablet*, 18 May 2018, https://www.tabletmag.com/sections/news/articles/china-plans-global-order

84 Greer, 'China's plans'.

of the Leninist state and its harnessing of capitalist economics has presented the CCP with a dilemma: 'it cannot disengage from the global economic and technological processes that generate development' but is keenly aware that 'global engagement opens China to the contagion of liberal ideas'.[85]

From the very beginning of his tenure as the general secretary of the CCP, Xi has consistently acted to address this quandary in a way that may set China on a path towards revolutionary revisionism once more. In a speech to the Central Party School on 5 January 2013, Xi asserted that 'hostile forces at home and abroad … often write essays on the history of the Chinese revolution or of New China, doing all in their power to smear and vilify that era' to 'confuse the hearts of the people' and 'incite them into overthrowing both the [CCP's] leadership and the socialist system of our country'.[86] Thus, the CCP's control of the ideological 'battlefield' was of paramount importance because 'the ideological road we choose to follow … will determine victory or defeat of our Party's work, the very fate of the Party itself'.[87]

Domestically, this renewed focus on the ideological domain has been most overtly manifest in the CCP's drive to harmonise Chinese society to its vision of a domestic order defined by a population of responsible and high-quality citizens through both technologically enabled surveillance, such as the social credit system, and revitalisation of traditional mass line mobilisation.[88] However, for the CCP to be successful, it must also attain the China Dream. The China Dream, as Callahan argued, integrates a geopolitical narrative focused on the acquisition of the material attributes of power (for example, economic, technological and military power) and a moral narrative centred on rejuvenating the Chinese nation that will redress the injustices of the 'century of humiliation' suffered at the hands of foreign imperialism.[89]

Herein lies the roots of China's pursuit of both reformist and positionalist revisionism under Xi. While acquiring material power has long been considered the means

85 Garver, *China's quest*, p 781.

86 Xi Jinping, 'Several issues concerning upholding and developing socialism with Chinese characteristics', *Qiushi*, 1 April 2019, http://www.qstheory.cn/dukan/qs/2019-04/01/c_1124307480.htm

87 Xi, 'Several issues'.

88 See Rogier Creemers, 'Cyber China: upgrading propaganda, public opinion work and social management for the twenty-first century', *Journal of Contemporary China*, 2017, 26(103): 85–100, https://doi.org/10.1080/10670564.2016.1206281; Fan Liang, Vishnupriya Das, Nadiya Kostyuk and Muzammil M Hussain, 'Constructing a data-driven society: China's social credit system as a state surveillance infrastructure', *Policy & Internet*, August 2018, 10(4): 415–453, https://doi.org/10.1002/poi3.183; Suisheng Zhao, 'The ideological campaign in Xi's China: rebuilding regime legitimacy', *Asian Survey*, December 2016, 56(6): 1168–1193, https://doi.org/10.1525/as.2016.56.6.1168

89 William A Callahan, 'China 2035: from the China dream to the world dream', *Global Affairs*, August 2016, 2(3): 247–258, p 256, https://doi.org/10.1080/23340460.2016.1210240

by which China could preserve 'socialism with Chinese characteristics' in a system dominated by the US, Xi's simultaneous emphasis on the moral narrative of rejuvenation most fundamentally challenges the current international order by asserting the 'moral superiority of Chinese civilization' and 'the China Model as a globally important idea'.[90] This resonates with the era of high Maoism during the 1960s whereby the CCP sought to make itself – and by extension, the PRC – the moral leader of the socialist world in the face of Soviet Union revisionism and the custodian of the revolutionary aspirations of the developing world. For Mao, the security of the CCP and the Chinese revolution were inextricably linked to the progress of the revolutionary situation abroad and led China's foreign policy to promote an internationalised class war through its promotion of the Maoist model of revolution.[91] One of the ironies of this was that Mao's oft-celebrated 'Sinification of Marxism' – by definition a *parochial* adaptation of a foreign ideology – was stridently proselytised as having *universal* applicability in the developing world.

Xi's Chinese foreign policy discourse retains some vestiges of this desire to make China's model of governance and development globally important. However, all traces of Mao's internationalised class war have been jettisoned, favouring an overtly nationalist and parochial objective: the 'great national rejuvenation' of China. What remains of the Maoist era in Xi's discourse is the centrality of the CCP itself as the embodiment of the will of the Chinese people and the motivational force of China's rejuvenation. Indeed, Xi has often stated that establishing China as a powerful and influential if not ordering global power relies on maintaining the CCP's monopoly on political power. As he asserted in his opening speech to the National People's Congress in March 2018, the 'leadership of the CCP is the *defining* feature of socialism with Chinese characteristics' and the 'fundamental guarantee of the great rejuvenation of the Chinese nation'.[92] The ultimate objective, as Xi stated in his January 2013 speech to the Central Party School, is to increase China's 'comprehensive national power, improve the lives of our people, build a socialism that is superior to capitalism, and lay the foundation for a future where we will *win the initiative and have the dominant position*'.[93]

Thus, it is unsurprising that Chinese behaviour under Xi has exhibited reformist and positionalist revisionism. Concerning the former, Beijing has undertaken several initiatives to develop parallel institutions to those of the established order, such as

90 Callahan, 'China 2035'.

91 Dittmer, 'China's search', p 236; Lovell, *Maoism*, pp 125–126.

92 Xinhua, 'Speech delivered by Xi Jinping at the first session of the 13th NPC', *China Daily*, 21 March 2018, 6.37 pm, https://www.chinadailyhk.com/articles/184/187/127/1521628772832.html

93 Xi, 'Several issues' (my emphasis).

the Asian Infrastructure Investment Bank (AIIB). While China portrayed the AIIB as a complement to existing multilateral financing institutions (for example, Asian Development Bank), Stephen and Skidmore found that it 'promotes China's integration into global social networks', 'strengthens state-led development pathways' and is 'associated with China's norm of "non-interference" ', thus, presenting an embryonic alternative to current institutional frameworks of the liberal economic order.[94] The Belt and Road Initiative (BRI) also exhibits clear reformist tendencies through Beijing's emphasis on the contribution of this initiative to the existing international order. For instance, the BRI has been touted to global and regional business audiences in 'Davos-speak' as a mechanism for enhancing economic interconnectivity via infrastructure investments and new multilateral financing institutions (for example, AIIB).[95]

Meanwhile, the global media and academia are urged to understand the BRI as a form of geocultural power, wherein Beijing is facilitating the rediscovery of shared histories of cultural and economic connectivity along the Silk Road of yore in positive, so-called win-win scenarios.[96] Therefore, in this reading, the BRI is not a geopolitical masterplan for Chinese hegemony but a contribution to renovating the economic and institutional architecture of the existing order. Meanwhile, China's positionalist revisionism – that is, its efforts to alter the balance of power (especially military) – under Xi has been evident through its rapid military development,[97] including expanding Chinese missile and nuclear forces,[98] blue water naval capabilities[99] and efforts to militarise its claims in the South China Sea.[100]

94 Matthew D Stephen and David Skidmore, 'The AIIB in the liberal international order', *Chinese Journal of International Politics*, Spring 2019, 12(1): 61–91, p 85–86, https://doi.org/10.1093/cjip/poy021

95 See, for example, Liu Weidong, *The belt and road initiative: a pathway towards inclusive globalization*, Routledge, London, 2020.

96 See Tim Winter, *Geocultural power: China's quest to revive the silk roads for the twenty-first century*, University of Chicago Press, Chicago, 2019.

97 James Char, 'The People's Liberation Army in its tenth decade: assessing 'below the neck' reforms in China's military modernization', *Journal of Strategic Studies*, 2021, 44(2): 141–148, https://doi.org/10.1080/01402390.2020.1731953

98 See David Lague and Benjamin K Lim, 'New missile gap leaves US scrambling to counter China', *Reuters*, 25 April 2019 9.42 pm, https://www.reuters.com/article/us-china-army-rockets-short-idUSKCN1S11DQ; Bates Gill and Adam Ni, 'The People's Liberation Army rocket force: reshaping China's approach to strategic deterrence', *Australian Journal of International Affairs*, January 2019, 73(2): 160–180, https://doi.org/10.1080/10357718.2018.1545831

99 See, for example, David Lague and Benjamin K Lim, 'The China challenge: ruling the waves', *Reuters*, 30 April 2019 11.00 am, https://www.reuters.com/investigates/special-report/china-army-navy/; Thomas M Oliver, 'Honourable mention: the observable "cult of the defensive": PLAN strategic shift toward a blue water navy and American strategic perception', *Journal of Military and Strategic Studies*, August 2018, 18(4): 206–233, https://jmss.org/article/view/58340

100 See Michael Tcakik, 'Understanding China's goals and strategy in the South China Sea: bringing context to a revisionist systemic challenge – intentions and impact', *Defense & Security Analysis*, October 2018, 34(4): 321–344, https://doi.org/10.1080/14751798.2018.1529092

## China's revisionism, Sino–US strategic competition and implications for Australia

This paper has demonstrated how China's revisionist behaviour has transitioned from the revolutionary revisionism of the Maoist era to the reformist and positionalist revisionism of the Xi era. This discussion has demonstrated that while Beijing has sought to enhance its military and economic strength consistent with positionalist revisionism since 1978, only under Xi's tenure has Beijing also developed more overtly reformist revisionist behaviour designed to construct an alternative architecture for the global order than that provided by the US. China's reformist and positionalist revisionism under Xi have, unsurprisingly, resulted in significant reactions from other states and strained its relations with the existing hegemon, the US.

China's combination of reformist and positionalist forms of revisionism has significant implications for considering the future trajectory of Sino–US competition because 'the dynamics that move states towards the "revolutionary" limit often involve an iterative and mutually reinforcing interaction' between reformist and positionalist pathways.[101] This paper has demonstrated that China is simultaneously seeking security from what it considers the US-dominated and ideologically threatening order (i.e., a positionalist–revolutionary pathway) and status recognition by incorporating its order preferences (i.e., a reformist–revolutionary pathway). However, on each of these counts, current US rhetoric and policy from the economic and financial decoupling attempted under Trump to the Biden administration's rhetorical embrace of extreme competition actually reinforces Beijing's perceptions that its quest for security *and* status will remain unfulfilled so long as US hegemony and preferences shape the international order.

Recognition of this does *not* excuse Beijing's revisionism as simply a reaction to the US posture. Rather, it is to caution that a turn towards an overtly ideologised response to Beijing makes for poor strategy because it ignores the disaggregated nature of revisionist behaviour. In particular, analogising Sino–US relations to the Cold War struggle between the Free World and the communists (as Trump's Secretary of State Mike Pompeo did) is misleading and self-defeating for several reasons. First, the structural conditions that made the Cold War possible (i.e., US–Soviet Union bipolarity and the consequent alliance blocs) are absent. Under both Obama and then Trump, the US became a 'doubting great power' that questioned the costs and benefits of continued US hegemony.[102] In particular,

101 Cooley et al., 'Revising order', p 697.

102 Lawrence Freedman, 'Who wants to be a great power?', *PRISM: The Journal of Complex Operations*, 2020, 8(4): 3–14, https://ndupress.ndu.edu/Journals/PRISM/PRISM-8-4/

Trump most obviously questioned the costs and benefits of the liberal order, which he thought disadvantaged the US 'requiring a transfer of resources and favors to partners and allies that take without giving'.[103]

Here, Trump's 'America first' rhetoric became paradoxically 'about asserting strength and seeing off rivals' and simultaneously 'disregarding the interests and concerns of allies'.[104] This was hardly a sound basis upon which to build a global alignment against China. However, although China has attempted to develop constructive relations with many countries during the past two decades, it has been unwilling and unable to translate such relationships into anything approaching the US' system of alliances and partnerships. Thus, Adam Liff noted that China has been hamstrung by its zero-sum perception of alliances and an inability to 'present operationalizable pathways to realization' for its alternative conceptions of the international or regional order or 'address other states' traditional security concerns, which are themselves shaped in large part by Beijing's own policies and rhetoric'.[105]

Second, although China has significantly increased its military and economic strength since the 1990s, Chinese and foreign observers have noted that it still confronts a range of domestic and international constraints on its ability to translate that growing strength to challenge US pre-eminence effectively. Yan Xeutong, the dean of the Department of International Relations at Tsinghua University, noted that while 'China *appears* to be the sole country with the potential to shrink the comprehensive strength disparity between itself and the [US] sufficiently to become a new superpower', its unresolved ideological disposition between Marxism, economic pragmatism and Chinese traditionalism makes it unlikely that it could present a coherent ideological challenge to the structuring role of liberal ideas in international politics.[106] In turn, Zhao noted that, effectively, 'money can't buy you love' because 'Beijing's overreliance on its economic prowess as the key diplomatic instrument reveals the shortage of normative power.'[107] He further argued that 'despite its growing economic and military might, … China's efforts to use economic ties to influence other states' behavior have only achieved limited success because money cannot buy

103 Freedman, 'Who want to be a great power?'.

104 Freedman, 'Who want to be a great power?', p 8.

105 Adam P Liff, 'China and the US alliance system', *China Quarterly*, March 2018, 233: 137–165, p 154, https://doi.org/10.1017/S0305741017000601

106 See Yan Xuetong, 'Chinese values vs. liberalism: what ideology will shape the international normative order?', *Chinese Journal of International Politics*, Spring 2018, 11(1): 1–22, https://doi.org/10.1093/cjip/poy001

107 Suisheng Zhao, 'Revisionist stakeholder: China and the post-World War II world order', *Journal of Contemporary China*, 2018, 27(113): 643–658, p 653, https://doi.org/10.1080/10670564.2018.1458029

loyalty', especially in the context of relations with those that may have conflicting security interests.[108]

Third, economically, the US is not the undisputed colossus bestriding the globe as it was after 1945, nor is China analogous to the autarkic and isolated Soviet Union economy.[109] Indeed, as Auslin remarked, 'it goes without saying that the [US] and the Soviet Union had nothing remotely comparable to the trade relationship between the [US] and China', which reached a value of US$634.8 billion in 2019 and a trade deficit of US$308.8 billion.[110] While this suggests a level of imprudent dependency for the US, in reality, there is mutual vulnerability. Zhaohui and Jinghan demonstrated that for much of the post-1978 era, the Sino–US economic relationship has been a 'symbiotic but asymmetric' one, in which 'China's export-driven growth and its accumulation of dollar reserves and US debt are closely intertwined with the dollar hegemony in the international monetary system and America's increasing over-drafting consumption and trade deficit'.[111] Paraphrasing Keynes, they noted that China's holding of approximately US$1 trillion in debt places it as much at the mercy of the US as the other way around.[112]

Fourth, an ideologised framing of the Sino–US strategic competition is also a poor strategy because it would likely weaken one of the core bases of the post-1945 US hegemony: its alliance system. While there are domestic political and psychological reasons for the US to embark on 'strategic competition' with Beijing, doing so carries risks to its alliances in Asia where misalignment between the US and allied views on China 'reflect differences in the degree to which countries see their economic and political futures as reliant upon productive ties with Beijing'.[113] Despite often sharing US concerns about Chinese revisionism, many allies do not necessarily want to engage in the outright strategic competition

108 Zhao, 'Revisionist stakeholder', p 653.

109 Kenneth Rapoza, 'Why is the US so ridiculously dependent on China?', *Forbes*, 30 April 2020 2.27 pm, https://www.forbes.com/sites/kenrapoza/2020/04/30/why-is-the-us-is-so-ridiculously-dependent-on-china/?sh=555b0ad056b5

110 Michael Auslin, 'Beware the Cold War trap – It's a geopolitical competition, instead', *Texas National Security Review*, 15 May 2018, https://tnsr.org/roundtable/policy-roundtable-are-the-united-states-and-china-in-a-new-cold-war/#essay2. For 2019 trade figures, see Office of the United States Trade Representative (USTD), The People's Republic of China: US–China trade facts, USTD, n.d., https://ustr.gov/countries-regions/china-mongolia-taiwan/peoples-republic-china

111 Zhaohui Wang and Jinghan Zeng, 'From economic cooperation to strategic competition: understanding the US-China trade disputes through the transformed relations', *Journal of Chinese Political Science*, February 2020, 25(1): 46–69, p 56, https://doi.org/10.1007/s11366-020-09652-0

112 Zhaohui et al., 'From economic cooperation'.

113 Lindsey W Ford, 'The Trump administration and the "free and open Indo-Pacific" ', *Brookings Institute*, May 2020, p 6, https://www.brookings.edu/research/the-trump-administration-and-the-free-and-open-indo-pacific/

embraced by the Trump and Biden administrations.[114] For example, in Australia, until quite recently it was clear that 'for all Australia's loud roaring on China' it was 'still having it both ways' by seeking to maintain its 'unbreakable' security relationship with the US while 'shoring up its economic prosperity via its largest trading partner, China' and avoiding overt subscription to a hardening US line.[115] As Morgenthau remarked, ideological appeals, when 'superimposed upon an actual community of interests, can lend strength to an alliance by marshalling moral convictions and emotional preferences to its support'; however, they may also weaken it 'by obscuring the nature and limits of the common interests which the alliance was supposed to make precise and by raising expectations, bound to be disappointed, for the extent of concerted policies and actions'.[116]

Finally, reformist and positionalist revisionism are motivated by status- and security-seeking preferences, respectively. This raises a quandary regarding policy prescriptions given the preceding analysis, which suggests that Beijing now expresses behaviours consistent with both types of revisionism, representing a potential pathway to revolutionary revisionism. One prescription for ameliorating the challenge of status-seekers is for others to acknowledge the status-seeking revisionist's contribution to international order explicitly. Here, a less adversarial and more cooperative approach to the BRI, for instance, could have perhaps acted as a salve to such status-seeking. However, such a scenario is now highly unlikely in the current context of overt Sino–US strategic competition, where Washington deems Chinese behaviour to be a challenge to the balance of power and the existing international order – that is, Beijing is judged to be simultaneously moving along a *counter-hegemonic* and *counter-order* pathway.[117]

One of the major challenges confronting US allies such as Australia in this context is what they can (or should) do to mitigate the path dependencies of the Sino–US competition from hardening into outright conflict. In this context, the trajectories of China and the US are towards more adversarial relations. It is clear

114 See, for example, Victor D Cha, 'Allied decoupling in an era of US–China strategic competition', *Chinese Journal of International Politics*, December 2020, 13(4): 509–536, https://doi.org/10.1093/cjip/poaa014; Robin Wright, 'Why Trump will never win his new cold war with China', *The New Yorker*, 29 July 2020, https://www.newyorker.com/news/our-columnists/why-trump-will-never-win-his-new-cold-war-with-china; Richard J Heydarian, 'US presses and pushes allies into new cold war', *Asia Times*, 30 May 2020, https://asiatimes.com/2020/05/us-presses-and-pushes-allies-into-new-cold-war/

115 James Curran, 'Why America's relationship with Australia revolves around its geopolitical competition with China', *The National Interest*, 17 August 2020, https://nationalinterest.org/feature/why-americas-relationship-australia-revolves-around-its-geopolitical-competition-china?page=0%2C1

116 Morgenthau, *Politics among nations*, p 178.

117 For the Biden administration's phrasing of this, see Biden, *Interim national security strategic guidance*; Joseph R Biden, *Remarks by President Biden at the 2021 Munich Security Conference*, The White House, 19 February 2021, https://www.whitehouse.gov/briefing-room/speeches-remarks/2021/02/19/remarks-by-president-biden-at-the-2021-virtual-munich-security-conference/

that China's current pathway appears to be consolidated for the foreseeable future under Xi's leadership, and there is little that external actors can do to shift the calculus that underpins it. Moreover, American actions under the Trump and Biden administrations have appeared to simply reinforce – and not weaken – China's simultaneous pursuit of reformist and positionalist revisionism. Indeed, the rhetoric and practice of the US under Trump and Biden vis-a-vis China (for example, Trump's trade war and decoupling agenda) raises a thorny dilemma for US allies because it suggests that 'Washington appears less concerned about upholding an order which could peacefully incorporate China as a superpower, and more preoccupied with reasserting its place as a regional hegemon'.[118]

While Australia may be comfortable assisting the US in such a hegemony-sustaining exercise (given the security benefits it has reaped from the US post-1945 primacy), it is unclear whether there has been sufficient consideration about the costs or risks of such an approach. This is particularly true if Australia moves beyond the regular invocations of 'perpetual mateship' in its official rhetoric about the nature of the Australia and New Zealand US Treaty and instead focuses on the key questions about any alliance: 'What interests are shared, and how can allies cooperate to achieve them?'[119] If Australia accepts that China is moving along a counter-order *and* counter-hegemonic pathway but recognises that the US is more concerned with the counter-hegemonic equation, does it serve Australia's national security interests to assist Washington in what is a hegemonic competition? That is, is Australia more concerned with ensuring the US remains the pre-eminent power in Asia or with maintaining the rules-based order? If the answer is the former (i.e., a preference for maintaining US power), then, in essence, Australia would be choosing what Ikenberry characterised as the US-led 'security hierarchy' in Asia over that of a China-led 'economic hierarchy'.[120] To date, Australia, along with many other states in the region, has benefited from this dual hierarchy; it has provided such states with 'more space for maneuvering and bargaining' because Washington and Beijing have found 'it necessary to compete for leadership' and given them 'incentives to provide better "terms" for weaker and secondary states'.[121]

Opting effectively for a balancing strategy against Beijing carries significant strategic and political risks and economic costs. Strategically, such a choice

118 Iain D Henry, 'Adapt or atrophy? The Australia–US alliance in an age of power transition', *Contemporary Politics*, 2020, 26(4): 402–419, p 413, https://doi.org/10.1080/13569775.2020.1777043

119 Henry, 'Adapt or atrophy', p 415.

120 G John Ikenberry, 'Between the eagle and the dragon: America, China, and Middle State strategies in East Asia', *Political Science Quarterly*, November 2015, 131(1): 9–43, pp 11-12, https://doi.org/10.1002/polq.12430

121 Ikenberry, 'Between the eagle', p 26.

would end the favourable situation that Australia has enjoyed for two decades of 'having its cake and eating it too' by maintaining its security alliance with the US and simultaneously deepening its economic relationship with China. Staking Australian security on the continuation of US hegemony entails enduring likely adverse economic consequences from Beijing and significantly increased alliance maintenance costs, whether in acquiring greater military capabilities to support the US forward-deployed capabilities in Asia or expectations of Australian commitments to future direct conflict with China.[122] Additionally, in an era of fractured US domestic consensus regarding the need for continued US military extension abroad, greater reliance on the US may not be prudent.[123]

Finally, such a choice would also present significant domestic political and economic challenges. In recent years, it has become something of a truism that Australia must spend more on defence, but the prospect of an overt balancing strategy against China promises to come at a significantly greater political and economic cost. The precise amount of those costs will, in part, be determined by how Australia perceives the nature of China's challenge. Conquest of Australia can be discounted out of hand even for an entirely revolutionary revisionist China due at a minimum to constraints of both geography and capability.[124] However, an Australia that directly and overtly sides with US hegemony-maintenance objectives will find itself a target of greater Chinese attention. Therefore, a core focus of Australian defence spending and investment should be those capabilities that can deter Beijing's ability for direct coercion and freedom to act against our interests. While the Morrison government has committed to a AU$270 billion ten-year investment in defence and the defence industry, including developing a 'sovereign guided weapons capability', it is doubtful whether this would be sufficient or timely enough to cope with these objectives.[125] Rather, what is needed is more serious consideration of the types of Chinese behaviour and actions Australia may have to deter in the future and to tailor Australian capabilities

122 Nick Bisely, 'Australia's American alliance and the networking of forces in East Asia', *International Politics*, April 2020, 57(2): 208–224, p 217, https://doi.org/10.1057/s41311-019-00188-6

123 For the fracturing of the US foreign policy consensus, see, for example, Michael Clarke and Anthony Ricketts, 'US grand strategy and national security: the dilemmas of primacy, decline and denial', *Australian Journal of International Affairs*, 2017, 71(5): 479–498, https://doi.org/10.1080/10357718.2017.13427; Doug Stokes, 'Trump, American hegemony and the future of the liberal international order', *International Affairs*, January 2018, 94(1): 133–150, https://doi.org/10.1093/ia/iix238; Stephen Wertheim, 'The price of primacy: why American shouldn't dominate the world', *Foreign Affairs*, March/April 2020, https://www.foreignaffairs.com/articles/afghanistan/2020-02-10/price-primacy

124 Adam Lockyer, *Australia's defence strategy: evaluating alternatives for a contested Asia*, Melbourne University Press, Carlton, 2017, p 171.

125 See Elliot Williams, 'Defence Force update highlights mismatch in risk and capability timelines', *The Canberra Times*, 1 December 2020 5.00 am, https://www.canberratimes.com.au/story/7022098/are-australias-defence-capabilities-changing-fast-enough/; Hugh White, 'Why Australia's strategic situation is far worse than we think', *Financial Review*, 6 July 2020 12.00 am, https://www.afr.com/policy/foreign-affairs/why-australia-s-strategic-situation-is-far-worse-than-we-think-20200705-p5594m

accordingly. However, this conflicts directly with the longstanding and bipartisan approach of Australian governments for a balanced force structure and the 'defence of Australia' concept.[126]

Thus, the crucial point is that China's revisionism – and US reactions to it - is pushing Australia towards making choices regarding strategy and defence policies that it has studiously avoided for the best part of two decades. Dittmer remarked in 2012 that 'the limits of hedging' in Australia's approach to China 'will be reached in two contingencies: when the target [China] becomes a genuine threat to one's own vital interests, and when the target fights one of the alliance members, particularly its leader, the US'.[127] The current trajectory of Chinese foreign policy and Sino–US relations suggests that these two contingencies may now loom in the near future.


126 See Hugh White, *How to defend Australia*, Black Inc, Carlton, 2019; Hugh White, 'Four decades of the defence of Australia: reflections on Australian defence policy over the past 40 years', in Ron Huiskens and Meredith Thatcher (eds), *History as policy: framing the debate on the future of Australia's defence policy*, ANU Press, Canberra, 2007, p 164.

127 Lowell Dittmer, 'Sino–Australian relations: a triangular perspective', *Australian Journal of Political Science*, 2012, 47(4): 661–675, p 671, https://doi.org/10.1080/10361146.2012.732207

# Future all-volunteer force: the impact of artificial intelligence on recruitment and retention strategies

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## Abstract

In the competition for military supremacy, it is often claimed that advantage will go to those who can best drive and exploit advances in artificial intelligence (AI). However, attracting and retaining suitable recruits in the age of autonomy poses additional hurdles to already complex military recruitment processes, where geopolitics, socioeconomic and cultural demographics have traditionally determined the size and skills of available recruits. We claim that the historical shift from an institutional to occupational military mindset further exacerbates the challenges posed by AI. Given this, militaries therefore must understand the effect of AI on the formation of force structures at a granular level, and devise strategies that appropriately tackle recruitment challenges. To this end, we point to new career path models and incentive programs, the need to appropriately balance public and private resources in the talent cultivation and retention cycle, the establishment and expansion of partnerships with the tertiary education, and leadership that takes culture seriously, as possible pathways to solutions. While these measures are not exhaustive, our intention here is to offer opportunities for both action and critical reflection for policymakers and researchers alike. Recruiting suitable personnel for the military occupations of the future will take time, but armed forces should avoid the mistake of being quick to overinvest in AI-enabled technology while underinvesting in preparation for the workforce that will use it.

> [T]he real 'arms race' in artificial intelligence (AI) is not military competition but the battle for talent.[1]
>
> By the middle of the 21st century, ground forces will employ tens of thousands of robots, and the decisions of human commanders will be shaped by artificial intelligence. Although the future is impossible to predict, trends in technology and warfare make this a near certainty. Military organizations must plan now for this new era of warfare.[2]

In the global competition for military supremacy, it is often claimed that advantage will go to those who possess the talent capable of driving and exploiting the unprecedented technological transformation that characterises advances in AI. However, attracting and cultivating such talent is not an easy task. It poses an additional hurdle to already complex military recruitment processes where geopolitics, socioeconomic and cultural demographics have traditionally determined the size and skills of the available pool of recruits. Moreover, we will argue that the historical shift from an institutional to occupational mindset in the military further exacerbates the recruitment challenges wrought by AI technology. To harness the latter to their benefit, militaries need to understand the impact of AI on the formation of their force structures at a granular level and devise strategies that appropriately tackle these challenges.

The debate about the impact of AI on the global job market is often problematically characterised in binary terms: some foresee limitless opportunity, while others anticipate the dislocation and disappearance of occupations.[3] However, the reality is likely to be more complex. AI will require reducing certain job activities as much as it will entail re-skilling and upskilling affected service members and creating entirely new occupational specialties. Above all, the degree to which personnel demands may either be condensed or amplified because of AI integration is contingent on the extent to which AI is used to expand capabilities and achieve efficiency gains. Moreover, assessment of the effect will largely

1 Elsa B Kania, 'China's AI talent "arms race"', *RealClearDefense*, 23 April 2018, accessed 9 September 2021. https://www.realcleardefense.com/articles/2018/04/23/chinas_ai_talent_arms_race_113358.html

2 Mick Ryan, *Human-machine teaming for future ground forces*, Center for Strategic and Budgetary Assessments, Washington DC, 2018, p 3, accessed 9 September 2021. https://csbaonline.org/uploads/documents/Human_Machine_Teaming_FinalFormat.pdf

3 See World Economic Forum, *The future of jobs: employment, skills and workforce strategy for the fourth industrial revolution*, World Economic Forum, Cologny, January 2016, p v, http://www3.weforum.org/docs/WEF_Future_of_Jobs.pdf; see also Erin Winick, 'Every study we could find on what automation will do to jobs, in one chart', *MIT Technology Review*, 25 January 2018. https://www.technologyreview.com/2018/01/25/146020/every-study-we-could-find-on-what-automation-will-do-to-jobs-in-one-chart/.

depend on the industry, region and occupation in question as much as the ability of relevant stakeholders to manage change.[4]

Numerous studies have investigated the impact of AI and disruptive dual-use technologies on the civilian sector.[5] Yet, hardly any detailed inquiry into the ramifications of the AI use for military workforce design, recruitment and retention strategies exist to date, despite growing calls regarding the need to prepare for the changing talent supply and demand.[6] Moreover, debates about military AI rarely account for the role of culture in informing the social acceptability of technology, even though human-factors research, for instance, shows that militaries gain limited utility from advanced AI-enabled technology if soldiers do not want to deploy it, deploy it incorrectly or succumb to their own biases when using it.

This paper seeks to address this gap in the literature and further the emerging discussion on the influence of AI on the design of future armed forces. As AI is likely to continue shaping and redefining career path models both within and beyond the military, we argue that attracting and retaining suitably skilled and qualified personnel will likely become more competitive and potentially

4 World Economic Forum, *The future of jobs*, p v; see also Mark Muro, Robert Maxim and Jacob Whiton, *Automation and artificial intelligence: how machines are affecting people and places*, Brookings, Washington DC, 2019, p 5. https://www.brookings.edu/wp-content/uploads/2019/01/2019.01_BrookingsMetro_Automation-AI_Report_Muro-Maxim-Whiton-FINAL-version.pdf

5 See, for example, Muro, Maxim and Whiton, *Automation and artificial intelligence*; World Economic Forum, *The future of jobs*; Justine Brown et al., *Workforce of the future: the competing forces shaping 2030*, PricewaterhouseCoopers, United Kingdom, 2017. https://www.pwc.com/gx/en/services/people-organisation/publications/workforce-of-the-future/workforce-of-the-future--the-red-world-in-2030.html

6 See, for example, Ministry of Defence (MoD), *Mobilising, modernising & transforming defence: a report on the modernising Defence programme*, MoD, United Kingdom, 7 March 2018, p 23. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/765879/ModernisingDefenceProgramme_report_2018_FINAL.pdf. See the Australian Army robotic and autonomous systems strategy where it says: 'To ensure Army can maintain a capability advantage and meet future threats, we must start thinking about how Army can best use [Robotic and Autonomous Systems] RAS capabilities, determine what human-machine teaming could look and operate like, and consider how we could operate with and alongside machines'. It further adds the very unambitious / cautious statement: 'In addition to exploring what RAS capabilities can offer, [the] Army needs to consider what changes will need to occur to doctrine, concepts and force design to support the use of RAS capabilities.' Australian Army, *Robotic & autonomous systems strategy*, October 2018, p 2, https://researchcentre.army.gov.au/sites/default/files/2020-03/robototic_autonomous_systems_strategy.pdf [2.38 MB]. See also: 'As automation and AI allow civilian business leaders to place humans in different kinds of work, so too will military personnel planners be forced to think anew about the recruiting and employment opportunities of a new global workforce approach.' Ryan, *Human-machine teaming for future ground forces*, p 9, accessed 9 September 2021.

unsustainable in the long term,[7] unless and until military forces appropriately adapt by implementing innovative strategies, with the view to attract, re-skill, upskill and retain recruits. While the exact measures will vary from one state to the next, a few measures to consider include devising new career path models and incentive programs, appropriately balancing public and private resources in the talent cultivation and retention cycle, and establishing and expanding partnerships with the tertiary education sector. This process should be spearheaded by leadership that understands the vast spectrum of AI-based technology (for example, the opportunities and risks of any given technology) and its limitations. Attention to culture – at both the micro level of individual attitudes and at the macro-organisational level, more broadly – offers a way to reflect an awareness of the limitations and demonstrate innovative leadership strategies that are responsive to the times and soldiers' needs, values and experiences.

In what follows, we first discuss the ongoing automation of tasks – now increasingly facilitated by AI – in both combat and non-combat roles and address its ramifications for military occupational specialties. In the next step, we turn to the recruitment challenges all-volunteer forces (AVFs) face, both independent of and contingent on technological advancements. We then analyse the ramifications of technological transformation for recruitment and retention policies and suggest a non-exhaustive set of measures aiming to assist militaries in adjusting to the demands of future force design.

## The implications of autonomy on future force structuring

Automation, including computational processes underpinned by AI, fundamentally serves to substitute or supplement human labour with work activities performed by machines to increase the quality and quantity of output at a lesser cost per unit.[8]

7 Global competition for people with core skills in the development and maintenance of AI systems is intense, with suggestions that there might be 'about 300,000 AI professionals worldwide, but millions of roles available'. See Bernard Marr, 'The AI skills crisis and how to close the gap', *Forbes*, 25 June 2018, https://www.forbes.com/sites/bernardmarr/2018/06/25/the-ai-skills-crisis-and-how-to-close-the-gap/. Salaries for engineers in fields relating to AI are among the highest on offer, albeit mostly in major technological centres. See Andy Patrizio, 'Artificial intelligence salaries: paychecks heading skyward', *Datamation*, last modified 28 August 2018, https://www.datamation.com/artificial-intelligence/ai-salaries.html. Demand appears to be increasing, too, as AI capabilities expand, new applications in new industries become possible and more organisations seek to integrate AI into their operations. Nor is that growing demand limited to engineers and scientists working directly on AI systems; technologically competent personnel are in increasingly short supply in many associated job roles. See Claretha Hughes, Lionel Robert, Kristin Frady and Adam Arroyos, *Managing technology and middle- and low-skilled employees: advances for economic regeneration*, Emerald Group Publishing, 2019. Conversely, supply of qualified personnel cannot increase quickly enough to keep pace with demand. The rapid rate of innovation in AI and its increasing number of applications, compared to the years of education, training and experience it takes to produce suitably qualified personnel, seem to ensure that competition for people with desirable skill sets will remain strong for the foreseeable future.

8 Muro, Maxim and Whiton, *Automation and artificial intelligence*, p 13.

Automation of military technology and its support systems have accompanied the lives of armed forces for over a century. However, recent developments in AI bring advances in computing and automation to yet another qualitative level. Growing reliance on machine learning (ML) systems, for instance, means that these decision support tools for human-machine teams are synthesising more information than ever with unprecedented levels of speed. This paper considers 'AI' the progression on the spectrum of autonomous capabilities.[9] Both 'autonomy' and 'AI' are understood here as technological capabilities that enable a human-machine system to make decisions and accomplish a given mission with a lesser level of human supervision or intervention. Therefore, in the remainder of this paper, references to 'autonomy' include technologies underpinned by AI, and 'AI technologies' or 'AI systems' imply a subcategory of autonomous technologies, namely, ML systems.

Despite concerns raised in some circles that machine advancements will destroy jobs,[10] the impact of autonomy on the occupational market across private and governmental sectors is likely to be more nuanced. Any professional occupation involves the execution of a bundle of interrelated tasks. Some of those tasks can only be completed by humans (for example, a midwife's duties), while others are better assisted by or performed entirely by machines (for example, air and missile defence missions). Increasingly autonomous technologies are being integrated into how we conceptualise and structure labour across military and non-military domains. Yet numerous studies suggest that it is unlikely that they will be able to

9 Despite many rigorous attempts, pinning down the essence of 'autonomy' and 'AI' has proven to be a daunting undertaking, as different disciplines suggest their nuanced approaches to the notions. These approaches are often reflective of the conceptual thinking at a given period in time, and therefore evolve with the changes in time and perspective. However, it is largely agreed that 'autonomy' generally stands for some form of self-governance, while 'AI' alludes to a machine imitation of human intelligence. The latter has been explained through juxtaposition with (autonomous) deterministic systems. Deterministic systems operate on the principle that any given 'x' input is meant to provide 'y' output. In contrast, AI represents technology with self-learning capacity. The 'knowledge' of AI systems is not programmed by humans. Rather, these systems 'learn' from data and, thus, to a large extent are programming themselves. The advantage of AI systems compared to traditional programming is that the human does not need to explicitly define both a problem and a solution; instead, the system is designed to improve its knowledge through experience. See Natalia Jevglevskaja and Rain Liivoja, 'The better instincts of humanity: humanitarian arguments in defense of international arms control' in Jai Galliott, Jens David Ohlin and Duncan Macintosh (eds) *Lethal autonomous weapons*, Oxford University Press, Oxford, 2021. https://global.oup.com/academic/product/lethal-autonomous-weapons-9780197546048?cc=us&lang=en&# See also Brian K Hall, 'Autonomous weapons systems safety', *Joint Force Quarterly*, 3rd Quarter 2017, 86(3): 87. https://ndupress.ndu.edu/Portals/68/Documents/jfq/jfq-86/jfq-86_86-93_Hall.pdf

10 Indeed, it is often feared that because of increasing automation and adoption of AI capabilities the value of an individual to the organisation will be deprioritised. For example, by 2050, the UK MoD Development, Concepts and Doctrine Centre expects 'a shift in the balance between the components of fighting power with increased use of machines in many combat functions previously performed by humans'. See MoD, *Global strategic trends: the future starts today*, MoD, United Kingdom, 2018, p 14. https://www.gov.uk/government/publications/global-strategic-trends. See also Gregory C Allen, 'Understanding China's AI strategy', *Centre for a New American Security*, 6 February 2019. https://www.cnas.org/publications/reports/understanding-chinas-ai-strategy

substitute for *all* tasks in any one occupation, in the armed forces or otherwise;[11] the need for human labour *in some form* will persist.[12]

Against this background, the foremost objective for the armed forces will be to discern how increasing reliance on AI is likely to reshape the demand for human skills in any given role across military services. In what follows, we first examine the anticipated impact of automation on combat roles before turning to the effects of automation on non-combat activities, recognising the interdependencies and cross-pollination between each category.

## Autonomy in combat

Autonomy provides opportunities to remove soldiers from 'dull, dirty or dangerous' tasks, such as clearing improvised explosive devices; detecting chemical, biological, radiological and nuclear material; and handling of other hazardous materials.[13] Still, the most visible (and most controversial) military application of autonomy is arguably its use in weapon systems, which serves to overcome many operational challenges associated with manned weapon systems. Some of the key operational advantages lie in the possibility of deploying military force with greater agility, precision, persistence, reach, coordination and mass while

11 Muro, Maxim and Whiton, *Automation and Artificial Intelligence*, p 14. See also Melanie Arntz, Terry Gregory and Ulrich Zierahn, 'The risk of automation for jobs in OECD countries: a comparative analysis', *OECD Social, Employment and Migration Working Papers*, 2016, https://doi.org/10.1787/1815199X; James Manyika et al., *A future that works: automation, employment, and productivity*, McKinsey Global Institute, San Francisco, 2017. https://www.mckinsey.com/~/media/mckinsey/featured%20insights/Digital%20Disruption/Harnessing%20automation%20for%20a%20future%20that%20works/MGI-A-future-that-works-Executive-summary.ashx

12 See, for example, Major General Mick Ryan (Australian Army) who, reflecting on the continuously changing nature of warfare, presumed that: a highly capable and sustainable land combat battlegroup in 2030 may consist of as few as 250–300 human soldiers and several thousand robotic systems of various sizes and functions. By the same token, many functions of artillery and combat engineer units, currently undertaken by humans, might be better done by robots in human-robot teams. This has the potential to reduce the size of these types of units by hundreds of combat arms personnel. This approach could free up personnel for redeployment into areas where the art of war demands leadership and creativity-enabling intelligence functions; training and education; planning; and, most importantly, command and leadership. Ryan, *Human-machine teaming for future ground forces*, p 20. See also Den Sabbagh, 'Robot soldiers could make up quarter of British Army by 2030s', *The Guardian*, 8 November 2020. https://www.theguardian.com/uk-news/2020/nov/08/third-world-war-a-risk-in-wake-of-covid-pandemic-says-uk-defence-chief?utm_term=Autofeed&CMP=soc_568&utm_medium=Social&utm_source=Twitter#Echobox=1604827319

13 For example, militaries increasingly rely on explosive devices with self-deactivating or self-destruction mechanisms or deploy systems that autonomously perform land or naval mine hunting and clearance. See David B Larter, 'US Navy makes a major breakthrough in autonomous weaponry', *Defense News*, 10 September 2019. https://www.defensenews.com/digital-show-dailies/dsei/2019/09/10/the-us-navy-just-had-a-major-breakthrough-with-autonomous-weapons/ See also, for example, SCIRO Data 61, 'Autonomous ground vehicle for landmine clearance – phase 1 completed', *SCIRO Data 61 News*, 2 June 2020. https://research.csiro.au/robotics/autonomous-ground-vehicle-for-landmine-clearance-phase-1-completed/; Melanie Rovery, 'Robots assist Libyan EOD teams', *Janes Defence News*, 15 June 2020. https://www.janes.com/defence-news/news-detail/robots-assist-libyan-eod-teams

keeping humans out of dangers associated with active combat.[14] Above all, autonomous decision-making capabilities allow operational decisions to be made in circumstances and at speeds that would not otherwise be achievable by a human operator. It is this logic that has, for example, led to the installation of close-in weapon systems on naval vessels to defend against incoming anti-ship missiles.[15] However, most agree that current and prospective technology should serve as 'decision supports', not decision-makers.[16] Be it the Automatic Ground Collision Avoidance System[17] or a more sophisticated 'wingman',[18] the purpose is, thus, not to replace humans but to provide a computerised co-worker.

Admittedly, with the advancements of, for example, swarm technologies,[19] the very purpose of which is to let one operator control multiple systems, a certain decline in overall numbers of operators may legitimately be anticipated. The need for human deminers or manned minesweepers is also likely to decline in the future. Naval systems, which are becoming increasingly automated, allowing for reduced crew sizes, serve as another case in point.[20] Even so, it is projected that human-crewed (weapons) platforms will stay in operation for

14 Vincent Boulanin and Maaike Verbruggen, *Mapping the developments in autonomy,* SIPRI, Stockholm, 2017, p 61. https://www.sipri.org/sites/default/files/2017-11/siprireport_mapping_the_development_of_autonomy_in_weapon_systems_1117_1.pdf

15 Damian Copeland and Luke Reynoldson, 'How to avoid "summoning the demon": The legal review of weapons with artificial intelligence', *Pandora's Box*, 2017: 99–100; Michael C Horowitz, 'When speed kills: lethal autonomous weapon systems, deterrence and stability', *Journal of Strategic Studies*, 2019, 42(6): 768.

16 As Scharre observes, '[e]ven as autonomous systems play an increasing role on the battlefield, it is still humans who fight wars, only with different weapons'. Technology, thus, is meant to '*help* humans fight as it has since the invention of the sling, the spear, the bow and arrow'. Paul D Scharre, 'The opportunity and challenge of autonomous systems', in Andrew P Williams and Paul D Scharre (eds), *Autonomous systems: issues for defence policymakers*, NATO Communications and Information Agency, Norfolk, The Hague, 2015, p 10. https://www.act.nato.int/images/stories/media/capdev/capdev_02.pdf; See also: '[I]t is expected that the human will remain at the heart of decision-making', Australian Army, *Robotic & autonomous systems strategy*, p 21. Further the US Army strategy states: 'The Army seeks to maintain human control over all autonomous systems. It will achieve this goal by keeping humans "in-the-loop or on-the-loop" of current and future RAS.' US Army, *The US Army robotic and autonomous systems strategy*, US Army Training and Doctrine Command, Fort Eustis VA, 2017, p 3.

17 Nhut Ho et al., 'A longitudinal field study of auto-GCAS acceptance and trust: first-year results and implications', *Journal of Cognitive Engineering and Decision Making*, September 2017, 11(3): 239–251. See also Naval Research Advisory Committee, *Autonomous and Unmanned Systems*, NRAC, 2017, pp 10–11. https://www.hsdl.org/?abstract&did=807760

18 Sydney J Freedberg Jr, 'DARPA, Army test optionally manned helicopter (It's not AI)', *Breaking Defense*, 29 October 2018. https://breakingdefense.com/2018/10/darpa-army-test-optionally-manned-helicopter-its-not-ai/

19 See Scharre: '[M]ilitaries will be able to shift from today's remote-control paradigm in which one person controls one vehicle, to a swarm paradigm, in which one person controls many vehicles at the mission level'. Scharre, 'The opportunity and challenge of autonomous systems', p 4.

20 Robert Barb, 'New generation Navy: personnel and training – the way forward', in Gregory P Gilbert and Nick Stewart (eds), *Papers in Australian Maritime Affairs No. 27*, Sea Power Centre, Department of Defence, Canberra, 2008, p 68, https://www.navy.gov.au/sites/default/files/documents/PIAMA27.pdf [PDF]

some decades to come[21] and will require at least some minimal or optional manning.[22] Restated, the purpose of ceding certain tasks to machines remains foremost to enhance human-machine mission effectiveness, such that soldiers' labour becomes reconfigured and re-spacialised, protecting them from the risks of the frontlines.

### Autonomy in non-combat functions

While the nature of combat has changed through the advent of increasingly sophisticated autonomous weapons technology, it is more routine non-combat processes where advances in AI – specifically, ML – offer further and significant near-term benefits for armed forces.[23] Consider the area of ***cybersecurity and cyber defence***, where safety and resilience of defence networks and systems and the capacity to identify, analyse and neutralise threats are of paramount importance. Advancements in ML help overcome the shortfalls of traditional cyber security tools by making it possible to set up self-configuring networks, where software code vulnerabilities (i.e., software bugs) or malware are detected at machine speed and autonomously responded to, for example, through self-patching or counterattacks.[24] This allows cybersecurity personnel to redirect their focus to improving overall risk posture through engineering and architecture or remediation activities.[25]

21 Marcus Hellyer, *Accelerating autonomy: autonomous systems and the Tiger helicopter replacement*, Australian Strategic Policy Centre (ASPI), December 2019, p 19. https://www.aspi.org.au/report/accelerating-autonomy-autonomous-systems-and-tiger-helicopter-replacement

22 For example, minimally manned vessels will have a small crew maintaining key propulsion systems, while sensors and weapons will function largely autonomously with the human remaining 'in the loop'. See Hellyer, *Accelerating autonomy*.

23 Certainly, combat and non-combat domains are not mutually exclusive. However, for our purposes, we treat them as analytically distinct as a means to better understand the specific effect of automation in each realm, while maintaining and acknowledging their interdependencies. See, for example, The United States Air Force (USAF), *The United States Air Force artificial intelligence annex to the Department of Defense Artificial Intelligence Strategy*, USAF, 2019, Focus Area 4: 'repurpose the warfighter to focus on more complex tasks which require critical thinking'.
https://www.af.mil/Portals/1/documents/5/USAF-AI-Annex-to-DoD-AI-Strategy.pdf

24 This ultimately reduces the probability of human error and furthers network resilience, prevention and protection against cyber threats. See Michael Sulmeyer and Kathryn Dura, 'Beyond killer robots: how artificial intelligence can improve resilience in cyber space', *War on the Rocks*, 6 September 2018, https://warontherocks.com/2018/09/beyond-killer-robots-how-artificial-intelligence-can-improve-resilience-in-cyber-space/; Salvador Llopis Sanchez, 'Artificial intelligence (AI) enabled cyber defence', *European Defence Matters*, n.d., https://www.eda.europa.eu/webzine/issue14/cover-story/artificial-intelligence-(ai)-enabled-cyber-defence; Justin Lynch, 'The Army wants to use AI to prevent cyberattacks', *Fifth Domain*, 22 January 2019, https://www.fifthdomain.com/dod/2019/01/22/the-army-wants-to-use-ai-to-prevent-cyberattacks/. The increasing adoption of machine learning constitutes one of the key emerging trends in the global military cybersecurity market; see 'Global military cybersecurity market 2019–2023 | High adoption of artificial intelligence and machine learning to boost growth | Technavio', *Businesswire*, 28 November 2018.
https://www.businesswire.com/news/home/20181128005557/en/

25 Darren Death, 'Is cybersecurity automation the future?', *Forbes*, 20 August 2019. https://www.forbes.com/sites/forbestechcouncil/2019/08/20/is-cybersecurity-automation-the-future/#172f1cff589c

ML is also visibly transforming ***data synthesis and analysis*** practices. The Australian Department of Defence, for example, has ordered a customised version of the IBM Watson platform[26] to perform mission assessment.[27] Such advances in data analysis could extend to the area of predictive analytics. The concept of 'predictive maintenance', for instance, is currently being trialled by Uptake Technologies for several Bradley M2A3 combat vehicles.[28] The intended purpose is to move from the conventional 'scheduled maintenance' approach to processes where the system monitors and analyses data collected from the sensors and telematics, forecasting the failure of the vehicle or its parts during active operations.[29]

***Transportation, logistics and supply*** stand to benefit most immediately from advances in ML.[30] Managing the defence supply chain is a herculean task. ML-enabled software can help to ease this burden by, for example, tracking the supply delivery and providing real-time data support to units who have put in orders reducing the requirement to monitor, forecast, audit and manage requests.[31] That said, current work on ground vehicles with autonomous leader-follower capabilities is likely to count to most tangible and sophisticated ML applications. Humans who have to move supplies around remain the greatest vulnerability of the logistics system, with convoys repeatedly suffering heavy casualties to roadside bombs and other dangers of active combat.[32] Software

26 With the demonstrated capability to process 40 million documents in 16 seconds, the system reviews information on past deployments suggesting a course of action for similar future operations in similar environments. In use across all services, Watson also offers weapons performance analysis saving effort in calculating velocity, trajectories, effect of environmental or anticipated external factors as well as other relevant performance parameters.

27 Asha Barbaschow, 'How Australia's Department of Defence is using IBM Watson', *ZDNet*, 16 May 2018. https://www.zdnet.com/article/how-australias-department-of-defence-is-using-ibm-watson/

28 See, Sydney J Freedberg Jr, 'AI logistics let combat units move faster: Uptake's DIUX Contract', *Breaking Defense*, 27 June 2018. https://breakingdefense.com/2018/06/ai-logistics-can-speed-up-army-tanks-uptakes-diux-contract/ Likewise, the US Army's Logistics Support Activity signed a $135 million contract with IBM in 2017 to deploy Watson's predictive analytical capability to diagnose the health and readiness of its military equipment; see IBM, 'Army Re-Ups with IBM for $135 million in cloud services', *IBM News Room*, 6 September 2017. https://newsroom.ibm.com/2017-09-06-Army-Re-Ups-with-IBM-for-135-Million-in-Cloud-Services?lnk=hmhm

29 See Sonja Jordan, 'Army investing in predictive maintenance for Bradleys', *National Defense*, 26 September 2018. https://www.nationaldefensemagazine.org/articles/2018/9/26/army-investing-in-predictive-maintenance-for-bradleys

30 Christian H Heller, 'The future Navy – near-term applications of artificial intelligence', *Naval War College Review*, Autumn 2019, 72 (4): 84.

31 An automated fuel management system, for instance, could transmit data on how long a given unit could keep operating on its current fuel supplies and what resupply was available and where. See Sydney J Freedberg Jr, 'No more iron mountains', *Breaking Defense*, 3 May 2017, https://breakingdefense.com/2017/05/no-more-iron-mountains-streamlined-logistics-key-to-multi-domain-battle/; Sameer Pandey, 'Opportunities to use artificial intelligence in Army logistics', US Army, 22 January 2019. https://www.army.mil/article/216389/opportunities_to_use_artificial_intelligence_in_army_logistics

32 Freedberg, 'No more iron mountains'.

enables supply trucks to use sensors to follow a manually operated lead vehicle, helping to minimise casualties while sustaining overall war efforts.

Finally, ***administration*** stands to benefit too. Many commercial sector businesses use ML applications to support internal functions and processes such as contract and budget management, customer support and feedback, report writing and so on. In the military, this could aid in processing command check-ins and checkouts, executing searches, creating policies and orders, disseminating reports and authorising travel.[33]

## What to make of it?

This brief overview of the uses of AI in the military is certainly not exhaustive. It shows, however, that at least some concerns about increasing automation of technology are unfounded. The belief that automation can substitute for humans is grounded on the assumption that human and machine capabilities are directly comparable, whereas the examples above show that they are rather complementary.[34] In a military context, machines will remain critical for activities that require the assimilation and processing of increasingly significant amounts of data, while humans remain vital for understanding context and evaluating consequences. The near-term advantages of autonomous capabilities are, thus, set to augment human decision-making in the first instance while freeing up the workforce for higher-order assignments involving human ingenuity and imagination, strategic critical thinking and cross-contextual adaptation.[35] Operators now assume the additional role of monitoring and coordinating the technology[36] such that 'when automation "takes over," human operators

33 Heller, 'The future Navy', pp 79–81.

34 Robert R. Hoffmann et al., 'Myths of automation and their implications for military procurement', *Bulletin of the Atomic Scientists*, 2018, 74(4): 256. https://doi.org/10.1080/00963402.2018.1486615

35 See also: 'The consensus among our interview subjects with technical backgrounds was that enterprise AI is closer to deployment than is mission-support AI, with operational AI the furthest out.' Tarraf et al., *The Department of Defense posture for artificial intelligence*, RAND, Santa Monica, 2019, p 99; See also Benjamin Jensen, Scott Cuomo and Chris Whyte, 'Wargaming with Athena: how to make militaries smarter, faster, and more efficient with artificial intelligence', *War on the Rocks*, 5 June 2018. https://warontherocks.com/2018/06/wargaming-with-athena-how-to-make-militaries-smarter-faster-and-more-efficient-with-artificial-intelligence/

36 World Economic Forum, *The future of jobs*, p 3; Hoffmann et al., 'Myths of automation', p 255.

– instead of having fewer things to do – have new things to do'.[37] Crucially, research shows that automation in the past 30 years delivered more jobs to national economies than it destroyed. Experts predict that by 2030 about eight to nine per cent more occupations will emerge on the market that do not exist today.[38]

Against this background, and as autonomy (underpinned by AI) is integrated into military formations, it is fair to anticipate the need for a sufficiently sized and talented workforce that understands its nature and specifics. It is also safe to assume that as constantly evolving autonomous capabilities continue to be applied to an ever-expanding range of activities, the boundary between the tasks that humans perform and those machines perform will stay both permeable and evolutionary.[39] Where autonomy is understood to be a technological capability that enables a human-machine system to accomplish a given mission with a certain level of human involvement, the challenge lies in finding the right balance between making it possible to efficiently leverage the machine capabilities while simultaneously allowing humans to do what they do best and adequately prepare them for that.[40]

Before turning to the question of what type of recruit is preferred to operate and oversee increasingly more sophisticated technology, it is imperative to consider the complex nature of recruitment. Thus, in the next section, we will argue that today, two interrelated phenomena increasingly burden recruitment and retainment strategies. On the one hand, there is the problem of the nature of AI technology itself and the demands of securing professionals with

37 Consider, for example, the rapid uptake of unmanned aerial vehicles (UAVs) that have certain autonomous capabilities, such as take-off and landing or loitering over a geographical area for extended periods of time. The introduction of UAVs in the armed forces was accompanied by programs allowing military and civilian pilots to retrain to UAV operators. It equally raised demand for personnel to perform a range of associated tasks such as analysing intelligence, surveillance and reconnaissance data gathered by these systems. However, today AI is increasingly playing a larger role in the analysis of intelligence, surveillance and reconnaissance data. See Mick Ryan on this, 'In 1913, there was no such category as "tank crewman", but there were many horse-mounted cavalrymen. In 1945, we did not imagine "cyber warriors" as a core military capability. There will be future personnel categories we probably have not yet imagined that we will need to thrive in the digital age.' Mick Ryan, 'Intellectual preparation for future war: how artificial intelligence will change professional military education', War on the Rocks, 3 July 2018, https://warontherocks.com/2018/07/intellectual-preparation-for-future-war-how-artificial-intelligence-will-change-professional-military-education/. See also Hoffmann et al., 'Myths of automation', p 255; and also Muro, Maxim and Whiton: 'Historically, workplace substitution by machines has freed up humans to focus on higher-value tasks or to create new ones.' Muro, Maxim and Whiton *Automation and artificial intelligence,* p 13.

38 Muro, Maxim and Whiton, *Automation and artificial intelligence*, p 11; Peter Gumbel, Michael Chui and Susan Lund, 'How will automation affect jobs, skills, and wages?' [Podcast], McKinsey Global Institute, recorded 23 March 2018, transcript available at https://www.mckinsey.com/featured-insights/future-of-work/how-will-automation-affect-jobs-skills-and-wages

39 Muro, Maxim and Whiton, *Automation and artificial intelligence*, p 14.

40 As Scharre points out, humans and machines excel at different tasks and 'the best model will invariably be a blend of the two'. Scharre, 'The opportunity and challenge of autonomous systems', p 5.

appropriate training and expertise in the main sub-fields pertinent to AI. On the other hand, there is the notion of the occupational military. If we accept that the military is now defined by its occupational status (rather than institutional) then this paradoxically, as we will show below, compels such professionals to seek employment opportunities *outside* the military.

## Military recruitment

For most nations, ongoing military recruitment is an activity that, to varying degrees, relies on AVFs. Recruitment, as a formal mechanism by which militaries persuade and enlist their personnel, signals, in part, the government's commitment to utilising military force as a means to guarantee the safety of its people from external but also, when required, internal threats.[41] Given that having the right personnel, appropriately trained for critical positions, is the essential prerequisite of success in military operations, if the services fail to recruit whom they need, the overall force posture may be questioned, military readiness is potentially threatened, and national defence is ultimately compromised.[42] Recruitment is a challenge in the best of times. As will be shown below, the increasing reliance on AI-enabled technologies in the context of the occupational military exacerbates this, giving rise to distinct problems.

The many recurring obstacles that recruitment services have faced over the years are shaped by factors that lie both within and beyond the influence sphere of respective services.[43] Factors that commonly fall *within* the control sphere of armed forces are foremost resourcing, including the number and quality of incentives offered to recruiters and marketing research and advertising.[44] Militaries must actively shape their efforts to attract the workforce they need. As US Army General Thurman pithily stated: 'The military may be called an "all-volunteer force," but it really is an all-recruited force'.[45] Thus, sensible recruitment policy and practice, which must be curated with the populations in mind that are primarily targeted, is essential in presenting the military as a desirable career path for potential recruits. Simultaneously, recruitment strategies must be responsive

41 Matthew F Rech, 'Recruitment, counter-recruitment and critical military studies', *Global Discourse*, 2014, 4(2–3): 245. https://doi.org/10.1080/23269995.2014.909243

42 Curtis Gilroy, Elizabeth Clelan, Josh Horvath and Christopher Gonzales, *The all-volunteer force and the need for sustained investment in recruiting*, Center for Naval Analyses, Arlington VA, April 2020, p 1, https://www.cna.org/CNA_files/PDF/DRM-2019-U-022349-1Rev.pdf

43 On militaries in Europe and North America missing their recruiting and staffing goals, see data provided by Peter Geluk, Matthew Schlueter, Troy Thomas and Silvio Erkens, *Fixing the talent gap in armed forces worldwide*, Boston Consulting Group, 28 January 2020. https://www.bcg.com/publications/2020/fixing-talent-gap-armed-forces-worldwide

44 Gilroy et al., *The all-volunteer force,* p 6.

45 Gilroy et al., *The all-volunteer force,* p 9.

to shifting processes (both sociopolitical and technological) that surpass, but in turn undoubtedly affect, the localised cultures of individual services.

Factors *beyond* the control of military leadership are many and largely environmental in nature. They include the state of the civilian and global economy and geopolitical situation, particularly the extent of military engagements abroad and 'at home'. There is often a distinct correlation between the percentage of successful enlistments and the overall youth unemployment rate at a given time. Meeting the numerical targets is easier for recruiters in periods of high unemployment in the civilian sector when hiring rates drop and jobs become highly competitive.[46] Besides, private businesses can adjust to changes in the economic climate by expanding or contracting when necessary. While increasingly utilising private military and security corporations to supplement weakening state armies,[47] militaries need to maintain a recruiting presence at any time, as the demand for national defence is traditionally thought to be independent of fluctuations in the economy.[48] To sustain the structures of existing forces, annual enlistments must equal annual separations.[49]

Further, military engagements in overseas counterinsurgency wars and counterterrorism operations have historically negatively affected recruiting processes and will likely continue to do so in the future. Equally important are the size and characteristics of the youth population, their post-secondary education aspirations and youth influencers.[50] The pool of potentially suitable recruits is increasingly being lost to rising levels of obesity and mental health diagnosis, the general ageing of the population or past criminal convictions.[51] Apart from the issue of demographics, businesses in the private sector are not the only competitors of recruitment services. Tertiary education providers, too, are likely to win over potential recruits: the increasing growth in college and university enrolment has been one of the most significant trends in the youth populace.[52]

46 Gilroy et al., *The all-volunteer force*, p 12. See also Siobhan Heanue, 'Defence recruiting soars as Australians look for work amid downturn', *ABC News*, 4 July 2020. https://www.abc.net.au/news/2020-07-04/adf-recruiting-soars-as-unemployment-rises-under-covid19/12419240

47 Sean McFate, *Mercenaries and war: understanding private armies today,* National Defense University Press, Washington DC, 2019. https://ndupress.ndu.edu/Portals/68/Documents/strat-monograph/mercenaries-and-war.pdf; Peter W Singer, *Corporate warriors: The rise of the privatized military industry*, Cornell University Press, Ithaca, 2003.

48 Gilroy et al., *The all-volunteer force*, p 14.

49 As a rule, the more personnel leaving in any given year, the harder the recruiting services must work to make up the difference. Gilroy et al., *The all-volunteer force*, p 1.

50 Gilroy et al., *The all-volunteer force*, p 6.

51 See MoD, *Global strategic trends*, p 11, p 58, p 66.

52 In the US, for example, it has been observed that the percentage of high school graduates or those with equivalent credentials enrolling in college has grown from 49 per cent in 1980 to 66 per cent in 2017. See Gilroy et al., *The all-volunteer force*, 14.

Besides, youth willingness to enlist is affected by recruiters with whom they interact to no lesser degree than their personal background, such as veteran family members serving as role models for future recruits.[53]

Crucially, today's technological innovation, underpinned by AI, progressively exacerbates existing challenges. Increasing technological change inevitably mediates who recruitment targets are. The central dilemma posed by technological innovation can be thought of in terms of establishing the appropriate balance between selecting people based on their physicality and combat readiness (as traditionally understood) in contrast to selection based on skills and abilities pertaining to those domains that are more cerebral in nature. To be sure, these categories are not purely distinct, and soldiers and other service members have always relied on and have been required to understand technology to some extent. Yet, given that conflict is increasingly influenced by combat 'unmanning' and the congruent desire for risk-averse high-technology warfare, it can be safely assumed that technological knowledge is now of equal if not greater importance than physical fitness.

The increasing shift to an 'occupational mindset' poses another hurdle to attracting and retaining talented personnel. Military sociologist Charles Moskos identified this shift in the 1970s. Moskos, Balint and Dobos demonstrate that while the military is traditionally thought of as an institution, wherein members see themselves as transcending individual self-interest, the military is now subjected to the corporatised business logic and models of most occupational organisations operating in a globalised, neoliberal era.[54] The effect of this is that the marketplace, and other neoliberal signifiers of capitalist accumulation, dictate how soldiers conceptualise their labour, namely, as 'just another job'. This would explain how and why 'recruitment campaigns increasingly emphasise monetary inducements and concessions, and broader career advantages, rather than duty, honor, and patriotism'.[55] One consequence of the occupational shift is that 'the soldier who thinks like a rational, self-maximising actor is unlikely to show loyalty when civilian jobs within their reach offer more attractive remuneration packages'.[56] Indeed, attracting suitably skilled personnel to work in automation and AI for military purposes is likely to become an unaffordable undertaking

53 For example, one study found that the decline in the number of veterans between 1987 and 1997 resulted in 19 per cent decline in enlistment. See John T Warner, Curtis J Simon and Deborah M Payne, *Enlistment supply in the 1990s: a study of the Navy college fund and other enlistment incentive programs*, April 2001, p 43. https://apps.dtic.mil/dtic/tr/fulltext/u2/a390845.pdf

54 Peter Balint and Ned Dobos, 'Perpetuating the military myth – why the psychology of the 2014 Australian Defence pay deal is irrelevant', *Australian Journal of Public Administration*, 2015, 74(3). https://doi.org/10.1111/1467-8500.12161

55 Dobos, 'Perpetuating the military myth', p 360.

56 Dobos, 'Perpetuating the military myth', p 361.

due to significantly higher salaries offered for the same set of skills in the private sector.[57] Civilian organisations, particularly large technology companies, enjoy considerable advantages in their ability to attract AI talent in terms of the salaries they can pay and the lifestyle options they offer.

In pursuit of a loyal, technologically sophisticated workforce that can accomplish its missions cooperatively and effectively, devising successful strategies appropriately reflective of existing human capital is, thus, imperative. It is these strategies that we focus our attention on next.

## Ramifications for recruitment strategies

If institutions are to use AI effectively, they will need informed personnel capable of utilising these technologies intelligently. As shown above,[58] AVFs will face a persistent need for human labour characterised and redefined by the skills required to oversee the operation of autonomous technologies rather than the skills inherent to the end task being performed. The question that arises is what the ideal future recruit looks like. We may imagine what their labour looks like in relation to AI-enabled technological systems, to what extent individual soldiers are responsible for operating or overseeing systems and how this reconfigures command and control architecture, for instance.

### 'The ideal soldier'

To begin with, higher calibre candidates will be sought after. Studies confirm that educational attainment, such as a high school diploma, post-secondary education or higher qualifications, have proven a better return on investment, as respective candidates show lower attrition rates, are more likely to complete their initial term of service and are unlikely to be disciplined.[59] Given the increasing technological sophistication of contemporary militaries, it cannot be entirely excluded that, with time, the bar will be raised even higher. For example, China's armed forces, the People's Liberation Army, already actively aims at improving the quality of its recruits by toughening entry-level educational requirements – the number of enlisted candidates with high school diplomas are set to be lowered, and the focus on luring into the service's current and recently graduated

57 The competition with the private sector for autonomy and AI-competent workforce already is and will likely stay tight in the future. See National Security Commission on Artificial Intelligence (NSCAI), *Interim report for Congress*, November 2019, p 37, https://www.nscai.gov/whitepaper/interim-report-november-2019/. See also Jack Corrigan, 'The government's struggle to hire young tech talent is worse than you thought', *NextGov*, 1 December 2017. https://www.nextgov.com/cio-briefing/2017/12/governments-struggle-hire-young-tech-talent-worse-you-thought/144225/

58 See p 178 above. 'The implications of autonomy on future force structuring'

59 Gilroy et al., *The all-volunteer force*, pp 2–3; see also Beth J Asch, *Navigating current and emerging army recruiting challenges: what can research tell us?*, RAND Corporation, Santa Monica CA, 2019, p 24, https://www.rand.org/pubs/research_reports/RR3107.html.

university students amplified.[60] Having said this, it has also been argued that reliance on academic credentials may instead decrease in the coming years, with preference being given to aptitude tests and simulations.[61] Some private sector businesses, for example, have already abandoned academic qualifications as a recruiting metric.[62] While the expected educational attainment is still likely to be contingent on the occupational vacancy to be filled, a certain allowance for flexibility in minimum formal education requirements may prove beneficial even as overall expectations on skill proficiency increase.

Moreover, multidisciplinary expertise, including military, strategic and economic theory, logistics, global supply chains and acquisition, human behaviour and decision-making, social and cultural understanding, and others, will be required.[63] After all, 'automation' or 'AI' is not an occupational field in and of itself but is projected to become part and parcel of nearly any occupational specialty.[64] Therefore, one of the challenges is attracting and maintaining adequate AI literacy across professional military positions, particularly those associated with planning, design, acquisition, programming, testing, quality control and autonomous technology operation.[65] To be sure, a sailor may not need to be proficient in algorithm coding and training to intelligently use a given autonomous system (although being educated in science, technology, engineering and mathematics would be of benefit).[66] Yet, in contrast to their counterparts from the commercial sector and particularly when it comes to weaponised AI platforms, their operators

60 While conscription is still in force under China's military service law, authorities barely had to rely on conscripts, given that China's vast population produces more than enough volunteers for its military needs. See Adam Ni, 'What are China's Military Recruitment Priorities?', *The Diplomat*, 10 August 2018. https://thediplomat.com/2018/08/what-are-chinas-military-recruitment-priorities/

61 MoD, *Global strategic trends*, p 72.

62 MoD, *Global strategic trends*, p 72. See also Nicholas Hellen and Sian Griffiths, 'We can work it out: exam "failures" beat graduates at top firm', *The Times*, 5 March 2017. https://www.thetimes.co.uk/article/we-can-work-it-out-exam-failures-beat-graduates-at-top-firm-07509wv7n

63 Ron Hodge et al., *Designing a new narrative to build an ai-ready workforce*, MITRE Center for Technology and National Security, April 2020, p 25, https://www.mitre.org/sites/default/files/publications/pr-20-0975-designing-a-new-narrative-to-build-an-AI-ready-workforce.pdf

64 It is only by coupling technical expertise with a technological literacy across the entire organisational structure that an effective exploitation of the benefits of AI will be possible. Ryan, 'Intellectual preparation for future war'.

65 Feickert et al., *US ground forces robotics and autonomous systems (RAS) and artificial intelligence (AI)*, CRS Report Number R45392, Congressional Research Service, Washington DC, 20 November 2018, pp 27–28. https://crsreports.congress.gov/product/pdf/R/R45392 [PDF]

66 STEM is a curriculum based on four specific disciplines (i.e., science, technology, engineering and mathematics). See also Mark Abernethy, 'Tapping into the next generation successful for ADF recruitment', *AFR*, 20 June 2018. https://www.afr.com/policy/foreign-affairs/tapping-into-the-next-generation-successful-for-adf-recruitment-20180619-h11lad

will have to possess a more nuanced understanding of the AI capabilities and limitations because of the risks associated with any weapon system.[67]

Apart from the increasing need for multidisciplinary expertise and personnel with technical acumen, armed forces will equally need to attract and cultivate soft skills, such as emotional intelligence, critical thinking, communication, conflict resolution, counselling, etc. As automation continues to reduce the need for human labour in predictable and routine tasks, it is soft skills that will set humans apart from machines for a long haul and, given the inherently human nature of war, also enable effective human-machine teaming, serving as a force multiplier.[68] Adaptability, flexibility and commitment to continuous professional development could be the most crucial soft skills on which to focus.

Finally, most armed forces worldwide continue to operate on the understanding that high-technology warfare can revert to conventional warfare rather quickly, so troops must still be trained in traditional forms of war. While recruits undoubtedly must still be combat-ready, the impact of autonomous technologies may ultimately result in a shift away from a warrior ethos associated with physicality towards a cognitive, cerebral ethos associated with situational understanding. In light of the aforesaid, it is not far-fetched to suggest that recruiting and retaining an 'ideal' warrior who can demonstrate supreme cognitive ability and years of advanced technical training, in addition to meeting the physical and behavioural standards for joining the armed forces, will be a daunting undertaking.[69] Consequently, there is a need to understand the interdependency of physical abilities and technological skills and how these talents can be best synthesised and captured through a refocused recruitment policy. Attracting suitably skilled personnel to work in the many sub-fields of AI is likely to become unaffordable if military forces do not adapt and implement innovative policies that attract, (up) skill and retain the requisite talent.

67 See Connor S Mclemore and Eric Jimenez, 'Who is the Admiral Rickover of Naval artificial intelligence?', *War on the Rocks*, 18 September 2018, https://warontherocks.com/2018/09/who-is-the-admiral-rickover-of-naval-artificial-intelligence/. See also the Royal Society, *Machine learning: the power and promise of computers that learn by example*, The Royal Society, April 2017, p 6, https://royalsociety.org/~/media/policy/projects/machine-learning/publications/machine-learning-report.pdf. Noticing that any skilled workforce using AI should comprise those with a basic understanding of these technologies, more informed users and those who possess advanced skills.

68 For example, Muro, Maxim and Whiton, *Automation and artificial intelligence*, p 5, p 65.

69 See Feickert et al., *US ground forces robotics and autonomous systems (RAS) and artificial intelligence (AI)*, pp 27–28.

## Suggested measures

In what follows, we lay out several suggestions as to how to address this problem. This list is not exhaustive, nor is it free from contradiction. It may be that when a policymaker or decision-maker pursues one option from this list and attempts to combine it with another, they find that they cannot coexist for multiple reasons (budgets, quotas, bureaucratic or diplomatic obstacles, etc.). Above all, the list below is designed to provide those working in defence recruitment and retention areas with possible entry points for action and opportunities for critical reflection. While we acknowledge that, to mitigate against the projected future dearth of talent, some of the suggested measures may have been trialled by some AVFs to a certain degree previously, we nonetheless wish to point to areas that require further research while acknowledging that there is no straightforward 'solution' to the problem of AI-skill integration in the military. We suggest that it is in moments of *contradiction* that the most fruitful and productive insights can occur, since it is in these moments that we can look deeper into foundational tensions – some of which may prove irreconcilable – that may be present in how we conceptualise the military now and into the future, both in theory and in practice.

## Innovative strategies

To begin with, armed forces should consider creating innovative strategies aimed at the cultivation of the appropriate skills at key career development points. University partnerships serve as an illustration. In response to a severe shortage of cybersecurity professionals, the Chinese Government planned to launch several world-class cybersecurity schools at certain tertiary level institutions as training grounds for cyber-warriors.[70] The schools are geographically spread out to maximise outreach to the nation's nearly 1.4 billion population and encompass a mixture of civilian and military-affiliated colleges – a model that allows schools to complement one another's limitations. Having completed three years of coursework, the graduates are expected to spend a year in a corporate environment to attain the relevant practical experience. Outstanding graduates are subsequently fast-tracked to the Strategic Support Force, which is the wing of the People's Liberation Army charged with cyber, electronic and space warfare. Similar talent management initiatives could be developed for the AI-focused specialisations in the AVF military and potentially extend even further to high school partnerships or other post-secondary funding schemes.

Citizenship waivers – regarding candidates from states that have been long-term allied partners or overseas applicants with a relevant combination of

70 See Adam Ni, 'China is massively expanding its cyber capabilities', *The National Interest*, 3 October 2017. https://nationalinterest.org/blog/the-buzz/china-massively-expanding-its-cyber-capabilities-22577

techno-military expertise – could serve as yet another means to enlarge the eligible talent pool, as has already been recognised by some governments. For example, in 2018, Germany's ministry of defence announced that it was considering recruiting EU citizens to the German Bundeswehr, which is suffering from chronic recruitment gaps. The militaries in the UK, France and Belgium equally include non-citizens among their ranks.[71]

### Balancing public-private resources

The importance of balancing public and private resources in the talent recruitment and retention efforts should not be underestimated, given that militaries no longer serve as the focal point of progress for the national technology base – this role has long been assumed by the private sector industries. Indeed, competition in this space is likely to go beyond companies that have historically contracted with defence organisations. Instead of large, traditional and familiar companies, defence will increasingly need to look to smaller start-ups where innovation occurs rapidly. The growing civil–military divide in some states (evident, for example, in certain technology hubs in the US) can be negatively compared to other governments that frequently profit from labour-hire from the commercial sector.

For example, in Russia and China, enterprises frequently lend their top talent to armed forces on a part-time or consulting basis to enhance overall military posture and readiness.[72] In states like the US, leveraging public-private cooperation will be critical, or competition with states where governments can rely on support from the private sector will be lost. Therefore, such states should consider establishing suitable conditions for so-called 'public-private swaps', where services may send a certain percentage of uniform officers to training with industry programs while simultaneously engaging private sector technology workers to serve in defence departments on one-to-two-year assignments.[73] These swaps ultimately ensure that military experience is augmented with lessons learned in the commercial sector, leading to technical expertise with an operational purpose. To be sure, the success of public-private partnerships is squarely dependent on mutual benefits and trust. Given that segments of

71 See Geluk et al., 'Fixing the talent gap in armed forces worldwide'; Hodge et al., *Designing a new narrative to build an AI-ready workforce*, p 1; Elisabeth Braw, *Competitive national service: how the Scandinavian model can be adapted by the UK*, RUSI, 2019. https://rusi.org/explore-our-research/publications/occasional-papers/competitive-national-service-how-scandinavian-model-can-be-adapted-uk

72 See James Ryseff, 'How to (actually) recruit talent for the AI challenge', *War on the Rocks*, 5 February 2020. https://warontherocks.com/2020/02/how-to-actually-recruit-talent-for-the-ai-challenge/

73 See Daniel S Hoadley and Kelley M Sayler, *Artificial intelligence and national security*, CRS report R45178, Congressional Research Service, 2014, p 18, https://fas.org/sgp/crs/natsec/R45178.pdf; Lauren C Williams, 'Could personnel swaps help solve DOD's AI talent problem?', *FCW*, 28 May 2020. https://fcw.com/articles/2020/05/28/dod-ai-personnel-swaps.aspx

the public are disquieted by military applications of AI (Project Maven being a recent example), the services might face an extra burden of underscoring their commitment to the ethical deployment of modern technologies, as well as transparently communicating to private sector partners that there are compelling ways to contribute positively to society by working in defence.

### New career path models

Successfully onboarding required personnel is also improbable without offering attractive career pathways, particularly non-linear career tracks and career intermissions – concepts historically alien to a strict and hierarchical military culture.[74] Career progression in established military structures can be compared to a pyramid consisting of many entry-level positions at the bottom and an ever-diminishing number towards the top. With most individuals joining the armed forces at the lowest enlisted or officer rank, these career paths are characterised by their rigidity. They have fixed intervals for promotion opportunities and are foremost crafted to take an individual from a focused specialist in a given skill set to a leader of increasingly larger organisational units within, habitually, no shorter than a multidecade timeframe. In an environment of this kind, where success is primarily defined through the lens of upward viability and a match of talent and interests with the available occupational speciality is not necessarily guaranteed, dynamic, non-traditional and technologically contemporary jobs dictated by the developments in autonomy and AI become challenging to integrate. Maintaining the desired supply of expertise may require establishing novel career pathways, as recognised, for example, in Australia,[75] including reward schemes for superior performers allowing them to move up the ranks faster, creating possibilities to enter the hierarchical pyramid laterally at a higher level or pursue a technical career track with fewer postings to leadership positions.[76] Potential guiding models for the latter option could be drawn from the military medical community, where officers are routinely accepted at a higher entry-level grade because of the medical skills they bring rather than demonstrated professional military expertise or large-scale organisational leadership.[77]

74 Jacob Yanofsky, 'Six million dollar men: policy, technology, and talent management', *War on the Rocks*, 10 January 2019, https://warontherocks.com/2019/01/six-million-dollar-men-policy-technology-and-talent-management/.

75 See Department of Defence, 'ADF total workforce system', website, Australian Government – Department of Defence, accessed 9 September 2021, https://www.defence.gov.au/PayandConditions/ADF/ADF-TWS.asp.

76 See Feickert et al., *US ground forces robotics and autonomous systems (RAS) and artificial intelligence (AI)*, pp 28–29; see also, Yanofsky, 'Six million dollar men'.

77 See Feickert et al., *US ground forces robotics and autonomous systems (RAS) and artificial intelligence (AI)*, pp 28–29; see also the US DoD, Secretary of Defense Memorandum, 'The next two links to the force of the future', 9 June 2019, https://dod.defense.gov/Portals/1/features/2015/0315_force-of-the-future/Memorandum-The-Next-Two-Links-to-the-Force-of-the-Future.pdf.

Similarly, career intermission opportunities may allow military personnel to pursue, for example, specialised educational programs, transfer to reserve services for a certain period or take up employment with the private sector technology companies (as part of the public-private swaps, for example), without risk of derailing their career progression or negatively affecting their ability to reach higher ranks in the service.[78] Likewise, building internal support measures for a non-careerist personnel base – short-term, high pay-off contracts instead of a slow, incremental progression leading to flag officer ranks – may successfully complement the workforce pursuing traditional lifelong career paths.[79] Finally, expanding the size of the reserve component within services (which traditionally offer more flexible career development opportunities) may prove attractive for recruits who are open to uniform service and have good prospects in the private sector.[80]

### Incentive programs

In a recent survey of Australian cadets regarding their attitudes towards autonomous systems,[81] respondents were asked to rank incentives from least tempting to most tempting. Notably, a quarter of the nearly 1,000 respondents ranked *financial gain* as their top incentive for working alongside robots. Indeed, the need for reassessment of policies on monetary and non-monetary incentives has also been suggested as a means to boost numbers of suitable recruits and secure retention of skills.[82] The former may include financial incentive programs, for instance, in the form of special pay and bonuses. However, it is equally important to offer future recruits an opportunity to work on challenging but rewarding projects. It has been repeatedly argued that top talent is attracted to the hardest problems within a worthwhile mission that benefits fellow human beings.[83] In the words of Sue Gordon, former Principal Deputy Director of

78 The US DoD, for example, has specifically regulated the matter of career intermission, see Geluk et al., 'Fixing the talent gap in armed forces worldwide'.

79 Geluk et al., 'Fixing the talent gap in armed forces worldwide'. See also Ryseff, 'How to (actually) recruit talent for the AI challenge'.

80 James Manyika and William H McRaven, *Innovation and national security: keeping our edge*, Council of Foreign Relations, New York, 2019, p 78, https://www.cfr.org/report/keeping-our-edge/pdf/TFR_Innovation_Strategy.pdf.

81 Jai Galliott, Bianca Baggiarini and Sean Rupka, 'Empirical data on attitudes towards autonomous systems', in Jai Galliott, Jens David Ohlin and Duncan Macintosh (eds), *Lethal autonomous weapons*, Oxford University Press, Oxford, 2021, https://global.oup.com/academic/product/lethal-autonomous-weapons-9780197546048?cc=us&lang=en&#

82 Hodge et al., *Designing a new narrative to build an ai-ready workforce*, p i: 'Bringing in new AI talent requires a fresh look at novel incentives'; NSCAI, *Interim Report*, p 37.

83 See Richard Kuzma, 'But first, infrastructure: creating the conditions for artificial intelligence to thrive in the Pentagon', *War on the Rocks*, 13 July 2018, https://warontherocks.com/2018/07/but-first-infrastructure-creating-the-conditions-for-artificial-intelligence-to-thrive-in-the-pentagon/. See also Ryseff, 'How to (actually) recruit talent for the AI challenge'.

National Intelligence, the armed forces may be well advised to better emphasise the non-monetary benefits of military service, such as working on 'crazy hard problems', taking on 'more responsibility early', and thereby securing 'a running advantage through the rest of [one's] life'.

### Growing in-house talent and securing retention through new educational programs

Growing talent within the services and building a cadre of professionals with the necessary education and experience is equally important. Not only will this make armed forces less dependent on the supply of expertise from the private sector, but it will also secure talent with unique attributes that the private sector cannot offer, above all military operational insight and expertise.[84] Only once the viability of developing the requisite skill talent within the organisational structures is appropriately assessed is respective adaptation of recruitment practices and, thus, more targeted and efficient recruiting possible.

Retention of personnel is improbable without adequate re-skilling or upskilling either, calling for measures establishing at the minimum a baseline level of education in AI. Even more so, perhaps, given that military personnel will require basic literacy in AI at almost every rank level in the near future.[85] Making a case for better tailored educational programs to shape the future workforce in the US Navy, Schramm and Kline illustrate this point further:

> When the Navy introduced nuclear engineering, it established a nuclear engineering school to meet its manpower requirements. When the Navy introduced the Aegis combat system, it established a dedicated Aegis school to meet its manpower requirements. The difference between these historical examples and AI is that AI does not need the same physical safeguards as radioactive materials and high-power radars. The Navy currently has the ability to better prepare its AI workforce through multiple institutions and methods – both military and civilian – including the Naval Postgraduate School, civilian institutions, and fellowships.[86]

To foster the next generation of technological talent, others have also suggested instituting a Reserve Officer Training Corps for advanced technologies.[87]

84 Harrison Schramm and Jeff Kline, 'Can warfighters remain the masters of AI?', *War on the Rocks*, 6 February 2020, https://warontherocks.com/2020/02/can-warfighters-remain-the-masters-of-ai/.

85 Ryan, 'Intellectual preparation for future war'.

86 Schramm and Kline, 'Can warfighters remain the masters of AI?'

87 Manyika and McRaven, *Innovation and national security*, p 8.

Having said this, an argument can also be made that defence forces are increasingly dependent on outsourced human resources, so that contracting out AI expertise would only be a logical next step in the overall scheme of technological developments in the military. In Australia, for example, external service providers – including private military and security companies – are already the Australian Defence Force's second-largest 'service' after the Army but ahead of the Australian Public Service, Navy and Air Force.[88] If deep maintenance of aircraft is already done by industry rather than Air Force personnel, why should deep maintenance of systems underpinned by AI be different?

However, the arguments in favour of large-scale outsourcing frequently overlook the numerous risks implicit in such processes. Although beyond the scope of this paper, these risks pertain above all to the requirement of accountability and transparency as applied to the activities of militaries acting on behalf of liberal democracies and the depoliticisation of national security and defence mandates that are subsequent to the privatisation of military planning and labour.[89] Notably, corporate entities' goals, objectives and values may not necessarily reflect those of the government that hired them. Given the recent commitment on behalf of states and militaries to be transparent and accountable when employing AI, it is important to consider how outsourcing risks hindering such endeavours with more wariness.

### Strong leadership advocacy

As much as implementing structural changes within any organisation is key to facilitating future talent acquisition and retention,[90] it also poses a significant challenge which cannot be overcome without a strong leadership advocacy. The energetic, well-resourced leadership committed to disciplined implementation of new policies across the services ultimately creates the macroclimate in which potential cultural resistance to personnel reform may be successfully overcome.

88 Marcus Hellyer, *The cost of defence 2020–2021 Part 2: ASPI 2020–2021 Defence budget brief*, Australian Strategic Policy Institute, Canberra 2020, p 68, https://www.aspi.org.au/report/cost-defence-2020-2021-part-2-aspi-defence-budget-brief

89 See Jutta Joachim and Andrea Schneiker, 'Of "true professionals" and "ethical hero warriors": a gender-discourse analysis of private military and security companies', *Security Dialogue*, 2012, 43(6): 495–451, https://doi.org/10.1177/0967010612463488; Anna Leander and Rens van Munster, 'Private security contractors in the debate about Darfur: reflecting and reinforcing neoliberal governmentality', *International Relations*, 2007, 21(2): 201–216; Deborah Avant and Lee Sigelman, 'Private security and democracy: lessons from the US in Iraq', *Security Studies*, 2010, 19(2): 230–265, https://doi.org/10.1080/09636412.2010.480906. Andrew Alexandra, Deane Peter Baker and Marina Caparini, eds., *Private military and security companies: ethics, policies and civil-military relations*, Routledge, New York, 2008; Bianca Baggiarini, 'Re-making soldier-citizens: military privatization and the biopolitcs of sacrifice', *St. Anthony's International Review*, 2014, 9(2): 9–23.

90 See Feige, 'The army needs full-stack data scientists and analytics translators.'

As noted by Mick Ryan:

> [D]ifferent military occupational specialties have developed unique subcultures within the larger force. These cultures and subcultures are powerful elements in developing cohesion and esprit de corps. But they can also be barriers to change and the adoption of new ideas, techniques, and technologies. This can be magnified by the bureaucratic inertia that is resident in every large organization.[91]

Therefore, shaping organisational culture in ways conducive to embracing personnel reforms will require determination by leaders at all levels. Having said this, creating and modernising new military occupational specialties requires leadership with a non-technical background to understand the specific challenges brought about by automation and AI and intelligently discuss the capabilities, limitations, as well as interoperability of various software and hardware systems. The fact that rather few in senior leadership have a detailed understanding of AI's operational capabilities and potential[92] signifies another area for improvement.

Strong leadership should also be informed by research that considers the importance of cultural attitudes. Knowledge of attitudes matters deeply for understanding the impact of AI-enabled technology on military personnel, as empirical research has shown that attitudes towards said technology influence the use or misuse/abuse of innovative technology.[93] We can understand the meaning of culture from two complementary vantage points. The first concerns individual cultural attitudes; attitudes are beliefs that emerge from, but are not reducible to, the inner workings of human minds. We do not view attitudes as direct pipelines into individual mental states that determine behaviour but instead view attitudes as judgements produced relationally through social interactions. Consider the individual attitudes of cadets. First, their attitudes do not exist in isolation but emerge in their social exchanges with their peers. Second, their attitudes cannot be neatly separated from the globalisation, discourses of autonomy, the politics of war, and the contemporary military's occupational ethos in which cadets are trained to serve. Cadets' attitudes do not exist in a social vacuum but will be informed by structural and organisational policies

91 Ryan, *Human-machine teaming for future ground forces*, p 37.

92 See Jason Brown et al., 'Building the airmen we need: upskilling for the digital age', *Strategy Bridge*, 9 July 2020, https://thestrategybridge.org/the-bridge/2020/7/9/building-the-airmen-we-need-upskilling-for-the-digital-age; Michael C Horowitz and Lauren Kahn, 'The AI literacy gap hobbling American officialdom', *War on the Rocks*, 14 January 2020. https://warontherocks.com/2020/01/the-ai-literacy-gap-hobbling-american-officialdom/

93 Steven E Davis, *Individual differences in operators' trust in autonomous systems: a review of the literature*, Joint and Operations Analysis Division Defence Science and Technology Group, Edinburgh, South Australia, 2019.

produced by and within senior leadership. However, further research that takes cultural attitudes seriously is required to ensure AI systems are fit for purpose and socially accepted by those who deploy them and the public more broadly.

## Conclusion

Increasing automation and AI offer real opportunities, but, as is often the case, with opportunities come challenges. Attracting, cultivating and retaining personnel that have the required intellectual, psychological and physical ability to work within an increasingly automated operational environment is likely to remain one of the most significant hurdles for militaries to overcome. As shown in this paper, autonomous capabilities underpinned by AI will continue to be applied to a wider and ever-expanding range of tasks. While rendering many existing employment skills superfluous, they also amplify the comparative advantage of workers with problem-solving, leadership and emotional intelligence skills. The near-term advantages of autonomy, in particular, are set to augment human decision-making while simultaneously driving the need for new occupational specialties.

Developments in autonomy and AI will also directly influence national recruitment and retention policies, requiring reconceptualisation and modernisation. While the list of measures we suggest is certainly not exhaustive, it includes some starting considerations for militaries keen to ride the wave of technological change successfully. Our intention in this paper is to offer opportunities for both action and critical reflection. Still, we maintain that decision-makers and policymakers working on the ground in the areas of recruitment and retention have the expertise to determine best practices and chart a path forward together with researchers.

Crucially, recruiting suitably talented personnel for the military occupations of the future will take time. Armed forces will therefore be well advised to avoid the mistake of overinvesting in technology while underinvesting in preparation for the workforce that will use it. The fact that nearly a quarter of Australian cadets recently surveyed ranked financial gain as their top incentive for working alongside robots suggests that respondents – and future users of militarised AI technology – identify the military as an occupational, rather than strictly institutional, entity. The risk of identifying with this occupational mindset is that soldiers may not cultivate the level of loyalty required to sustain the distinct social status that the military has historically relied upon to justify and legitimise its existence. This occupational mindset will likely compound the impact of autonomous systems on recruitment and retention policies, and policymakers should prepare for this reality as they plan for and design future AVF.

**Acknowledgements**

This material is based upon work supported by the United States Air Force Office of Scientific Research under award number FA9550-18-1-0181. The authors wish to thank Dr Marcus Hellyer, Dr Christine Boshuijzen van Burken, Dr Sadjad Soltanzadeh, Damian Copeland and Dr Jay Galiott for insightful comments on earlier drafts of this paper.

# Cybersecurity and sovereignty

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## Abstract

This paper considers the question of whether it is desirable and viable to preserve national interests in cyberspace through a focus on sovereign capability. Desirability is addressed through an examination of the relevance of, and risks associated with, cyberspace. Viability is examined in terms of the potential of Australia's cyber industry and the prospect of protecting sovereignty in cyberspace through industry policies such as Defence's Sovereign Industry Capability Priorities.

## Introduction

In 2020 and 2021, we are experiencing not only a pandemic but also a significant deterioration of our security outlook. Accordingly, in 2020 the Australian Government issued a defence strategic update that noted an increased potential for high-intensity conflict.[1] The update acknowledged national vulnerabilities arising from global supply chains and called for greater security, including in the sovereign industrial capability supporting Defence.

Cyber risks are prominent in these supply-chain vulnerabilities. Our society, our national interests and our military capabilities are dependent on information technology. Government has noted that 'growing, supporting and maturing

1 Department of Defence (DOD), *2020 Defence Strategic Update*, Australian Government, 1 July 2020, p 6. https://www.defence.gov.au/strategicupdate-2020/

Australia's sovereign cybersecurity is now more critical than ever'.[2] In this context, cybersecurity represents measures to protect the confidentiality, integrity and availability of information and systems.[3]

Sovereignty is a term that has a number of connotations but is used primarily in relation to Westphalian sovereignty. That is, it is concerned with the protection of a state's ability to exercise power exclusive of interference by external sources.[4] That power typically is related to the territory associated with the state, thus early views on the relationship between cybersecurity and sovereignty were focused on the diminution of state power due to the borderless nature of the information environment.[5] Yet cyberspace exists within an environment in which the state can exercise sovereignty and offers new ways of conducting statecraft.[6]

This paper considers the question of whether it is desirable and viable to preserve national interests in cyberspace through a focus on sovereign capability. It addresses the first part of the question of desirability through an examination of the relevance of, and risks associated with, cyberspace. To address viability, we review the potential of Australia's cyber industry and the prospect of protecting sovereignty in cyberspace through industry policies.

## Cyber relevance

The transformative implications for society of the growing power and reducing cost of information and communications technologies (ICT), often referred to as the Information Age, has been recognised since the late twentieth century.[7] Within the defence sector, ICT similarly has been acknowledged as a substantial force multiplier for military power.[8] As defence forces transformed

2 Quote attributed to Hon Karen Andrews MP in Shannon Jenkins, 'Commonwealth needs a less fragmented approach to ICT procurement to improve nation's cyber security, according to new report', *The Mandarin*, 19 August 2020, https://www.themandarin.com.au/137714-commonwealth-needs-a-less-fragmented-approach-to-ict-procurement-to-improve-nations-cyber-security-according-to-new-report/

3 Australian Cyber Security Centre, *Cyber security terminology* [website], Australian Government – Australian Signals Directorate, 2021, https://www.cyber.gov.au/acsc/view-all-content/advice/cyber-security-terminology

4 Stephen D Krasner, 'Rethinking the sovereign state model', *Review of International Studies*, December 2001, 27: 20. https://www.jstor.org/stable/45299503

5 For a background explanation of the relationship between the information environment and the cyber domain, see G Crowther, 'The cyber domain', *The Cyber Defense Review*, Fall 2017, 2(3): 63–78.

6 Sarah Mainwaring, 'Always in control? Sovereign states in cyberspace', *European Journal of International Security*, June 2020, 5(2): 215–232, https://doi.org/10.1017/eis.2020.4

7 Thomas A Stewart, 'Welcome to the revolution', in David S Alberts and Daniel S Papp (eds), *The information age: an anthology on its impact and consequences*, Command and Control and Cyber Research Portal (CCRP), 1997, http://www.dodccrp.org/files/Alberts_Anthology_I.pdf

8 David S Alberts and Richard E Hayes, *Power to the edge: command and control in the information age*, Office of the Assistant Secretary of Defense (OASD), CCRP, 2003, https://apps.dtic.mil/sti/pdfs/ADA457861.pdf

their capabilities and doctrine to exploit this ICT advantage, cyberspace was recognised a decade ago as a separate domain in which operations and warfare may be conducted.[9]

In the twenty-first century, technology has integrated and enhanced capabilities, contained not only within the cyber domain, but also reaching into the physical and cognitive domains. Technology advances associated with the fourth industrial revolution are increasing the relevance and influence of the cyber domain, with cyber-physical systems allowing information systems to control actions in the physical world.[10] At the same time, the ability to manipulate information and the broad adoption of social media mean that cognition is more readily controlled by actions in the cyber domain.

The reliance of physical systems and cognition on information systems means that information warfare not only impacts cyberspace but has a widespread and lasting impact. An advantage in the cyber domain can translate into an advantage across all domains.[11] This shifts information warfare from an enabling component of traditional warfare, with physical activity and kinetic effects having primacy, to one in which gaining an information advantage in itself can be decisive. Not only can information effects create an advantage in awareness, but they can also create military advantage by disabling or misguiding physical systems, or by influencing the cognition of warriors and their leaders.[12]

This potential of cyber, due to its growing connectivity and influence, is further enhanced by its ability to achieve objectives at minimum risk and cost. This makes cyber operations and the broader concept of information warfare key to grey-zone conflict; that is, the conduct of activities below the threshold of physical conflict.[13] While the grey-zone threat is of considerable relevance in its own right, the real danger lies in the prospective conduct of such activities as an effective, and arguably increasingly necessary, prelude to physical conflict.

9 Lesley Seebeck, 'Why the fifth domain is different', *The Strategist*, ASPI, 5 September 2019, https://www.aspistrategist.org.au/why-the-fifth-domain-is-different. For a definition of cyberspace, see US DoD, *Department of Defense dictionary of military and associated terms*, Joint Publication 1-02, Joint Chiefs of Staff, 8 November 2010 (as amended through 15 February 2016), accessed 14 November 2021. https://fas.org/irp/doddir/dod/jp1_02.pdf

10 Klaus Schwab, *The fourth industrial revolution*, Crown Business, New York, 2017.

11 Dale Lambert is credited with raising the potential for cyber dominance to result in complete control, D Lambert, *Digital Warrior Mission*, unpublished DST presentation, 2019.

12 Andrew Dowse, 'Scenario planning methodology for future conflict', *The Journal of Indo-Pacific Affairs*, Spring 2021, 4(2): 18–31.

13 Frank G Hoffman, 'Examining complex forms of conflict: gray zone and hybrid challenges', *Prism,* Institute for National Strategic Security, National Defense University, 2018, 7(4). https://www.jstor.org/stable/26542705

The Australian Defence Force (ADF) recognised the criticality of cyber with the establishment in 2017 of its Information Warfare Division, formed to help combat threats to Australia's national interests in the information environment. This initiative together with the broader national measures arising from the *2016 Cyber Security Strategy* would seem to be moving in the right direction; however, their adequacy needs to be considered in terms of the risks that the nation faces in the information environment.[14]

## Cyber risks

The modern cyber threat landscape is distinguished by an expanding array of state and nonstate actors with access to various cyber tools and weapons, used for the purposes of collection, criminal financial gain or digital surveillance.[15] The cyber threat landscape extends from peace to conflict, with traditional concepts of demarcation between military and civil affairs being challenged.

Our cyber risks are exacerbated by the confluence of several factors, including attribution of actions in cyber-related conflict, our increased information system dependence, insecure supply chains, complex system risks and uncertainty, the speed of threats and a numerical disadvantage in that our adversaries have more comprehensive resources.[16] These factors will impact our military capability just as much, and arguably more, than the broader national environment. This paper addresses each of these factors.

Over the past decade, there has been an evolution in the employment of cyber capabilities, with substantial growth in state-sponsored activities.[17] State-sponsored cyberattacks are not confined to conventional notions of legitimate military targets, but may target political, economic and social systems. Conversely, cybercriminals may target military and national infrastructure. Attribution of cyberattacks is an intractable problem that creates uncertainty of roles in cyber defence and response.[18] Many threats are suspected of being affiliated with or sponsored by nation states, thus attacks by nonstate actors may be attributed

14 For the cybersecurity strategy, see Commonwealth of Australia, Department of the Prime Minister and Cabinet, *Australia's Cyber Security Strategy*, 2016. https://www.homeaffairs.gov.au/cyber-security-subsite/files/PMC-Cyber-Strategy.pdf.

15 Public-Private Analytic Exchange Program, *Commodification of cyber capabilities: a grand cyber arms bazaar,* US Department of Homeland Security – Intelligence and Analysis, 2019, https://nsiteam.com/social/wp-content/uploads/2019/11/191119-AEP_Commodification-of-Cyber-Capabilities-Paper.pdf.

16 J Green, Presentation to Defence Cyber Futures – Technology and Trends webinar, 19 November 2020.

17 See *Cyber operations tracker* [website], Council on Foreign Relations, https://www.cfr.org/cyber-operations/.

18 Thomas Rid and Ben Buchanan, 'Attributing cyber attacks', *Journal of Strategic Studies*, 2015, 38: (1-2 ): 4–37, p 5. https://doi.org/10.1080/01402390.2014.977382

to a state actor,[19] and attribution is ultimately a matter of 'what states make of it'.[20] Regardless of whether the target is military or civilian, such attribution may lead to a legal right to a self-defence response under Article 51 of the UN Charter.[21]

Risk is typically considered as a product of likelihood and consequence. Our dependence on the information environment leads to greater consequence of an attack, especially with cyber-physical integration increasing the potential for physical impact. This prospective impact incentivises threats, thus increasing likelihood. Likelihood also is increased by rising threat motivation and capability, together with a massive increase in attack surface, due to a combination of increased connectivity and technology cycles. In 2017, 49 per cent of the world's population was connected online and an estimated 8.4 billion connected Internet of Things (IoT) devices were in use worldwide. By 2020, this had grown to 59 per cent of the world population and 31 billion IoT connected devices.[22] By 2025, it is estimated that 75 billion IoT devices will be connected to the Internet.[23] The drive for efficiency and productivity is extending connectivity to systems such as operational technology (OT), which further increases the attack surface and cyber risk.[24] This vulnerability is leading to an increased incidence of attacks on OT assets that impact critical infrastructure.[25]

Although the ADF's digital environment may not involve the same attack surface when compared to broader society, it is arguably on a similar trajectory. This trajectory includes the increasing vulnerability of cyber-physical systems such as OT that support ADF operations. The fact that the benefits of increased

19 Michael N Schmitt (ed), *Tallinn Manual 2.0 on the international law applicable to cyber operations*, 2nd Edition, Cambridge University Press, 2017, pp 87–100.

20 Rid and Buchanan, 'Attributing Cyber Attacks', p 7.

21 Catherine Lotrionte, 'Reconsidering the consequences for state-sponsored hostile cyber operations under international law', *The Cyber Defense Review,* Summer 2018, 3(2):73–114, p 90. https://www.jstor.org/stable/26491225

22 Joseph Johnson, *Global digital population as of October 2020*, *statista.com*, last updated 10 September 2021. https://www.statista.com/statistics/617136/digital-population-worldwide

23 Gilad David Maayan, 'The IoT rundown for 2020: stats, risk, and solutions', *Security Today*, 13 January 2020, https://securitytoday.com/articles/2020/01/13/the-iot-rundown-for-2020.aspx.

24 Operational Technology (OT) are systems used to direct, monitor and/or control enterprise physical devices, processes and events, and include Industrial Control Systems.

25 Cybersecurity and Infrastructure Security Agency (CISA), 'NSA and CISA recommend immediate actions to reduce exposure across operational technologies and control systems', CISA, 23 July 2020, revised 24 October 2020, https://us-cert.cisa.gov/ncas/alerts/aa20-205a.

connectivity and sophisticated technologies may be seen to outweigh the risks, including within Defence, represents a complex cybersecurity challenge.[26]

A significant source of cyber risk arises from organisations' inability to control security measures adopted by supply-chain partners.[27] A global study commissioned by CrowdStrike in 2018 found that two-thirds of 1,300 senior information technology (IT) decision-makers and IT security professionals, including those in Australia, stated that their organisations had experienced a software supply-chain attack.[28] Supply-chain risks can arise because of inadequate quality or support of supply-chain elements, or the malicious insertion of unwanted functions to ruin the design, product or the integrity of the supply chain. Virus insertion may arise at any stage of the supply chain. The successful penetration of 11 Saudi MSPs in 2018 serves as a recent example where firms can buy prebuilt code from third parties for complex or widely encountered tasks and thereby open themselves to attack.[29]

With greater complexity and opaqueness of new technologies, supply chains will become more vulnerable to disruption, manipulation, and capture by governments, criminal organisations and other malicious actors. The public sector is especially exposed, because of the value of successful attack and the relative ease of access to systems largely purchased through commercial off-the-shelf procurement. Whether at the hardware or software level, supply-chain management and security will need to remain an important priority, especially for Defence, with growing concern about supply chains as a source of cyber risk.[30]

The increasing complexity of our information systems, their supporting supply chains and the range of potential threats makes cyber risk management correspondingly more complex. Cyber risks include sophisticated attacks that

26 Camino Cavanagh, 'New tech, new threats, and new governance challenges: an opportunity to craft smarter responses', Carnegie Endowment for International Peace, Washington DC, 28 August 2019, https://carnegieendowment.org/2019/08/28/new-tech-new-threats-and-new-governance-challenges-opportunity-to-craft-smarter-responses-pub-79736.

27 Shipra Pandey et al., 'Cyber security risks in globalized supply chains: conceptual framework', *Journal of Global Operations and Strategic Sourcing,* 2020,13(1): 3. https://doi.org/10.1108/JGOSS-05-2019-0042

28 Stephen Withers, 'How Australian firms can defend against supply chain attacks', *Computer Weekly*, 10 June 2020, https://www.computerweekly.com/news/252484430/How-Australian-firms-can-defend-against-supply-chain-attacks.

29 Danny Palmer, 'Cybersecurity: new hacking groups target IT companies in first stage of supply chain attacks', *ZDNet,* 18 September 2019. https://www.zdnet.com/article/cybersecurity-new-hacking-group-targets-it-companies-in-supply-chain-attack-campaign/.

30 J Frank, M Davidson and N Morris, *Cyber security's impact on SMEs and the supply chain*, South Australia Defence Industry Leadership Program, Defence Teaming Centre, 2019. https://dtc.org.au/wp-content/uploads/2020/04/SADILP-2019-Concept-paper-Cyber-Security-Report-FINAL.pdf.

may disrupt entire countries, industries, businesses and supply chains.[31] This complexity challenges traditional approaches to risk management in which mitigations are designed to reduce risks to an acceptable level. In particular, designing mitigations based upon previously experienced incidents exposes the system to zero-day attacks, which should be of concern to Defence. Thus, a key to managing risk in such uncertainty may be to focus on plausibility of adverse events rather than probability.

A characteristic of the cyber environment is that cyberattacks can be conducted with speed and efficiency. The 2018 CrowdStrike report identified the importance to defenders of *breakout times* – a key cybersecurity metric which measures the speed from an adversary's initial intrusion into an environment, to when they achieve lateral movement across the victim's network towards their ultimate objective.[32] The report identified that Russian state-sponsored hackers are now able to complete a major systems breach within 19 minutes, with the average time for the intrusion to become a significant breakout being four hours and 48 minutes.

CrowdStrike's 2020 threat report identified that beyond the states most actively engaged in cyberattacks, there are 81 state-sponsored groups. Moreover, the report discusses the multiplicity of new tactics, techniques and procedures that state-affiliated threat actors are employing to accomplish their goals.[33] Of concern is the widening variety of goals these highly capable adversaries may seek to achieve. Along with the more traditional objectives of espionage and surveillance, their potential roles include widespread disruption and discord as well as the potential employment of non-kinetic targeting within military campaigns. The 2020 Review of the Legal Framework of the National Intelligence Community stressed that destructive cyberattacks launched by foreign state-sponsored actors represent a serious threat to our national security.[34]

Another worrisome trend has been the emergence of *Advanced Persistent Threats* (APTs). APTs are hacking groups who access systems and maintain a

31 Paul Rogers, 'Cyber risks are becoming more complex and challenging', *Intelligent CIO*, 3 January 2020. https://www.intelligentcio.com/africa/2020/01/03/cyber-risks-are-becoming-more-complex-and-challenging/.

32 CrowdStrike, *2020 Global Threat Report*, CrowdStrike Inc., 2020, p 10. https://go.crowdstrike.com/rs/281-OBQ-266/images/Report2020CrowdStrikeGlobalThreatReport.pdf

33 CrowdStrike, *2020 Global Threat Report,* pp 11–14.

34 Dennis Richardson, *Comprehensive review of the legal framework of the national intelligence community*, Australian Government – Attorney-General's Department, December 2019, section 3.76, p 46. https://www.ag.gov.au/system/files/2020-12/volume-1-recommendations-and-executive-summary-foundations-and-principles-control-coordination-and-cooperation.PDF

presence that cannot be stopped through software updates or rebooting.[35] The Australian Cyber Security Centre reported that APT actors are actively targeting Australia's health sector and medical research facilities.[36] Beyond this, there are implicit assumptions that the health sector is not the only critical area that is being targeted, with defence a likely interest. APT attacks represent a significant threat to both the public and private sectors.[37] The mass of threat capability and volume of attacks creates a substantial challenge for our national cybersecurity effort.

The combined effect of these factors of attribution, information dependence, insecure supply chains, complex system risks, the speed of threats and numerical disadvantage represents an extraordinary level of risk to our national security. The Australian Government acknowledged the significant level of cyber risk the nation faces, with a new cybersecurity strategy, released in 2020. The strategy positions Australia to meet evolving security threats and will invest $1.67 billion over the next decade to achieve a vision that includes: defending critical infrastructure, cybercrime, protection of government networks, developing cybersecurity skills, increased situational awareness and improved sharing of threat information.

The implemented and planned cybersecurity strategy measures may help to mitigate some of the risks that Australia faces. Yet the parliamentary inquiry into the implications of the COVID-19 pandemic heard expert evidence that the increased threat of cyberattacks demands a new strategic approach to policy, taking better account of the need for sovereign capabilities to improve national resilience.[38] This advice resulted in an inquiry recommendation that 'at risk' supply chains for critical national systems be moved to sovereign Australian suppliers or, where appropriate, to other trusted, transparent arrangements.[39] However, mitigations against cyber risks are implemented, they will require the support of national industry.

35 Hugh Taylor, 'What are cyber threats and what to do about them', *The Prey Project,* 22 January, 2020. https://preyproject.com/blog/en/what-are-cyber-threats-how-they-affect-you-what-to-do-about-them/

36 Australian Cyber Security Centre (ACSC), *Advanced persistent threat (apt) actors targeting Australian health sector organisations and COVID-19 essential services*, ACSC, Australian Government – Australian Signals Directorate, first published 8 May 2020. https://www.cyber.gov.au/acsc/view-all-content/alerts/advanced-persistent-threat-apt-actors-targeting-australian-health-sector-organisations-and-covid-19-essential-services

37 Santiago Quintero-Bonilla. and Angel Del Rey, 'A new proposal on the advanced persistent threat: a *survey'*, *Applied Sciences,* June 2020, 10(11): 1–22. https://doi.org/10.3390/app10113874

38 Parliament of Australia, *Inquiry into the implications of the COVID-19 pandemic for Australia's foreign affairs, defence and trade*, Joint Standing Committee on Foreign Affairs, Defence and Trade, Australian Government, December 2020, section 2.58. https://www.aph.gov.au/Parliamentary_Business/Committees/Joint/Foreign_Affairs_Defence_and_Trade/FADTandglobalpandemic/Report

39 Parliament of Australia, *Inquiry into the implications of the COVID-19 pandemic for Australia's foreign affairs, defence and trade*, section 5.80.

## Australia's cyber industry

The Australian cybersecurity sector has matured significantly over the past five years. Yet there is an over-reliance in Australia on the use of non-Australian services companies for cybersecurity needs. Two-thirds of Australian cyber companies are less than 10 years old and lack the market maturity to compete with established global cyber firms.[40] In line with global trends, compared with hardware and software spending, cybersecurity services consume nearly 45 per cent of the protection stack, over 73 per cent of security operations and nearly 80 per cent of underlying processes, including governance, risk and compliance.[41]

In Australia in 2018, external spending on cybersecurity products grew by 8 per cent to $AUD3.9 billion, compared to 6 per cent growth in 2017.[42] Within the space of four years, over 50 new cybersecurity companies were created in Australia, with over 26,500 workers employed in the sector, which is an increase of nearly a third. Of these companies, 43 per cent are exporting globally, generating $AUD3 billion from the domestic market and $AUD600 million internationally.[43] In Australia, the cybersecurity sector has witnessed an average growth rate of 9 per cent per annum from 2016 to 2020.

With substantial growth in the market over the past five years, there is potential for the Australian cyber industry to grow further. Australia's cyber industry is reliant upon human capital; thus, expansion of the industry is reliant upon increasing the skills pipeline. Since 2018 there has been a dramatic increase in cybersecurity training programs across Australia. Australian universities and TAFEs have mobilised to address the skills gap, with more than 50 per cent of cyber providers surveyed being more confident about the talent pipeline than they were five years ago.[44]

More than 20 Australian universities now offer cybersecurity as a dedicated degree or as a major in IT or Computer Science. The shortage at more senior levels of the experience curve has been met with the supply of dedicated

40 Australian Cyber Security Growth Network (AustCyber), *Australia's Cyber Security Sector Competitiveness Plan 2020 update: driving growth and global competitiveness* [PDF], Australian Government, November 2020, p ii. Available from https://www.austcyber.com/resource/australias-cyber-security-sector-competitiveness-plan-2020

41 AustCyber, *Australia's Cyber Security Sector Competitiveness Plan*, Australian Government – Department of Industry, Science, Energy and Resources, April 2017, pp 18–19. Available from https://www.austcyber.com/tools-and-resources/sector-competitiveness-plan-2017

42 AustCyber, *Australia's Cyber Security Sector Competitiveness Plan 2019 update*, Australian Government, December 2019, p 4. https://www.austcyber.com/resource/australias-cyber-security-sector-competitiveness-plan-2019

43 AustCyber, *Australia's Cyber Security Sector Competitiveness Plan 2020 Update*, p ii.

44 AustCyber, *Australia's Cyber Security Sector Competitiveness Plan 2020 Update*, p 80.

postgraduate programs. At the vocational and education and training, or VET, segment of the market, enrolments increased from less than 500 in 2014 to approximately 3,800 in 2019.[45] Private training providers have also entered the market in greater numbers to offer skill-based qualifications. Although this increase in education and training is helping to deliver the current workforce, arguably it may need to be expanded further to meet the demands of a growing cyber industry.

Although the cybersecurity market is on an upward trajectory, some key sectors continue to remain exposed to adverse risk. Defence, in particular, is at a medium risk level, fuelled by very high threat levels as well as its regulatory environment, which disincentivises companies from entering the defence sector. Development of Australia's competitive edge in products and services such as threat intelligence, cloud security and analytics could become areas for defence and other critical infrastructure activities such as telecommunications and space.[46]

With government's recognition of cyber threats,[47] the need to protect critical infrastructure[48] and the implications of COVID-19 on Australia's resilience,[49] there is likely to be a substantial call on Australian industry to deliver more cybersecurity capability. Although Australian industry cannot be expected to deliver all cybersecurity, there will be a greater emphasis on sovereign and trusted elements of supply chains supporting critical infrastructure.[50] Australian industry may feature more prominently, depending upon the nature of risks and the relative strength of our national cyber industry.

In the examination of supply chains supporting our national cyber environment, it is likely that many defence systems will be classified as critical infrastructure and even as 'systems of national significance'. As part of its $270 billion Integrated Investment Program, Defence will invest up to $20 billion over the next decade

45 AustCyber, *Australia's Cyber Security Sector Competitiveness Plan 2020 Update*, p 73.

46 AustCyber, *Australia's Cyber Security Sector Competitiveness Plan 2020 Update*, p 46.

47 Department of Home Affairs, *Australia's Cyber Security Strategy 2020*, Australian Government, 6 August 2020, https://www.homeaffairs.gov.au/about-us/our-portfolios/cyber-security/strategy/australia%E2%80%99s-cyber-security-strategy-2020

48 Department of Home Affairs (DHA), *Security Legislation Amendment (Critical Infrastructure) Bill 2020* [website], DHA, last updated 11 December 2020. https://www.homeaffairs.gov.au/about-us/our-portfolios/national-security/security-coordination/security-legislation-amendment-critical-infrastructure-bill-2020

49 Parliament of Australia, *Inquiry into the implications of the COVID-19 pandemic for Australia's foreign affairs, defence and trade*.

50 Parliament of Australia, *Inquiry into the implications of the COVID-19 pandemic for Australia's foreign affairs, defence and trade*, p 81.

on IT and cyber capabilities.[51] Although this will include overseas solutions, the growing risk arguments together with the government's announcement of increased Australian industry content in defence acquisitions should be reflected in increased local cyber procurements.[52]

The case for sovereign cyber industry capability primarily is driven by the need for resilience of national and defence systems within Australia, but there is a secondary, economic argument for fostering Australian cyber industry. In 2020, the Western Australia AustCyber Innovation Hub modelled the business risks and costs of cyberattacks to small businesses in Western Australia. While the model gave a range of outcomes, the conservative figure used to show the value of cybersecurity was a 4.7 to 1 return on investment. This figure highlights the fact that if any major industry deemed as critical infrastructure were to invest in Australian cybersecurity products and services to protect them, they would circulate the large majority of $4.70 within Australia for every dollar spent on hardware, software and services. The data model could also apply to Defence, in that cost avoidance (when an attack does not occur due to strategically apportioned spend to critical operations) equates to the preservation of the ability to operate, monitor and defeat attempted intrusions and attacks.

The economic argument is prefaced on development of an industry that represents value for money, requiring our cyber companies to be competitive and able to perform in a global context.[53] The exportability of Australian cyber offerings is strong, with relatively few barriers in place.[54] Yet the global landscape of cybersecurity software firms is dominated by more mature industry capabilities in the United States (61 per cent) and Israel (18 per cent).[55] Notwithstanding the strong case for Australian cyber industry to help protect our national infrastructure, including our defence systems, support mechanisms may be needed to level the playing field dominated for so long by two advanced economies.

Levelling that playing field could be achieved through interventions on the supply side of cyber capability through assistance provided to Australian cyber companies to develop a skilled workforce and to be competitive in both local

51 Justin Hendry, 'Defence IT investment to climb to $20 billion over next decade', *itnews.com.au*, 2 July 2020, https://www.itnews.com.au/news/defence-it-investment-to-climb-to-20-billion-over-next-decade-549965.

52 For a discussion on the proposed increase in Australian industry capability, see Charbel Kadib, 'Government commits to Australian industry capability program overhaul', *Defence Connect*, 21 September 2020, https://www.defenceconnect.com.au/key-enablers/6851-defence-to-overhaul-aic-program.

53 Department of Defence (DOD), *2016 Defence Industry Policy Statement*, Australian Government, 25 February 2016, p 43. https://www.defence.gov.au/WhitePaper/Docs/2016-Defence-Industry-Policy-Statement.pdf

54 AustCyber, *Australia's Cyber Security Sector Competitiveness Plan 2020 Update*, p 44.

55 AustCyber, *Cyber Security Sector Competitiveness Plan*, p 16.

and export markets. The federal government is attempting to stimulate the local cybersecurity industry through vehicles such as the research and development incentives offered in Defence's Next Generation Technology Fund. Interventions on the demand side include reform of procurement practices that currently favour more mature overseas solutions, largely from an acquisition risk perspective. Such interventions constitute a shift from a market-based approach to one supported by a policy that favours sovereign industry.

## Prioritising sovereignty

Sovereignty is a term used regularly in Defence publications and is mentioned throughout the *2020 Defence Strategic Update*. The 2018 *Defence Industrial Capability Plan* construes sovereignty as the independent ability to employ defence capability or force when and where required to produce the desired military effect.[56] This need for assured support to the military is one that has been referred to as operational sovereignty.[57]

Neither the *Defence Industrial Capability Plan's* emphasis on 'independent' operations, nor the references in most of Australia's Defence white papers on 'self-reliance' mean that defence capabilities must be produced by Australian industry in order to preserve sovereignty. Nevertheless, their recognition of the importance of local industry to sovereignty is a continuation of defence policies over at least the past quarter of a century.[58]

The 2009 *Defence White Paper* introduced the concept of Priority Industry Capabilities, or PICs. PICs were defined as 'those industry capabilities that would confer an essential strategic capability advantage by being resident within Australia, and which, if not available, would significantly undermine defence self-reliance and ADF operational capability'.[59] The PICs policy met with initial concern about the omission of capabilities that were not high profile but were nonetheless strategically important.[60] A 2015 Parliamentary inquiry found that the PICs were

56 Department of Defence, *2018 Defence Industrial Capability Plan*, Australian Government, p 17. https://www1.defence.gov.au/business-industry/capability-plans/defence-industrial-capability-plan

57 Graeme Dunk, 'The decline of trust in Australian defence industry', *Australian Defence Magazine*, 10 February 2020, https://www.australiandefence.com.au/news/the-decline-of-trust-in-australian-defence-industry.

58 Discussion of requirements and policies associated with self-reliance have featured in Defence strategic reviews and white papers from the late 20th Century, see Paul Dibb, 'The self-reliant defence of Australia: the history of an idea', in Ron Huisken and Meredith Thatcher (eds), *History as policy: framing the debate on the future of Australia's defence policy*, ANU Press, 2007. http://doi.org/10.22459/HP.12.2007

59 Department of Defence, *Defence White Paper 2009*, Australian Government, 2009, p 128. https://www.defence.gov.au/whitepaper/2009/

60 Leigh Purnell and Mark Thomson, *How much information is enough? The disclosure of defence capability planning information,* Australian Strategic Policy Institute, December 2009, pp 63–64. https://www.aspi.org.au/report/how-much-enough-disclosure-defence-capability-planning-information

confusing and passive, that there was a gap between policy and action, and that specific areas of interest were outdated.[61] Amongst 11 recommendations aimed at improving defence industry policy, the Committee recommended the PIC program be discontinued.

In 2016, Defence heralded the Sovereign Industry Capability Assessment Framework (SICAF) as the means by which sovereign industrial capabilities supporting the ADF would be identified and developed.[62] Immediate concerns with the new framework included the perceived lack of innovative focus in reviewing sovereign capabilities against emerging strategic risks.[63]

The six criteria used in SICAF to assess capability programs are protection of intent, independence of action, interoperability, assurance of supply, skills retention and competitive advantage. Once the SICAF process identifies potential industry capabilities, they are prioritised against a range of filters, including whether they improve readiness, the importance of sovereign control, whether they sustain current capability and lead time implications. The 2018 *Defence Industrial Capability Plan* provided greater transparency of the framework and its ten specific priorities, with subsequent implementation plans to address how the priorities would be supported.

The SICAF criteria and filters do not recognise the broader benefits of a robust defence industry, which include not only contribution to sovereignty and security, but also the contribution to the economy and other spillover effects.[64] Such advantages are encompassed within Australian industry capability, which might be considered to be a superset of sovereign industry capability, as shown in Figure 1.

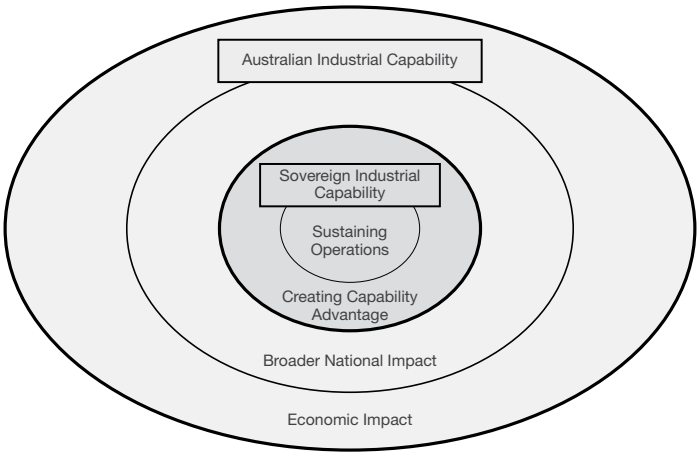
61 Parliament of Australia, *Report: Principles and practice – Australian defence industry and exports, Inquiry into government support for Australian defence industry exports*, Joint Standing Committee on Foreign Affairs, Defence and Trade, 1 December 2015, p 25, p 40, p 42 and p 43. https://www.aph.gov.au/Parliamentary_Business/Committees/Joint/Foreign_Affairs_Defence_and_Trade/Defence_Industry_Exports/Report

62 Department of Defence, *2016 Defence Industry Policy Statement*, p 23.

63 Graeme Dunk, 'Defence industry policy 2016 – well-intentioned but conflicted', *Security Challenges*, 2016, 12(1): 145–146.

64 Parliament of Australia, *Principles and practice – Australian defence industry and exports*, p 12.

**Figure 1: Sovereign industry capability and Australian industry capability**[65]




Notably, there is no national equivalent to Defence's SICAF. Whereas Australia's critical infrastructure legislation will result in a review of the risks in cyber supply chains supporting critical infrastructure assets, there is no explicit discussion of the need for sovereign industry. Future threats require a broader approach to national security, including risks to national infrastructure and the economy; this should be reflected in government policy about the requirement for sovereign industry priorities.

We highlight two additional considerations for sovereign industrial capability. First, there is a temporal dimension. Current thinking is that drivers affecting industry capability, such as the inability to rely on an overseas supplier of major capital equipment, may evolve in slow time. The acquisition-focus of the SICAF then puts priority on industries that have a long lead time in establishing, such as shipbuilding. The *2020 Defence Strategic Update* acknowledged that previous assumptions of a ten-year strategic warning of conflict were no longer valid, heralding a new era in which conflict may arise at short notice and may involve periods of high-intensity warfare.[66]

Attention in the SICAF thus needs to embrace the prospect of short notice and high-intensity conflict, which may affect the industry capabilities needed

65 South Australian Government, *Submission 66 to the Inquiry into the implications of the COVID-19 pandemic*, Joint Standing Committee on Foreign Affairs, Defence and Trade, 2020, p 5. https://www.aph.gov.au/Parliamentary_Business/Committees/Joint/Foreign_Affairs_Defence_and_Trade/FADTandglobalpandemic/Submissions

66 Department of Defence, *2020 Defence Strategic Update,* p 14.

to sustain ADF capabilities. Implications include protection against short notice threats, as well as the capacity to rapidly ramp up delivery of systems to mitigate the effects of attrition. Given the likely prelude of information warfare ahead of conflict, a focus on cybersecurity may help the ADF meet the SICAF priority of high readiness.

A second consideration is trust. With the sophistication of modern information systems in almost every ADF capability, which in future will include machine learning and artificial intelligence, Australia's ability to verify system behaviour is limited. The consequent cyber risks have been characterised as the ADF being taken out of any meaningful fight before they even get to it.[67] Our sovereign industry capability therefore must, if not providing all such technologies (which would be a task that would be out of reach), at least deliver and support trust mechanisms to mitigate against adverse cyber events. Such a requirement aligns with the SICAF priority of sovereign control to assure availability. With a focus on systems that facilitate trust, should cybersecurity be a sovereign industry capability priority for the ADF?

## Should cybersecurity be a priority?

Defence needs to, and will, invest in cybersecurity through the 2020 *Force Structure Plan*. Some Defence investments are in projects explicitly dedicated to cybersecurity, such as Joint Project 9131 Defensive Cyberspace Operations. However, with the integration and digitisation of the ADF, there are cyber aspects of many other projects that make the true investment in cyber far more significant. In all of these investments, the dual nature of cyber, to enable but also disable operations, means that they are critical to the ability to independently employ capability to produce the desired military effect.

The ADF's increasing level of dependency on information systems and the influence of those systems in the physical and cognitive domains represents a source of value. It also represents a vulnerability that will be targeted. This vulnerability is at the centre of any independent ability to employ ADF capability when and where required to produce the desired military effect. With Defence reliant upon industry to provide solutions and services to help protect cyber vulnerabilities, cybersecurity is a logical choice as a sovereign industry capability priority.

Given the previously described SICAF process, all the Defence capability programs (including those in the Information and Cyber capability stream)

67 Marcus Thompson, *Information Warfare – a new age?* Speech to Military Communications and Information Systems Conference (ILCIS), Canberra, 15 November 2018. https://defence.gov.au/JCG/docs/MILCIS2018-HIW-Transcript.pdf

should have been considered to identify essential industry capabilities. Yet, it would appear that cybersecurity was not identified as essential. Two of the original Sovereign Industrial Capability Priorities (SICPs) addressed cyber: advanced signal processing, and surveillance and intelligence. These two SICPs are depicted respectively as the tactical and strategic aspects of information integration, fusion and exploitation. The Advanced Signal Processing SICP explicitly mentions cyber, although it is in the context of only aspects of cyber that support tactical signal processing, such as management of platform cyber signatures. Otherwise, these SICPs only address cybersecurity in terms of the importance of cyber safeguards within industry and recognition of cybersecurity as an adjacent sector.

The focus on the analysis and manipulation of signals appears to be the legacy of early sovereign industry thinking, which featured concerns about electronic warfare threat data, the Echidna program and the local development of the ALR-2002 radar warning receiver. Such exploitation of information remains an important part of the ADF's need for a decision-making advantage. However, protection of the confidentiality, integrity and availability of the information systems is also important. The pursuit of functionality without attention to assurance does not reflect the risks to ADF capability in the cyber domain.

It could be inferred from this omission that Defence did not perceive cyber to be a substantial risk or operationally critical; or recognised the risk but expects that it will be mitigated by the adjacent cybersecurity sector; or does not see local industry as relevant to risk mitigation. The first alternative is unlikely, as Defence has acknowledged concerns in multiple forums about the potential for cyberattacks on its operational capabilities. The second is also not a significant factor: whereas some national initiatives that arise out of the *2020 Cyber Security Strategy* and critical infrastructure legislation may address the threat and help develop resilience, in general they require respective agencies and businesses to do more to protect their own systems.

So, was there a belief within Defence that possessing Australian skills, technology, intellectual property and infrastructure is not critical to the mitigation of cyber risks? There have been examples in the past where international supply chains have been chosen due to the perception that such suppliers represent less risk. This has led to a criticism that Australian-controlled companies are not trusted to provide the capabilities upon which operational advantage relies.[68] However, if an Australian supplier is given the opportunity to demonstrate it can deliver a solution or service, there is no logical reason to consider it fundamentally

68 Dunk, 'The decline of trust in Australian defence industry'.

riskier than an overseas supplier.[69] Indeed, from an ongoing supply chain and sovereignty perspective, as opposed to an acquisition perspective, local suppliers should be less risky in support of ADF operations. For example, an Australian supplier may be less likely to feature security 'back doors' in their software.[70]

Defence's policies in cybersecurity sovereignty will shape our future security and resilience. Given the recent adversarial relationship with the Chinese Government, which sponsors substantial APT activity,[71] it may be informative to consider the asymmetry of our policies. Whilst the Chinese Government is establishing a range of cyber access opportunities through its Digital Silk Road program[72], it maintains a closed approach to protect its own environment through 'cyber sovereignty'.[73] Such an offset may represent a significant starting disadvantage for the ADF.

Other nations' militaries are starting to realise the vulnerability of their cybersecurity, with the UK MOD recognising gaps lower in the supply chains and the US recognising gaps in unclassified environments.[74] NATO also has identified cybersecurity as a risk and is addressing its supply chains in conjunction with other initiatives.[75] Like the current Australian SICAF, the focus of such supply-chain security efforts appears to be on the cyber readiness of defence industry, rather than on how the supply-chain risk may be manifested in defence assets. The US DoD, for example, places a lot of emphasis on the Cybersecurity Maturity Model Certification as a standard by which defence industry is measured.[76] However, such measures by Defence to help industry to raise their standards need to be complemented by efforts in which industry helps lift Defence's cyber resilience.

69 Brent Clark, 'Op-ed: The use of risk to distort supply chains', *Defence Connect*, 3 September 2020, https://www.defenceconnect.com.au/key-enablers/6758-op-ed-the-use-of-risk-to-distort-supply-chains.

70 Ben Packham, 'Army may have to fight next war with pencils and paper', *The Australian*, 11 May 2021.

71 See CrowdStrike, *Meet the threat actors: list of APTs and adversary groups* [website], CrowdStrike Inc., 2019, https://www.crowdstrike.com/blog/meet-the-adversaries/.

72 Robert Greene and Paul Triolo, *Will China control the global internet via its digital silk road?* Carnegie Endowment for International Peace, 8 May 2020, https://carnegieendowment.org/2020/05/08/will-china-control-global-internet-via-its-digital-silk-road-pub-81857.

73 Niels Nagelhus Schia and Lars Gjesvik, *China's cyber sovereignty*, Policy Brief [2/2017], Norwegian Institute of International Affairs, 1 January 2017. https://www.jstor.org/stable/resrep07952

74 Trevor Taylor and Rebecca Lucas, 'Management of cyber security in defence supply chains', *RUSI Newsbrief*, 24 April 2020, 40(3): 2–3.

75 Robert K Ackerman, 'NATO expands cybersecurity activities', *The Cyber Edge*, AFCEA, 1 May 2020. https://www.afcea.org/content/nato-expands-cybersecurity-activities

76 John Keller, 'Pentagon to issue cyber security standards to provide trusted computing for military supply chain', *Military and Aerospace Electronics*, 31 January 2020. https://www.militaryaerospace.com/trusted-computing/article/14092854/cyber-security-supply-chain-trusted-computing

The situation with respect to cybersecurity and sovereignty in Australia may be about to change, at least in relation to Defence. In August 2021, the Minister for Defence Industry, the Hon Melissa Price MP, announced the addition of four additional priorities to complement the ten original SICPs of the *2018 Defence Industrial Capability Plan*.[77] One of these priorities is *Information Warfare and Cyber Capabilities*, defined as requiring 'Australian industry to have the ability to design, develop and maintain capabilities, suitable for dominance in, and resilience to information warfare and the deterring and responding to potential threats'.[78] While at time of writing, details of this additional SICP are not available, they are likely to be contained within the associated implementation plan to be published in due course.

The addition of the four additional SICPs reflects Defence's commitment to reviewing its SICPs annually to ensure the priorities align with technological developments as well as the critical requirements of the ADF into the future.[79] In the future such reviews Defence's should consider three key factors.

First, essential industrial capabilities should be in the context of future scenarios, considering emergent technology trends and risks. Doing so would put more emphasis on areas such as cybersecurity, artificial intelligence, quantum computing and space.[80] In future conflict, support to these elements of defence capability will be pivotal to operational sovereignty. For Australian industry to be positioned to provide such support in the future, they need to be priorities now.

Second, reviews should consider risk not only in terms of the delivery of functionality of capability programs, but their assurance. The cyber domain, like other domains, is contested and therefore greater attention to the risk of adverse acts is needed to give balance to the required operational sovereignty.

77 Melissa Price MP, *Morrison government supporting Australia' sovereign defence industrial capabilities* [media release], Australian Government, 26 August 2021. https://www.minister.defence.gov.au/minister/melissa-price/media-releases/morrison-government-supporting-australia-sovereign-defence

78 Centre for Defence Industry Capability (CDIC), 'Four new Sovereign Industrial Capability Priorities announced', *business.gov.au*, Australian Government, 7 September 2021. https://business.gov.au/cdic/news-for-defence-industry/four-new-sovereign-industrial-capability-priorities-announced

79 Department of Defence, *2018 Defence Industrial Capability Plan*, p 20.

80 Noting that space is one of the four additional SICPs announced on 26 August 2021.

Third, more attention is needed on how the SICPs are implemented. Although the government's funding for industry initiatives is significant, their effectiveness will continue to be constrained by systemic issues in which acquisitions are controlled by foreign primary contractors.[81] This situation may only be rectified by stronger coupling between the SICPs and proposed Australian industry capability reforms in Defence procurement processes.[82]

## Conclusion

Information Technology has emerged as a dominant capability in the military as in broader society. Technology development is transforming systems and the character of modern conflict, to the extent that superiority in the cyber domain will translate to broader success. Conversely, surprise in the same domain may result in failure. When considering the risks to the ADF's ability to independently employ force, cybersecurity should be central.

Our analysis indicates that a greater focus on sovereign cybersecurity capabilities would help mitigate risks and is viable. At both the national level and in Defence, there is recognition that increasing risk may justify greater sovereign control over supply chains associated with cyberspace. At the national level, the government has initiated a process to assess risk in critical infrastructure, with a likely increased use of sovereign and trusted supply chains.

Following Defence's emphasis on cyber and sovereign industry as priorities in the *2020 Defence Strategic Update*, cyber has been added to its sovereign industrial capability plans, although an implementation is yet to be developed. Based on our analysis, we assess that through implementation of the new SICP, exploitation of a growing national cybersecurity industry would help increase trust and responsiveness in the face of the growing threats to ADF capability.[83]


81 Tyson Sara, 'Filling the hollow middle in Australia's defence industry', *The Strategist,* ASPI, 6 November 2020. https://www.aspistrategist.org.au/filling-the-hollow-middle-in-australias-defence-industry/

82 Linda Reynolds MP and Melissa Price MP, *Strengthening how Defence does business with Australian industry* [joint media release], Department of Defence and Department of Defence Industry, 18 September 2020. https://www.minister.defence.gov.au/minister/lreynolds/media-releases/strengthening-how-defence-does-business-australian-industry

83 The Edith Curtin University received associated funding through a Defence grant to produce research that has contributed to this paper.

# Commentary

Commentary

# Can Asians fight? Organisational-cultural impediments to the conduct of Asian high-tech conventional warfare

*Ahmed S Hashim*

## Introduction

Can Asians fight?[1] History says they can. The continent of Asia – extending from Southwest Asia, a subregion universally known as the Middle East, through the Indian subcontinent to Southeast Asia and finally the Far East, has had an extraordinary military history.[2] Its major subregions: Southwest Asia, the Indian subcontinent, and the Indo-Pacific, are replete with tensions and rivalries. Asian wars have often been monumental affairs and cataclysmic events. As strategic uncertainty increases in the Indo-Pacific region due to heightened tensions between the great powers, the United States and the People's Republic of China (PRC), the overall *modern* military capabilities of major Asian powers to wage war must be assessed realistically: *can they wage modern high-tech conventional warfare?* That is debatable. History has shown that the acquisition of weapons – and in recent decades Asian powers have acquired formidable arsenals – does not mean they will be able to use them effectively and efficiently.[3]

In the mid-nineteenth century, Asian powers had enormous difficulties in cognitively understanding what modern war *was*; prime examples of this failure to comprehend the threat posed by Western powers were displayed in the responses of Qajar Iran and Qing China. If you fail to understand changes in the

1 The title is inspired by that of Singaporean diplomat Kishore Mahbubani's book, *Can Asians think? Understanding the divide between East and West*, Steerforth Publishing, Singapore, 2002.

2 This piece is a summary of a forthcoming 80-page monograph of six chapters on Asian military capabilities. It is divided into Chapter I: Introduction; Chapter II: Can Asians fight: competing explanations; Chapter III: Combined arms and joint warfare as measures of modern military effectiveness; Chapter IV: India; Chapter V: Japan; Chapter VI: People's Republic of China; Chapter VII: Conclusions.

3 I discuss the notions of military effectiveness and efficiency in some detail in Chapter III of the forthcoming monograph.

character of war, you cannot make the changes necessary. These were examples of 'cognitive failure'.[4] By way of contrast, in the twenty-first century the Asian powers that I am addressing in this commentary do *understand* what needs to be done, but whether they will succeed is still open to question. To wage high-tech conventional warfare requires certain skills, two of which – combined arms and, especially, joint warfare – I do not believe have been adequately developed and institutionalised in the major Asian armed forces so far, in the twenty-first century. I will briefly address the efforts of India, Japan, and the PRC in building high-tech conventional military forces that can conduct both *combined arms* and *joint warfare*.

## Brief background

Combined arms is the ability to use all the combat arms –infantry, armour and artillery – in an integrated manner on the battlefield to achieve effects that are greater than the sum of their parts.[5] The practice of combined arms has existed since ancient times, but most armies could not implement it due to impediments associated with social structures and military organisational issues. The Western powers learned combined arms over the course of the centuries but not without immense 'teething' problems.

Jointness is even more complex, as it involves the command and coordination of the different services within a military. Jointness refers to the ability of the different services capacity to operate together effectively where the armed forces 'train as a team, fight as a team, and win as a team'. Whereas combined arms is fighting within a single domain – land warfare – joint warfare is fighting across domains, that is land, air and sea. Jointness is the opposite of the organic or 'single-service' approach, where each service organises for war independently; single-service syndrome is exhibited in training exercises where the services do not coordinate or cooperate, even if they are exercising in the same training area.[6]

4 I have adopted the concept of 'cognitive failure' from Peter Paret who used it to explain Prussia's failure to understand the implications of the changes in warfare occasioned by the French Revolutionary and Napoleonic Wars; see Peter Paret, *The cognitive challenge of war: Prussia 1806*, Princeton University Press, Princeton, 2009. The French historian and army officer, Marc Bloch had also come up with a similar idea when explaining the disastrous French defeat at the hands of the Germans in 1940, when he stated that the French politicians and high command failed to understand the character of the war Germany had prepared for and waged. See Marc Bloch, *Strange defeat: a statement of evidence written in 1940*, WW Norton and Company, New York, 1999.

5 See Jonathan House, *Combined arms warfare in the twentieth century*, University of Kansas Press, Lawrence, 2001.

6 I have based my discussion here on Jan Angstrom and JJ Widen, *Contemporary military theory*, Routledge, London, 2014, pp 93–109.

After independence, many Asian states developed extensive conventional military capabilities and waged wars against one another. In those encounters, Asian militaries were tactically proficient in small-unit exchanges, infiltration and flank assaults. But they were woefully unprepared for the complex movement of large units beyond the company or battalion levels in the theatre of operations, and they often failed to coordinate use of various branches of their ground forces on the battlefield. The reasons for failure were many. For instance, the separate ground branches did not train or exercise together. In many armies, infantry and armour were not familiar with each other's concept of operations and thus found it difficult to operate in a coordinated manner. In addition, commanders were not educated or trained in combined arms. In the 1960s and 1970s, Asian powers balanced the various branches of their ground forces by building up armour, artillery and engineer units. But combined arms did not come easily to many armies; this was evident in the dismal performance of the People's Liberation Army (PLA) ground forces in the Sino-Vietnamese War of 1979.

From the 1980s onwards (and particularly from the 1990s when their economies grew), the major Asian powers began to build up their air forces and navies, thus also creating more balance in *service force structures*.[7] But this has not meant that the path towards jointness has been easy. In China, the People's Liberation Army Ground Forces (PLA-GF) have dominated other services because of the centrality of ground warfare in China's wars to date. This dominance initially hindered innovative thinking about power projection and joint warfare, and it has continued to be an issue, even as China has become more powerful and has sought to shape the geopolitical environment in its neighbourhood more to its liking.[8] Similarly, the Indian Army has dominated the formulation and implementation of Indian strategies against India's two most pressing threats: China and Pakistan.[9] The Indian Army is huge and much of its budget goes to personnel salaries, benefits and pensions; while curiously, the more capital-intensive but significantly smaller air force and navy can devote more monies to the purchase of platforms. Even with the emergence of jointness, the default approach of Asian militaries has been to continue to perpetuate the 'single-service' syndrome, in which each service works alone and jealously guards its autonomy.[10]

7 This is derived from perusing several years' issues of *The Military Balance* of the International Institute of Strategic Studies. https://www.iiss.org/publications/the-military-balance.

8 See Michael S Chase, Jeffrey Engstrom, Tai Ming Cheung, Kristen Gunness, Scott W Harold, Susan Pushka and Samuel K Berkowitz, *China's incomplete military transformation: assessing the weaknesses of the People's Liberation Army*, RAND Corporation, Santa Monica, 2015, p 51. https://www.rand.org/pubs/research_reports/RR893.html

9 See Arzan Tarapore, *The army in Indian military strategy: rethink doctrine or risk irrelevance*, Carnegie-India Paper, 10 August 2020. https://carnegieindia.org/2020/08/10/army-in-indian-military-strategy-rethink-doctrine-or-risk-irrelevance-pub-82426

10 See Anit Mukherjee, 'Joint doctrine for armed forces: the single-service syndrome', *Brookings Institution-India Center*, 9 May 2017. https://www.brookings.edu/opinions/joint-doctrine-for-armed-forces-the-single-service-syndrome/

## Transforming militaries – India, Japan, PLA

### India

India's geopolitical environment has been fraught with danger ever since independence. It has fought four wars with its neighbour Pakistan: in 1948, 1965, 1971 and 1999, as well as numerous border clashes. The dominance of ground warfare, particularly during the first Indo-Pakistan War in 1948, obviously, precluded jointness; while in the 1965 war, the air force and navy largely did their 'own thing'. The war of 1971, in what was East Pakistan, witnessed some effort in the direction of jointness among the services, but this was largely due to the personal chemistry between the commanders rather than because of any institutionalisation of jointness. Yet even after that war, backbiting and snide comments about the lack of cooperation and coordination among the services occurred. India's controversial military intervention in the brutal Sri Lankan civil war in 1987 was also marred by a lack of coordination and cooperation between the army, navy and air force.[11]

Each of the Indian services has viewed war fighting from its own perspective, and thus, despite attempts at reform, they have lacked a unified and coordinated approach to problems of defence and security.[12] The Kargil mini-war of 1999, in which a surprise border incursion by Pakistani forces took the Indians by surprise, shocked the latter into full recognition of the need to overhaul the dysfunctional nature of the higher defence structure. The Kargil Review Committee recommended a wide-ranging set of reforms, including a call for promoting jointness among the services and the creation of a Chief of Defence Staff (CDS) post. There was considerable back and forth about this CDS post; and the usual bureaucratic inertia, inter-service rivalries and civilian fears of a dominant military officer meant the matter was left in abeyance. A Headquarters Integrated Defence Staff (HQ IDS) was set up in 2001 to provide a single point, tri-service, military advice to the government. An integrated command – Andaman and Nicobar Command – was set up to serve as a testbed for raising more such joint structures. But these efforts remained half-hearted, and during the decade-long premiership of Manmohan Singh (2004–2014) defence reforms were neglected.[13]

11 S Kalyanaraman, 'Major lessons from Operation Pawan for future regional stability operations', *Journal of Defence Studies*, 2012, 6(3):43–44. https://www.idsa.in/jds/6_3_2012_MajorLessonsfromOperationPawanforFutureRegionalStabilityOperations_SKalyanaraman

12 BS Sachar, 'Jointmanship in the defence forces: the way ahead', *Journal of Defence Studies*, August 2007, 1(1). https://www.idsa.in/jds/1_1_2007_JointmanshipInTheDefenceForces_BSSachar

13 Anit Mukherjee, 'The great churning: Modi's transformation of the Indian military', *War On the Rocks*, 5 May 2021. https://warontherocks.com/2021/05/the-great-churning-modis-transformation-of-the-indian-military/

It was left to the government of Prime Minister Narendra Modi to promote deep-seated reforms in the defence sector, which were designed to bring about a 'fundamental transformation' in the military. When he took office in 2014, he made clear that the Indian military needed reform: the days of single-service culture and turf protection were over. On 15 August 2019, he announced the decision to create the post of CDS, to the delight of many defence analysts and some senior officers but to the dismay of many who felt threatened by the idea. On 30 December 2019, General Bipin Rawat, the 26th Chief of Army Staff, took over as India's first CDS. The CDS was to be senior to the service chiefs and their main mission was to promote jointness, by doing away with the large and cumbersome single-service commands of each service and creating a smaller number of joint theater commands within three years. Each theatre commander – and it would not matter which service they emanated from – was to have access to the full panoply of the military units of all the services. The services themselves would deal with procurement, equipment and training.

The past two years have not been smooth sailing and it would be unfair to think that India would achieve superhuman efforts in implementing jointness. It took the United States years to overcome the immense bureaucratic hurdles and inter-service rivalries; even though the first steps were initiated in 1947. In the case of India, no sooner had the formation of the CDS been formalised, then old as well as new objections emerged. Some of the services, particularly the air force, were worried they would lose out in any new system of joint theatre commands. Prior to the formalisation of the position of CDS, a navy admiral insinuated that the air force was the greatest obstacle in the path towards jointness. Air force reticence may, indeed, be understandable given the controversy that the CDS himself created in mid-July 2021, when he suggested that the air force was a *supporting* service. This was met by considerable ire on the part of the Indian Air Force Chief of Staff. Some objected to the need for India to have a radically different structure, given the kind of joint theatre commands that were called for were intended for an expeditionary type of military, which India's military was not. Yet, India has not been able to ignore the brutal fact that the PRC's military is far ahead of its own, in both the nature of the PRC's reforms and the rapidity with which they are being realised.

## Japan

The Imperial Japanese military was notorious for its deep-seated and almost murderous extended inter-service rivalries between the army and the navy, due to differences over strategic outlooks, doctrines and disputes over the budget allocated to each service.[14] Following its traumatic and total defeat in 1945, post-Second World War Japan was forced to renounce war as a sovereign right under the 'peace' constitution that was imposed on it by the victorious powers. This unusual clause was relaxed when the Cold War erupted and Japan, having become an ally of the United States, was allowed to rearm under stringent conditions.[15] Initially, the Japanese Self-Defense Force (JSDF) focused on the Cold War threat from the Soviet Union, and the Ground Self-Defense Force built a force structure designed to repel a potential Soviet invasion.[16] Joint training was virtually non-existent and each service contently existed within its own self-contained universe.

With the end of the Cold War and the growing assertiveness of China as a great power, Japan began to focus on China and North Korea as threats.[17] The changed geopolitical environment and the need to project power to defend Japanese interests, including the defence of outlying islands, have forced the Japanese to pay greater attention to jointness. However, the path has been marred by uncertainty.

The twenty-first century JSDF is one of the most high-tech militaries in the world, but it has a long way to go before it achieves jointness. The three services of the JSDF 'do not have a long history of training and operating together'.[18] Grant Newsham – a former US Marine Corps officer with considerable knowledge of the JSDF – has remarked that the force 'is less than the sum of its parts' and pointed out that many of its exercises are 'kabuki dances', elaborate affairs that hide

14 For a succinct summary, see Michael Barnhart, 'Domestic politics, interservice impasse and Japan's decision for war', in Ernest R May, Richard Rosecrance and Zara Steiner (eds), *History and Neorealism*, Cambridge University Press, Cambridge, 2010, p 185–200.

15 Michael Haas, 'Japan's military rebirth', *Center for Security Studies,* Zurich, June 2014, no.155, p 1–4.

16 Jeffrey Hornung, Japan's potential contributions in an East China Sea contingency, RAND Corporation, 2020, p x.

17 John Wright, 'Solving Japan's joint operations' problems', *The Diplomat*, 31 January 2018. https://thediplomat.com/2018/01/solving-japans-joint-operations-problem/

18 Justin Goldman, 'An amphibious capability in Japan's Self-Defense Force: operationalizing dynamic defense', *Naval War College Review*, Autumn 2013, 66(4):120.

serious deficiencies: intense inter-service rivalries, bureaucratic machinations and fights over allocations of the defence budget.[19]

The obstacles towards jointness can be seen in the saga of the Amphibious Brigade. In the spring of 2018, the JSDF underwent its biggest organisational reforms; with its command streamlined for more flexible operations and the creation of amphibious forces to project power to defend remote islands and offshore interests. The JSDF launched the Ground Component Command to provide unified command over regional armies and the Amphibious Rapid Deployment Brigade. But Japan's commitment to developing an amphibious capability was sidelined by senior Japan Maritime Self-Defense Force leadership, who favour investments in 'big-ticket' items such as submarines, anti-submarine warfare capabilities, aerial reconnaissance and ballistic missile defence.[20] The view of the navy officers was that the Amphibious Brigade was merely a result of intensive lobbying by the army, presumably to retain continued relevance and a slice of the defence pie. Moreover, even if the air force and navy came onboard, Japan would find it very difficult to conduct complex amphibious operations in a fight with the PLA because the various services of the JSDF have no doctrine for joint warfare. [21]

### People's Republic of China

The armed forces of the PRC, the PLA, was formed in August 1927 as the armed wing of the Chinese Communist Party (CCP) under Mao Zedong. Known initially as the Red Army, during the liberation war against the Japanese invaders and the civil war against the Guomindang Nationalist forces of Jiang Jieshi (Chiang Kai-shek), it was largely an illiterate peasant force. Nonetheless, it became a well-trained and hardy land force, defeating the Nationalists and winning the Chinese Civil War in 1949 in massive conventional set-piece battles. Its concept of People's War – *renmin zhanzheng* – assumed that a war would be fought *within* China against an invader, using the regular forces, local armed units and people's militia. None of these forces, not even the largely ground force dominated regular military, could project power beyond China's territory.

19 Grant Newsham, 'Japan's military has some serious problems (as China's military gets stronger)', *National Interest*, 7 September 2016, https://nationalinterest.org/blog/the-buzz/japans-military-has-some-serious-problems-chinas-military-17613; John Pomfret, 'The problem with Japan's military isn't warmongering. It is a toothless military', *Washington Post*, 20 November 2017. https://www.washingtonpost.com/news/global-opinions/wp/2017/11/20/the-problem-with-japan-isnt-warmongering-its-a-toothless-military/?noredirect=on&utm_term=.720ea0117533

20 Franz Stefan-Gady, 'Toothless tiger: Japan Self-Defence Forces', *British Broadcasting Corporation*, 15 October 2015. https://www.bbc.com/news/world-asia-34485966

21 Benjamin Schreer, 'Arming without aiming? Challenges for Japan's amphibious capability', *War on the Rocks*, 2 October 2020. https://warontherocks.com/2020/10/arming-without-aiming-challenges-for-japans-amphibious-capability/

Indeed, in the early decades there was no need to project power strategically; the Chinese hoped that an enemy stupid enough to invade would eventually be trapped and mired in the Chinese heartland. However, geopolitical and technological environments are dynamic; doctrine and strategic thinking must keep up.[22] From the 1990s, the impetus for defence reform was propelled forward not only by lessons learned from China's previous wars – recognition of the need to overhaul a bloated, corrupt and lumbering military – but also by lessons learned from 'other peoples' wars and the expansion of Chinese interests far beyond the PRC's borders, which required a modern military capable of projecting power. The British–Argentine war in the Falklands in 1982, in which a British military, stretched by years of defence austerity, managed to project air, land and naval forces 14,000 kilometres, impressed the PLA.[23] What shocked the Chinese leadership was the Gulf War of 1991, when a US-led coalition destroyed the vaunted Iraqi army. The Iraqi army had been described as the world's fourth-largest combat-proven military having 'won' the eight-year war against Iran in 1988, and it was armed with Soviet and Chinese weapons. The 1991 Gulf War highlighted how backward the PLA was in *every* aspect of modern conventional warfare in comparison with Western military forces.[24] While some progress was made – particularly in the realm of combined arms – and the PLA began stressing the need for jointness between the services, as evidenced by the increase in writings on the topic, little tangible was achieved in this specific area of defence reform during the eras of Jiang Zemin (1993–2003) and Hu Jintao (2003–2013).

It has been claimed that the PLA has gone through ten iterations of reform in its history. If so, then Xi Jinping – the current leader of the PRC and chairman of the Central Military Commission, the highest military policymaking institution – instituted the eleventh and most far-reaching set of defence reforms in the history of the PLA. They are transformational. From the early days of his leadership, which began in 2013, Xi made it abundantly clear – particularly at

22 See the early speech by General Su Yu (1907–1984), a PLA veteran calling for change, *Foreign Broadcasting Information Service-China*, 8 August 1977, pp 10–21.

23 Lyle Goldstein, 'China's Falklands lessons', *Survival*, 2008, 50(3):65–82.

24 For details, see Harlan Jencks, 'Chinese evaluations of "Desert Storm": Implications for PRC security', *Journal of East Asian Affairs*, Summer–Fall 1992, 6(2):447–477; Andrew Scobell, David Lai, and Roy Kamphausen (eds), *Chinese lessons from other peoples' wars*, Strategic Studies Institute, US Army War College, Carlisle Barracks, 2011; Michael Dahm, 'China's Desert Storm education', *United States Naval Institute Proceedings*, March 2021, 147(3).
https://www.usni.org/magazines/proceedings/2021/march/chinas-desert-storm-education

the plenum of the 18th Party Congress – that the PLA had to change.[25] Xi's reforms were designed, among other things, to reinforce the CCP control over the PLA and to create a military force worthy of a rejuvenated Chinese nation and able to project power and fight modern wars beyond China's borders. He ordered the dissolution of the obsolescent single-service theatre commands and the formation of five joint theatre commands, intensification of educating PLA officers in jointness, and the training of PLA units in realistic joint exercises.[26]

## Strategic issues for the Australia and the region

As we address the ability of major Asian militaries to wage high-tech conventional warfare in the twenty-first century, we cannot rely on obsolete explanations that focus on racial and cultural characteristics; nor on unmanageable and unwieldy explanations like addressing the nature of the polity and society.

Admittedly, one cannot deny that the nature of a polity and society has an impact on the armed forces. For example, if the political elite is fearful of its military, it will act to ensure regime security through, say, the promotion of officers who are loyalists, rather than prioritising the military's ability to prosecute its professional task, preparing to wage war. But if a military is rife with political hacks and loyalists, whose main job is to ensure regime security, it stands to reason those military tasks such as promoting combined arms and joint warfare are not at the top of their agenda. There is a connection between the nature of the polity and society and its armed forces.

Nonetheless, this does not absolve us from microscopically addressing the armed forces themselves as institutions. The failure to do combined arms and joint warfare effectively stems from organisational infirmities, bureaucratic bottlenecks, different strategic outlooks and service histories, different doctrines and inter-service rivalries that cannot be easily traced back to the wider society. American defence thinker, Carl Builder, once asserted that each service is an institution with a distinct and enduring personality, which can be uncovered by looking at the history of each service and its behaviour over time. While he was discussing the American military, he implied that this could apply to any military.

25 Dennis J Blasko, 'Th Chinese military speaks to itself, revealing doubts', *War on the Rocks*, 18 February 2019, https://warontherocks.com/2019/02/the-chinese-military-speaks-to-itself-revealing-doubts/; See also Dennis J Blasko, 'PLA weaknesses and Xi's concerns about PLA capabilities, Testimony before the US-China Economic and Security Review Commission, Panel on "Backlash from abroad: the limits of Beijing's power to shape its external environment"', 7 February 2019, US-China Economic and Security Review Commission. https://www.uscc.gov/hearings/what-keeps-xi-night-beijings-internal-and-external-challenges

26 The literature output on Xi Jinping's defence reforms is immense. I have analysed some of the primary and secondary sources more extensively in Chapter VI of my monograph. For this paper, I have relied on some of the key publications such as Philip Saunders et al., *Chairman Xi remakes the PLA: assessing Chinese military reforms*, National Defense University Press, Washington DC, 2019; Edmund Burke et al., *People's Liberation Army operational concepts*, RAND Corporation Research Report RRA 394–1 (2020).

I would argue that service personality has had an impact on the trajectory of jointness in the Asian militaries addressed here.[27]

Jointness remains the gold standard for any significant military with large and distinct services and pretensions to project power.[28] The three Asian powers addressed here have cognitively recognised the importance of jointness for their armed forces. Their armed forces must be able to operate jointly in defence of their contemporary national security interests. Defending some of these interests might require the capability to project power beyond national borders and sometimes much further afield. Power projection invariably requires jointness.

It is difficult to assess where the three Asian powers addressed here are in terms of combined arms and jointness. To be sure, most of their ground force exercises are now undertaken as combined arms training evolutions. It is in the more complex area of jointness where there is doubt.

First, while I would argue that there is *cognition* of the need for jointness, I am not sure it has become fully instilled within the militaries, particularly within the Indian and Japanese militaries, while the PLA remains something of an enigma. Civilian leadership has played a significant role in seeking to propel the respective militaries of their countries forward towards implementing reforms; but the military's 'buy-in' is critical. The three countries recognise that many of their security interests that need to be defended lie beyond their immediate territories; this means that they must *project power* to defend those interests. Effective projection of power beyond one's territory requires a military to be joint. No one service can do it alone and power projection decays over distance; the decay is not mitigated merely by having an abundance of military power but by having synergistic military power derived from the capabilities of all the services of a military establishment.[29]

Second, undertaking the reforms to bring about jointness is one thing, being able to do it in training and exercises is another thing. Efforts have been made to break the single-service syndrome, but it requires major changes in each service's organisational culture, the training of more joint personnel, and an increase in the frequency of *realistic* joint training and exercises.

27 Carl Builder, *The masks of war: American military styles in strategy and analysis*, Rand Corporation Research Study, Johns Hopkins University Press, Baltimore, 1989, pp 3–6.

28 Email discussion with Professor Jan Angstrom, Swedish Defence University, 27 September 2021.

29 I have used and modified the arguments of Jonathan Markowitz and Christopher Fariss, 'Going the distance: the price of projecting power', *International Interactions*, 2013, 39: 119–143. My forthcoming monograph will further develop the relationship between power projection and jointness.

Third, the real test of effectiveness in joint warfare is war. None of the militaries addressed here has fought a major war for a long time. The PLA has made greater strides in achieving a joint military than either India or Japan, which must be a source of worry for them. This does not mean that the PLA is on a par with its most powerful potential foe, the United States military. The PLA is still an 'incomplete' military power in modern warfare terms. It still suffers from immense weaknesses, and the lack of combat experience, bemoaned by certain PLA senior officers, may not be the biggest issue.

Finally, while Western countries have mastered combined arms, they still have 'teething' problems with jointness. Nonetheless, they are far ahead of the three Asian powers mentioned here when it comes to joint warfare theory and practice. The PLA problems in achieving jointness is a benefit for the United States and Australia and, of course, both India and Japan, who both see China as their primary threats. Crucially, however, Indian and Japanese vulnerabilities in this specific area adversely affect what they could bring to the table militarily as potential security partners of the United States and Australia. The Quadrilateral Security Dialogue nations, which brings together the United States, Australia, Japan and India to address growing security challenges in the Indo-Pacific, as it develops could usefully begin to include exercises and training events that work to address this significant issue.[30]

30 These points were developed in further conversations with Dr Peter Layton.

Commentary

# ‘Where to from here?’ The Australian Defence Force’s pursuit of national security and the *2020 Defence Strategic Update*

*Kane Wright*

The release of the *2020 Defence Strategic Update* (DSU) marked a turning point for Australian defence strategy. Under the rubric of ‘shape’, ‘deter’ and ‘respond’, this document articulated a simple and logical framework to guide Defence’s force generation and application in response to a shifting strategic environment. One year after the DSU’s release, it is worth evaluating how appropriate its central tenets remain to guide Defence’s strategy and actions.

This commentary proposes that it is time to move beyond ‘shape’, ‘deter’ and ‘respond’ to define and enhance the strategic ways in which objectives are pursued more accurately. It begins by evaluating Australia’s national security objectives through the first decades of the twenty-first century, demonstrating that national interests are consistent and enduring. While the pursuit of these interests remains unchanged over time, the shifting nature of the strategic environment and targeted threats have forced Australia to re-evaluate its approach. The DSU was the government’s principal artefact to catalyse this change.

To assess the DSU’s continued relevance and suitability, each of the document’s three pillars requires examination. The strength of any strategy is its ability to effectively craft strategic ways that connect the means available to a nation to the ends it pursues. By undertaking this qualitative analysis, this piece provides comment on how appropriate the DSU is as a guiding document for Defence and where modification to its various elements might enhance Australia’s ability to pursue national interests.

Although the DSU was an effective starting point for strategy development, future iterations can build upon its approach. Defence’s current focus towards shaping the region is appropriate but could be enhanced with greater investment

to our north. Australia's ability to deter threats as a middle power has limitations and may benefit from a more nuanced force design and deeper investment in alliances and balancing coalitions. The Australian Defence Force (ADF) is not ideally placed to achieve self-reliant deterrence. It could be enhanced subject to further analysis of the force balance required for future conflicts and targeted integration with allies and security partners for a collective defence system.

## Australia's pursuit of national security through the twenty-first century

Framed primarily through a national security lens, Australia's strategic objectives have remained consistent throughout the past few decades. From the foreign policy white papers of the early 2000s to Australia's capstone 2013 national security policy, *Strong and Secure: A Strategy for Australia's National Security*, successive governments have shown a uniformity of vision that pursues strategic 'ends' along interrelated and enduring themes: economic prosperity, regional stability, global standing and influence, security from coercive external influence and security from physical threat. The government's most recent guiding document, the *2017 Foreign Policy White Paper*, updated and echoed these objectives: 'a stable and prosperous Indo-Pacific', 'more opportunities for businesses globally', 'ensure Australians remain safe, secure and free', 'promote and protect the international rules' and 'step-up support for a more resilient Pacific'.[1]

For much of this period, Australia's strategic approach implicitly acknowledged the security afforded by US unipolar dominance. A 'non-specific threat environment' predominated that allowed Australia to pursue regional leadership by championing security across the region to enhance the nation's global influence.[2] This was achieved through 'middle power' initiatives: support to the global War on Terrorism through contributing to the US alliance, actions to counter regional terrorism and regional interventions to address Pacific Island instability.

However, the US's relative decline in recent years and accompanying great power competition with a rising China has changed Australia's strategic context. In doing so, strategic ends remain largely unchanged, but the approach needed to secure these ends has shifted. Australia's national security documents have

1 Department of Foreign Affairs and Trade (DFAT), *2017 Foreign Policy White Paper,* Australian Government, November 2017, p 7.

2 Michael Wesley, 'Australia's grand strategy and the 2016 Defence White Paper', *Security Challenges,* 2016, 12(1):19–30, p 20; Robert Ayson, 'Australia's defense policy: medium power, even bigger ambitions', *The Korean Journal of Defense Analysis*, 2010, 22(2):85. https://doi.org/10.1080/10163271003744447

evolved to reflect the growing awareness of security challenges. Graeme Dobell examined continuities across foreign policy white papers from 1997 to 2017 to offer a succinct summary: 'the arc is across four stepping stones aligned in purpose but beset by swift tides'.[3] Successive white papers acknowledged the geopolitical tensions emerging between global powers but used optimistic hedging language to assume players could navigate these tensions. Inferred state-based threats to Australia's security were not evident until the 2017 White Paper when the government acknowledged that 'significant forces of change are now buffeting' the international system.[4] This document brought great power competition to the fore, dedicating a section to the geoeconomic competition, threats and fault lines between the US and China. Alan Gyngell praised this analysis as a 'solid' foundation that recognised the strategic competition playing out in the region while concluding that the strategic approach to address these challenges remained unchanged over several decades: support to the US alliance, engagement in Asia and the South Pacific and preservation of an international order with clear rules.[5] Therefore, Australia's strategic approach is familiar; however, the geopolitical context and reasons for pursuing the approach have changed.

Within this context, the release of the DSU in 2020 was a watershed moment for Australian national security. Building on the strategic drivers that affect Australia's security environment – outlined in the 2016 *Defence White Paper* – this document sought to refocus defence efforts away from broad global commitments to address more specific regional challenges. The DSU called out the active pursuit of influence in the region by state actors and the use of grey-zone coercion and military developments that make the possibility of high-intensity conflict less remote.[6] These statements acknowledge that actors in the region possess the ability, and potential intent, to undermine or challenge Australia's strategic objectives. Thus, Australia's defence strategy has been shaped by circumstances to prepare for and respond to more focused regional threats. The document has crystallised thinking across the various arms of government as to where Australia's greatest security challenges lie.

3 Graeme Dobell, 'The 20-year arc of Oz foreign policy', *The Strategist,* Australian Strategic Policy Institute (ASPI), 19 February 2018, accessed 10 June 2021.
https://www.aspistrategist.org.au/20-year-arc-oz-foreign-policy/

4 DFAT, 2017 Foreign Policy White Paper, p 21.

5 Alan Gyngell, 'The uncertainty principle: the *2017 Foreign Policy White Paper* in historical context', *Security Challenges*, 2018, 14(1):6–12, p 7.

6 Department of Defence (DOD), *2020 Defence Strategic Update*, Australian Government, 1 July 2020, pp 11–14.

## How effective is the 2020 DSU as an Australian defence strategy?

As the guiding document for Defence's contribution to national security, the DSU does not neatly fit into either the national defence policy or defence strategy camp. The document articulates strategic objectives that implicitly support those interests defined in the *2017 Foreign Policy White Paper* (the domain of policy) while describing in broad terms how military power has been and will continue to be applied to mitigate threats to these interests (the domain of strategy).[7] The document's definition of specific defence objectives to 'shape', 'deter' and 'respond' are clear and simple narrative devices that serve as broad categorisations of the strategic ways that Defence, in concert with other instruments of national power, will pursue and preserve Australian interests.[8] Each strategic way requires consideration to best assess the 2020 DSU's effectiveness as a cohesive document, fit for purpose.

### 'Shape'

By prioritising the ADF effort to shape relationships in the immediate region, the DSU departs from earlier defence direction and focuses Defence's limited resources in support of broader national diplomatic and economic initiatives. This strategic way might be more accurately labelled 'influence through soft balancing', as the pursuit of partnerships pre-emptively sets conditions and relationships favourable to Australia, thus, reducing opportunities for malign actors to establish influence. The DSU builds on the *2016 Defence White Paper* assessment of the 'near region' (South Pacific) and South East Asia's importance as maritime approaches to, and areas of growing economic relations with, Australia.[9] Countering the threat of coercive foreign military, economic or other influence on these nations is, thus, critical to a secure and stable region, and Australia's ability to shape regional neighbours towards favourable relationships is an essential precondition to prosperity and security.

Defence has executed 'shape' activities across various programs and engagements, intertwining diplomatic, economic and military aspects in mutually

7 DOD, *2020 Defence Strategic Update.* The DSU effectively frames an updated strategic environment and statement of defence policy objectives in its opening chapters, before detailing how Defence will be equipped and resourced to pursue these objectives. In doing so, the document references a number of subordinate strategic documents and capability plans already in varying stages of implementation and how each contributes to the strategies to be pursued. This includes the *2020 Force Structure Plan*, the *Integrated Investment Plan* and the Pacific Step-up.

8 The conflation of terms for strategies and strategic objectives is confusing and not an entirely accurate representation of how defence strategy is pursued. However, these are a necessary narrative device (or 'bumper sticker') for a public-facing document to provide simple messaging to a broad Australian public.

9 DOD, *2016 Defence White Paper*, Australian Government, February 2016, p 69.

reinforcing ways to target key audiences. Australia's regional neighbours are the primary audience, shaping relationships to support shared interests.[10] Cooperative defence diplomacy, engagement and capacity building with regional nations via the Pacific Step-up have permitted Australia to employ 'hard power' in support of 'soft power' diplomatic outcomes, enhancing Australia's standing with its regional neighbours as a 'partner of choice'. Since its inception in 2017, this approach has strengthened Australia's security partnerships in the region. Through enhanced defence diplomatic presence, reciprocal training opportunities and substantial Defence Cooperation Program funding increases, Australia has successfully partnered with a number of nations to enhance ADF forward presence for mutual security benefit and deeper bilateral relationships.[11]

To a lesser extent, Australia has attempted to shape the South East Asian region, with enduring defence cooperation and counterterrorism commitments across multiple countries, including enhanced capacity-building initiatives in the Philippines.[12] However, ADF resourcing in this region is substantially less.[13] This is a missed opportunity for Australia, given South East Asia's strategic significance to states seeking to exert regional influence and the potential land bridge it offers for forward military basing.[14] The lesser priority Australia places on this region is a missed opportunity that other states may exploit.

Some literature indirectly challenges the efficacy of Australia's ability to 'shape' South East Asian nations. A common critique is that historical experience and geographical proximity to China will drive these states to avoid balance-of-power

10 DOD, 2016 Defence White Paper, p 51.

11 Marcus Hellyer, 'The cost of defence public database', *ASPI,* 12 August 2020. https://www.aspi.org.au/cost-of-defence-database. Defence Cooperation Program funding across the South Pacific and South East Asia has increased by approximately 75 per cent in real dollar terms from 2017 to 2021. In concert with defence diplomatic engagement and training opportunities, this and other capability investment initiatives have resulted in the upgrade of a naval base at Lombrum in Papua New Guinea (PNG), the 'Blackrock' UN training facility in Fiji and the delivery of Australian-built and supported Guardian Class Patrol Boats to PNG, Fiji, Vanuatu and other regional nations. Each initiative extends beyond funding and development, incorporating shared access arrangements and opportunities for Australia to partner with host nations for training and security matters.

12 John Blaxland, 'A geostrategic SWOT analysis for Australia', *The Centre of Gravity Series*, Australian National University Strategic and Defence Studies Centre, Canberra, June 2019, accessed 10 June 2021, p 7. http://sdsc.bellschool.anu.edu.au/experts-publications/publications/6966/geostrategic-swot-analysis-australia

13 Hellyer, 'The cost of defence public database'. The 2020–21 Defence Cooperation Program funding for the Southeast Asian region represents less than 25 per cent of the Defence Cooperation Program funding allocated to PNG and the South Pacific.

14 Derek Grossman, 'Indonesia is quietly warming up to China', *The RAND Blog*, RAND Corporation, 7 June 2021, https://www.rand.org/blog/2021/06/indonesia-is-quietly-warming-up-to-china.html. Grossman highlights 'warming' security ties between China and Indonesia, despite recent disputes over territorial claims in the Natuna Sea. This has included joint naval exercises and support to salvage the KRI Nanggala submarine.

coalitions and instead favour non-alignment policies.[15] This argument overlooks the implications of disengagement: ignored by Western nations, South East Asian countries may be influenced, coopted or coerced by others in ways unfavourable to Australian interests. This reinforces the importance of regular engagement by the Australian military, as an essential tool in support of diplomatic and economic initiatives to build relationships and partner on security issues. Laksmana cites the example of Indonesia and Australia's shared interests to ensure a free and open Indo-Pacific, noting enduring maritime disputes between Indonesia and China in the Natuna Sea.[16] Within this context, defence partnering initiatives on maritime security could demonstrate that Australia is engaged in the region and signal to Indonesia (and other ASEAN countries with maritime disputes) that they have international support to remain non-aligned and free from coercion.

Beyond bilateral engagements, mini-lateral security partnerships can be used to shape China's perceptions of relationships in the region. The Quadrilateral Security Dialogue is a prominent example. Although the dialogue does not represent any binding security alliance for common defence, it is a statement of intent between participants to cooperate on shared interests. Defence's logistic and intelligence sharing contributions to member nations support security outcomes and broader diplomatic initiatives to build global influence, such as the vaccine diplomacy exercised during the COVID-19 pandemic.[17] This four-way partnership is another forum to promote international rules, a secure Indo-Pacific and regional stability. Meetings, training activities and public declarations like the Quad Leaders' Joint Statement provide clear messaging to states that may seek to subvert the international order: the unified front of a coalition ideologically united on common issues, opposing coercive behaviour and publicly supporting affected nations.

Investment in the near region and wider Indo-Pacific relationships is an effective form of 'soft' balancing, leveraging bilateral and mini-lateral opportunities. As a contribution to Australia's security, the 'shape' approach Defence has adopted acknowledges that coercive influence of our neighbours is a more likely threat to Australia than direct conflict. Shaping the region reduces the ability of others to subversively influence or coerce Australia's neighbours, establish a forward

15 Bilahari Kausikan, 'The arena: Southeast Asia in the age of great-power rivalry', *Foreign Affairs,* March/April 2021, https://www.foreignaffairs.com/reviews/review-essay/2021-02-16/arena; Martin Stuart-Fox, 'Southeast Asia and China: The role of history and culture in shaping future relations', *Contemporary Southeast Asia*, 2004, 26(1):116–139.

16 Evan A Laksmana, 'Reinforcing Indonesia-Australia defence relations: the case for maritime recalibration', *The Lowy Institute*, 2 October 2018. https://www.lowyinstitute.org/publications/reinforcing-indonesia-australia-defence-relations-case-maritime-recalibration-1

17 Mohamed Zeeshan, 'Can India mold the Quad for its own gains?', *The Diplomat,* 17 March 2021, https://thediplomat.com/2021/03/can-india-mold-the-quad-for-its-own-gains/.

military presence or diplomatically and economically isolate countries against Australian interests. It also affects the cost–benefit considerations of malign actors regarding the wider diplomatic or economic repercussions the global community may impose in response to state coercion. In this approach, the DSU has effectively outlined priorities and intent that should only be enhanced.

**'Deter'**

Australia's objective to 'deter' potential adversaries as a strategic approach is predicated on complementary pillars: the enduring US security alliance and the ADF's force structure and capabilities as a credible deterrent. The language used to describe this strategy lacks precision, as the diplomatic and military partnering and 'hard' balancing under the US alliance more accurately reflect 'deterrence by punishment'. Until the DSU was released, every Defence White Paper of the twenty-first century has held the ADF's core purpose as to deter and defeat attacks on Australia.[18] The geostrategic analysis of the DSU suggests the chance of conflict with a *militarily superior* adversary is less remote. The DSU also employs language that aspires to a self-reliant ability to deter yet accepts Australia lacks the resource base to match the conventional capability of major powers.[19] This fundamentally challenges the ADF's ability to deter and defeat, creating a cognitive dissonance that requires adjustment.

The US alliance has consistently been the principal pillar by which Australia pursues deterrence and is explicitly identified as such in the National Security Strategy.[20] Using a deterrence framework and definitions developed by Snyder,[21] Australia does not possess the economic capacity or resource base to match an adversary like China in high-intensity conflict, with conventional means that 'deter by denial'. Several analysts support this assertion, highlighting that a self-reliant defence policy would be unacceptably expensive for the Australian Government and populace, given the nation's population.[22] However, the alliance allows Australia to leverage US extended nuclear deterrence, 'deterring

18 However, implicit in the language of these documents is an assumption that the technological edge afforded to Australia, and the benign strategic environment, would likely see conflict occur against an inferior or near-peer regional adversary.

19 DOD, *2020 Defence Strategic Update*, p 27.

20 Department of Prime Minister and Cabinet (PM&C), *Strong and secure: a strategy for Australia's national security*, Australian Government, 23 January 2013, p 22.

21 Glenn H Snyder, *Deterrence and Defense: Toward a theory of national security,* Princeton University Press, New Jersey, 1961, pp 14–16.

22 William Cannon, 'How will Australia's strategic culture inform its engagement in the Indo-Pacific region?', *Cultural Mandala: The Bulleting of the Centre for East-West Cultural and Economic Studies*, September–December 2014, 11(1):10–21; Rory Medcalf and James Brown, 'Defence challenges 2035: Securing Australia's lifelines', *Lowy Institute for International Policy*, November 2014.

by punishment' a militarily superior adversary who may seek to secure territorial or strategic objectives through conflict.

The strength of the US alliance is not without critique. Critics have argued that the alliance compromises our independence and entangles Australia in conflicts that do not serve our national interest, with no guarantee that the US would come to Australia's aid in the event of a conflict.[23] To ensure the credibility of the alliance as a threat deterrent, Australia must, therefore, set the necessary conditions to shape adversary perceptions that the US *will* commit to Australia's defence in time of conflict. This requires the extensive integration of Australian and US military capabilities and public communication of shared national interests and intent that consider an attack against one nation's interests an attack on both. This would shape the cost–benefit analysis for a superior adversary, demonstrating strategic 'unambiguity' (similar to that advocated by certain commentators on the US–Taiwan alliance),[24] where conflict with Australia would result in unacceptable escalation and entanglement of another great power. Australia has opportunities to enhance its current approach to achieve this effect.

Australia's geographical centrality in the Indo-Pacific is an opportunity to increase our value proposition to the US alliance.[25] The basing of US satellite communication systems and intelligence facilities in Australia, along with Marine Rotational Forces in the country's north, demonstrate Australia's value as a regional base for a balancing coalition against potential adversaries. The US Force Posture Initiative is an avenue to further these opportunities.[26] By exploiting opportunities to further integrate rotational forces and US capabilities within the country, Australia demonstrates a commitment to the enduring alliance.

23 Independent and Peaceful Australia Network (IPAN), 'IPAN calls for a better Plan B for Australia's defence', *Independent and Peaceful Australia Network*, 26 July 2018, https://ipan.org.au/ipan-calls-for-better-plan-b-for-australias-defence-26-july-2018/; Marrickville Peace Group (MPG), *Questioning the value of the Australia/US Alliance: Submission to the 2015 Defence White Paper,* MPG, October 2014, http://marrickvillepeacegroup.org/wp-content/uploads/2015/01/DWP-Submission-Questioning-the-Value-Oct2014b.pdf. These arguments are notably framed through historical perspectives – where US interests took primacy – and do not provide comment on the perceived value of the alliance as it may pertain to future conflict in which Australia's interests are challenged.

24 Richard Haass and David Sacks, 'American support for Taiwan must be unambiguous', *Foreign Affairs*, 2 September 2020, https://www.foreignaffairs.com/articles/united-states/american-support-taiwan-must-be-unambiguous.

25 Wesley, 'Australia's grand strategy and the *2016 Defence White Paper'*, p 26.

26 Michael Beckley, 'America is not ready for a war with China', *Foreign Affairs*, 10 June 2021, https://www.foreignaffairs.com/articles/united-states/2021-06-10/america-not-ready-war-china. The 2018 US Pacific Deterrence Initiative allocated US$27 billion for the US to disperse forces and bases across the Pacific; this is an obvious area Australia can leverage to offer hosting opportunities and remain a 'partner of choice'. Areas of enhanced cooperation already underway include partnering with the US as part of Australia's sovereign guided weapons munitions development and the prepositioning of US logistic stocks (including fuel). Australia's A$747 million training facilities upgrade in the north of the country also presents opportunities for more extensive bilateral and multinational training to better integrate Australian military with US and other security partners.

This arrangement also positions 'tripwire' forces that must be factored into an adversary's decision calculus to attack Australia. In doing so, Australia enhances its deterrence as part of a strengthened balancing coalition.

The ADF, the second pillar of Australia's 'deter' approach, is at present insufficient to generate a self-reliant deterrent effect. Despite the DSU's aspirational statements, Australia as a middle power could not match a great power and deter by denial in a conventional conflict. The twin-pillar approach, thus, requires some adaptation. The US alliance remains sound and should be enhanced where practicable. However, the imbalance between Australia's military capability and militarily superior potential adversaries demonstrate that the ADF is insufficient to achieve self-reliant deterrence. How the ADF could better *contribute* to a deterrent effect as part of national security, through force structure adaptations for asymmetric advantage and a broader 'collective defence' balancing coalition across the Indo-Pacific, is addressed next.

**'Respond'**

The DSU's primary approach to preserving national security in the event of a conflict, by way of Defence's ability to 'respond', focuses largely on the ADF structure required. The DSU's articulation of this approach as a discrete objective assists casual observers to differentiate the key components of defence's strategy. However, a closer analysis suggests the 'respond' approach is a sub-component of 'deter' as a strategy. Although not an entirely accurate label for the strategic effect sought, 'respond' as an approach avoids the unattainable language present in earlier white papers to 'defeat' superior adversaries. Instead, it more accurately reflects the ADF's capability to contribute to deterrence using the punishment approach previously addressed rather than in a discrete strategic way.

Although straightforward in intent, this aspect of the DSU does not clearly articulate how Defence contributes to Australia's security from physical threat due to the absence of a warfighting concept defining how the ADF fights.[27] The DSU references Defence Planning Guidance and capability acquisitions under the *2020 Force Structure Plan*.[28] Yet, the ADF has not articulated a holistic concept

27 Department of Defence, *Future Joint Operating Concept 2035*, Australian Government, December 2016, pp 15–16. The most recent, publicly available document to articulate Defence's strategic approach in high-intensity conflict is the *Future Joint Operating Concept 2035.* This document echoes the *2016 Defence White Paper*, providing a detailed assessment on the types of military capabilities and threats likely to exist in the future environment. However, description is limited on the way in which the ADF will integrate warfighting functions and capabilities to respond. In lieu of an integrated, self-reliant or coalition-based operating concept, motherhood statements are provided: 'conduct warfighting including strategic strike, which may involve non-kinetic effects'; 'defeat an adversary's ability to project force'; and 'contribute to the protection of ADF and critical national infrastructure'.

28 DOD, *2020 Defence Strategic Update*, pp 33–35.

(or strategic way) that integrates these individual procurements in response to the DSU's defined threats to secure strategic objectives. Equally important, yet absent, is an articulation of how the ADF would be integrated into a coalition warfighting concept in response to a major conflict in the region. Without this, the DSU reads as an intent statement, supported by a list of intended military procurements.[29]

A clearly articulated warfighting concept would better guide Australia's defence acquisitions and ensure the appropriate capability mix to impose unacceptable costs on an adversary and deter by punishment. Several commentators argue that the US and Australia continue to prioritise large platforms (sea and land) and short-range fighters on exposed bases that are vulnerable to pre-emptive attack.[30] These procurements do not intuitively support a force structure adapted to the likely military threats articulated in Australia's strategic assessments. Considering the intercontinental capabilities and long-range reconnaissance-strike complex states within the region have developed over the past two decades,[31] this legacy approach to equipment 'replacement' rather than capability development in an integrated operating concept may prove insufficient to defend against or respond to an adversary's most likely warfighting approach.

To structure the ADF as a credible deterrent force suited to the strategic environment, Defence should implement the DSU's promises to expand asymmetric non-kinetic and long-range kinetic capabilities that target threats 'as far from Australia or its deployed forces as possible'.[32] Albert Palazzo has advocated for a force that complements allied capabilities: operating in the littorals with a lighter footprint, providing niche contributions of a long-range strike in conjunction with partners and allies.[33] Conversely, Hugh White provides a pessimistic assessment of the burden on Australia to achieve deterrence,

29 To caveat this comment, the author acknowledges that the DSU is a public-facing document and that any joint or combined warfighting document would be subject to security classifications and, hence, unavailable in the public domain.

30 Beckley, 'America is Not Ready for a War with China'; Marcus Hellyer, 'The cost of defence: ASPI Defence Budget Brief 2021–2022', *ASPI*, 26 May 2021, p 81, https://www.aspi.org.au/report/cost-defence-aspi-defence-budget-brief-2021-2022. Beckley specifically identifies the US predilection towards high-cost, large warships that are obvious targets for comparatively low-cost, large-quantity missiles. Hellyer draws attention to the A$36 billion investment in armoured fighting vehicles that Australia has identified in the *2020 Force Structure Plan*, questioning the likelihood and utility of operating these assets in a conflict in mainland Asia or the difficult terrain of many South East Asian states.

31 Robert Haddick, *Fire on the water: China, America and the future of the Pacific,* Naval Institute Press, Annapolis, 2014; Medcalf and Brown, 'Defence challenges 2035: Securing Australia's lifelines'.

32 DOD, *2020 Defence Strategic Update*, p 38.

33 Albert Palazzo, *Australian Army Occasional Paper No. 3 – Planning to not lose: the Australian Army's new philosophy of war*, Australian Army Research Centre, Canberra, 2021, https://researchcentre.army.gov.au/sites/default/files/AARC%20Occasional%20Paper%20No%203%20-%20Planning%20To%20Not%20Lose%20%28Palazzo%29.pdf.

forecasting it would require defence spending of at least 3.5% of GDP. However, this assessment favours large quantities of high-end, expensive platforms (for example fighters and submarines).[34] Other analysts have advocated for a capability mix that is more affordable and favours lower-cost, high-proliferation emerging technologies to achieve a similar strike effect to deter and respond to attacks on Australian interests.[35] Promisingly, investments in offensive cyber capabilities and long-range missiles demonstrate that Australia is moving in the right direction to better respond to an attack. A well-established Integrated Air and Missile Defence System would also provide mainland force protection, increasing the likelihood of achieving a deterrent effect.[36] Future critical reviews of proposed acquisitions under the *Force Structure Plan*, within the context of a collective defence approach that counters strategic threats, may identify lower priority acquisitions that can be cancelled or reduced in scope to accommodate greater investment in the 'right' areas.

The arguments citing Australia's comparatively small population and economic base as constraints on a larger, better-equipped defence underscore the value and necessity of the US alliance and collective defence arrangements. The US alliance offers indirect benefits for capability generation. It affords Australia essential access to Five Eyes global intelligence sharing networks and advanced defence technology that cannot be generated indigenously.[37] The recent AUKUS strategic partnership is evidence of this, providing nuclear submarine capability for Australia that will significantly enhance Australia's sovereign strike capability once mature. However, for conventional measures of military strength (including the size of the army and quantities of naval and aviation platform crews), it is unlikely that the Australian population could sustain the recruitment and retention requirements for a force much larger than the present, outside declared conflict.[38] Reduced strategic warning times also mean that mobilisation in conflict may not occur quickly enough; Australian forces may initially require augmentation from (or reciprocally, be required to augment) coalition capabilities.

34 Hugh White, *How to Defend Australia,* La Trobe University Press, Carlton, 2019.

35 Blaxland, 'A geostrategic SWOT analysis for Australia', p 14; Hellyer, 'The cost of defence: ASPI Defence Budget Brief 2021–2022', pp 79–84. Blaxland argues for a further surge in these capabilities (including AI-equipped and unmanned sensors and vehicles), while Hellyer advocates greater investment in long-range strike capabilities and hypersonic missiles to achieve stand-off attack out to 2,000 km.

36 Hellyer, 'The cost of defence: ASPI Defence Budget Brief 2021–2022', p 77. An effective system such as this reduces the likelihood of a superior adversary effectively achieving a successful standoff 'first strike' capability against targets on the Australian mainland. Regrettably, Hellyer identifies that the Australian proposal for this capability, under project AIR6500, has had little progress beyond project scoping.

37 Cannon, 'How will Australia's strategic culture inform its engagement in the Indo-Pacific region?', p 12.

38 Blaxland, 'A geostrategic SWOT analysis for Australia', p 14. Blaxland identifies that the relatively benign strategic environment has observed the ADF structure remain stable at around three combat brigades, approximately a dozen warships and 100 combat aircraft for more than half a century.

To credibly establish a collective defence arrangement, Australia's adapted ADF could, therefore, present a reciprocal 'value proposition' to the US, other allies and security partners through the provision of niche contributions and effects regionally. To achieve this, further effort and refinement are required for future iterations of the DSU, clarifying how the nation intends to fight in conflict and adapting Australia's military force structure to suit.

## Conclusion

As the guiding document most closely approximating a defence strategy, the 2020 DSU is an effective artefact to frame Australia's threat environment, security objectives and general strategic approach to respond. The DSU's release was critical to demonstrate and articulate a shift in national thinking about Australia's regional and global environment, the nature of threats to our national security and define a broad approach for how best to navigate the associated challenges. It served as the starting point for a new, clear-eyed approach to Australian defence and security.

Notwithstanding its effectiveness as a document to signal intent, the initial approaches articulated within the DSU can benefit from refinement moving forward. The 'shape', 'deter', 'respond' narrative has effectively simplified and outlined the strategic logic for the public. Still, the articulation of the specific ways to pursue these objectives could be enhanced in certain areas. A less concise but more accurate description of the two strategic ways Defence contributes to strategic outcomes may be summarised as 'influence through soft balancing' and 'deterrence through punishment – hard balancing and collective defence'. Future iterations of this document or subsequent white papers might consider how best to repackage this narrative.

Components of the DSU's strategy can be enhanced for a more cohesive and comprehensive approach to achieving national security. Shaping efforts should be maintained and emphasised wherever practicable to better exploit influence opportunities in South East Asia and the South Pacific. To deter potential adversaries, the US alliance remains Australia's primary means of defence. However, it could be enhanced with measures that deepen the alliance and increase the likelihood (both real and perceived) that the US will support Australia in times of conflict. Finally, to generate the requisite military effects that contribute to a broader collective deterrence effort, the ADF may benefit from a detailed review of its capabilities considering the strategic context, adjusting force balance for the type of conflict that might characterise the strategic environment. Acknowledging the inability of Australia's resource base to generate sustainable force for complete self-reliance, this structure could be integrated into a broader regional coalition of collective defence arrangements.

# Australia's polar attraction: Antarctic strategy 2001–2021, an element of Australia's grand strategy

*Andrew Willis*

## Introduction

> When considering the future of the great continent to the south of Australia, most of the authorities of 155 years ago could see very little more than a 'barren and desolate region' in Australia itself.[1]

Antarctica's isolation and extreme conditions have constantly challenged governments, policymakers and those who administer, resource, explore and study this last frontier. Nonetheless, the continent's strategic importance and potential have driven Antarctica's geopolitics for over a century. Antarctica is the fifth-largest continent, holding more than 90 per cent of the world's freshwater,[2] a rich and diverse marine ecosystem critical to the global food chain,[3] and potentially one of the world's most significant remaining mineral and hydrocarbon

1 Sir David Orme Masson, *Australian National Research Council Report to Secretary Prime Minister's Department*, National Archives of Australia, 1927, vol. A981 ANT 4 Part 4. p 2. Available from: https://recordsearch.naa.gov.au/SearchNRetrieve/Interface/ViewImage.aspx?B=172701

2 The continent of Antarctica covers 13,661,000 km$^2$ (twice the size of Australia). The Antarctic ice sheet holds 90% of Earth's fresh water in 30 million cubic kilometres of ice. Antarctica is the driest continent on earth. Australian Antarctic Division (AAD), *Antarctic geography and geology* [webpage], Department of Agriculture, Water and the Environment, Australian Government, page last updated 27 October 2020, accessed 22 February 2021. https://www.antarctica.gov.au/about-antarctica/geography-and-geology/

3 Antarctica is important for science because of its profound effect on the Earth's climate and ocean systems. British Antarctic Survey, *Why Antarctica matters*, n.d., accessed 4 March 2021. https://www.bas.ac.uk/about/antarctica/why-antarctica-matters/

reserves.[4] Australia's interests in the Antarctic are substantial for strategic, historical and territorial reasons. Indeed, many do not appreciate the extent of Australia's polar commitments, particularly the extent of Australia's claimed Antarctic territory, which is around six million square kilometres or approximately 42 per cent of the Antarctic continent.[5] Australia's Antarctic interests enable defence through strategic denial; global influence and leadership through science, environmental and diplomatic mechanisms; the potential economic resources available; and maintaining the territorial claim.

This commentary does not seek to argue or justify the merits of these national objectives, rather it uses them to look at the strategy's ways and means. Given the magnitude of Australia's interests and Antarctica's strategic significance, it is to Australia's advantage to *at least* consider what this means as one element of Australia's national grand strategy. The global geopolitical reality of a contested twenty-first century will present challenges and opportunities to Australia. There is good reason to consider how this shifting strategic environment will test the strategic and security assumptions underpinning Australia's Antarctic strategy. There is always the possibility that Australia's Antarctic strategy may not maintain the comfortable status quo that we have enjoyed for many decades. What is Australia's adaptability if other stakeholders significantly challenge its interests through assertive behaviours?

In order to generate a baseline for analysis and associated conclusions, this commentary uses the lens of Australia's Antarctic strategy between 2001–2021, which provides contemporary insights and reflects shifting geopolitical trends. This enables a focus on the primary levers of national power (the ways) in which the strategy is pursued. The emerging geopolitical challenge to Canberra's desired political ends requires the Antarctic strategy to be amended. The core issue is the Australian Government's ability to generate a desired grand strategy *'power'* effect and, therefore, the suitability of its current Antarctic strategy to support this. If the 'power' effect cannot be generated, the strategy element needs adaptation.

4 Resource estimates are contested. Fogarty points to research by Macdonald et al 1988 predicting oil reserves are 203 billion barrels with additional 50 billion at sea (third largest in world). Ellie Fogarty, 'Policy Brief: Antarctica: assessing and protecting Australia's national interests', *Lowy Institute for International Policy*, August 2011, pp 1–19, Available: http://www.jstor.com/stable/resrep10200; also DIM Macdonald, PF Barker, SW Garrett, JR Ineson, D Pirrie, BC Storey, AG Whitham, RRF Kinghorn and JEA Marshall, 'A preliminary assessment of the hydrocarbon potential of the Larsen Basin, Antarctica', *Marine and Petroleum Geology*, 1988, 5(1):34–53. Available: https://dx.doi.org/10.1016/0264-8172(88)90038-4; Environmental critics fear resource misinformation creates the *El Dorado Complex*: 'the idea that unknown lands will be a treasure trove of resources'. Antarctic and Southern Ocean Coalition, *The Antarctic Oil Myth*, 2 April 2014, accessed 22 February 2021. https://www.asoc.org/component/content/article/9-blog/1184-the-antarctic-oil-myth#:~:text=The%20Guardian%20cites%20a%20Policy,publication%20by%20Bill%20St%20John%2C

5 AAD, *Australian Antarctic Territory* [web page], Australian Government, accessed 5 April 2021. https://www.antarctica.gov.au/about-antarctica/australia-in-antarctica/australian-antarctic-territory/

## Australia's Antarctic influence

Australia's strategic, exploratory and scientific interests in Antarctica predate federation in 1901, and the reasons remain essentially unchanged.[6] Although not formalised into a single public statement, the political ends Australia has pursued between 2001–2021 have remained relatively consistent. Shaped by heroic narratives of early explorers and a pristine wilderness that has captivated imaginations, Australia's international influence in Antarctica is sustained through continuing scientific presence and the adaptive use of diplomatic power.

Australia has used a spectrum of national power options to support Antarctic outcomes; however, diplomatic influence and ideational power are the principal components. Yet according to the Lowy Institute Global Diplomatic Index, Australia ranks 27th in global diplomatic effectiveness [7]. Well below Australia's potential, given its global economic ranking (12th) and military spending (12th). This weakened diplomatic power effect then limits Australia's overall capacity for diplomatic influence, including Antarctic matters. Australia's twenty-first century diplomatic power resourcing also reflects a historical comfort with the status quo. As Dobell noted:

> The strategy to be deduced from Australia's diplomatic budget is that of a content, even complacent status quo country, which thinks the existing system is working well.[8]

So, what has kept Australia's Antarctic strategy buoyant? The most recent public-facing strategy document, the 2016 *Australian Antarctic Strategy and 20 Year Action Plan,* explicitly highlights the importance of the Antarctic Treaty System (ATS) to Australia's interests and emphasises the centrality of science.[9] This core perspective on science's value continues to influence Australia's Antarctic program and treaty interactions. Science is widely regarded as the 'currency of influence' (power) in the ATS, and Australia is a leading contributor to the scientific

6 Marie Kawaja, 'Australia in Antarctica: realising an ambition', *The Polar Journal*, June 2013, 3(1): 31–52. http://dx.doi.org/10.1080/2154896X.2013.783275

7 *Global Diplomacy Index* [web page], Lowy Institute, 2019, accessed 21 June 2021. https://globaldiplomacyindex.lowyinstitute.org/country_rank.html

8 Graeme Dobell, 'Policy talks the way money walks', *The Strategist*, Australian Strategic Policy Institute (ASPI), 7 January 2013. https://www.aspistrategist.org.au/policy-talks-the-way-money-walks/

9 Australian Antarctic Division (AAD), *Australian Antarctic Strategy and 20 Year Action Plan*, Department of Agriculture Water and the Environment, Australian Government, April 2016, accessed 26 May 2021. https://www.antarctica.gov.au/site/assets/files/53156/20yearstrategy_final.pdf

output on Antarctica.[10] Fletcher, a former Director of the Antarctic Science Advisory Committee, understanding the strategic political need for science as a form of power, noted that 'Antarctic science could have and deserves a higher profile. It will get it with the realisation that you establish your right to have a say in the region by doing science. Anything else lacks credibility.'[11]

A 2005 parliamentary review of the Antarctic science strategy found that Australia's standing 'is premised on the conduct of world-class science. Australia's reputation for its scientific efforts in the Antarctic region should not be undervalued or taken for granted'.[12] In 2017, an Australian Antarctic Science Program review found that the current model:

> [d]oes not adequately resolve the tension between researcher-driven science and policy-driven science (particularly where the science requires a major campaign with large logistical support), or support a comprehensive data plan.[13]

The strategic consequence of an under-resourced diplomatic capability or inefficient Antarctic science strategy is that Australia risks devaluing its 'currency of influence'. In turn, this degrades the non-military forms of national power available to the government. The 2020 *Australian Antarctic Science Strategic Plan* refocused the intent, aiming to '[c]onduct world-class scientific research for Antarctica and the Southern Ocean that has global benefits and supports Australia's responsibilities for the region'.[14] However, when specific funding mechanisms are examined, other influences become apparent. Buchanan's 2019 analysis found that Australia's leading government-funded, Antarctic research organisation, the Antarctic Climate and Ecosystems Cooperative Research Centre, received significant foreign funding. In the financial year following the 2016 *Australian Antarctic Strategy and 20 Year Action Plan*, the

10 Anthony Bergin, Marcus Haward, Andrew Jackson, Anthony Press, Sam Bateman, Peter Jennings, Julia Jabour, Stephen Nicol, Patrick G Quilty, and Lyn Goldsworthy, 'Cold calculations: Australia's Antarctic challenges', *Strategic Insights,* Australian Strategic Policy Institute, no. 66, 21 October 2013, p 7. Available at http://www.jstor.com/stable/resrep04042 or https://www.aspi.org.au/report/strategic-insights-66-cold-calculations-australias-antarctic-challenges

11 Neville Fletcher, in K Murphy, 'Australia in Antarctica: What Price a Presence', *Bulletin with Newsweek*, vol. 112, no. 5726, 10 July 1990, p 46.

12 Parliament of Australia, *Antarctica: Australia's Pristine Frontier. Report on the adequacy of funding for Australia's Antarctic Program*, Joint Standing Committee on National Capital and External Territories, 41st Parliament of Australia, Tabled 23 June 2005, p 84, para 6.31. https://www.aph.gov.au/Parliamentary_Business/Committees/Joint/Completed_Inquiries/ncet/antarctic/report

13 Drew Clarke, *Australian Antarctic Science Program Governance Review*, Department of the Environment, Canberra. 2017, p 3. https://www.environment.gov.au/system/files/pages/7753423c-a411-480e-b1d8-8669a098d33d/files/aus-antarctic-science-program-governance-review.pdf

14 Department of Agriculture Water and the Environment, *Australian Antarctic Science Strategic Plan*, Australian Antarctic Science Council, 26 April 2020. Available: https://www.antarctica.gov.au/site/assets/files/53908/australian-antarctic-science-strategic-plan.pdf

centre received more from China than the CSIRO and the Australian Antarctic Division combined.[15] Arguably, without adequate Australian resourcing, the currency of Australian science is devalued and therefore risks the long-term intent for strategic influence.

The Department of Agriculture, Water and the Environment's Australian Antarctic Division is the lead agency managing Australia's Antarctic interests, including developing and implementing a whole-of-government policy approach. A key part of this policy is that the Antarctic Division is supported by other government departments and agencies, including the Department of Foreign Affairs (DFAT), the Attorney-General's Department and the Department of Defence. Although the 2016 *Australian Antarctic Strategy and 20 Year Action Plan* makes the desired policy ends evident, the strategy resources (the means) available are yet to evolve. In the words of Sir Arthur Tange, a previous secretary of both the Departments of Defence and External Affairs, 'until you are talking dollars, you are not talking strategy'.[16]

## Antarctic strategy challenges

> China is an unacknowledged magnetic pole for Australia's place in the world. Though the links wax and wane over time and are often indirect, navigating a path to security and prosperity for Canberra has rarely been possible without taking this pole into account.[17]

The status quo of the international rules-based order is being challenged, principally by the rise of the People's Republic of China (China) and its relationship with the United States of America (USA). This is a concern to Australia, given the importance of the international order to Australian strategy. As the status quo changes, Australia's Antarctic interests need re-examination. Australian policymakers need to be clear about the strategy's desired ends and its resourcing (the means). Future decisions concerning appropriate resources and

15 Elizabeth Buchanan, 'Antarctica: A cold, hard reality check', *The Strategist*, ASPI, 17 September 2019. Available: https://www.aspistrategist.org.au/antarctica-a-cold-hard-reality-check/
Note: In my research, Professor Marcus Haward (UTAS) has advised that Buchanan's analysis does not include like for like resourcing from AAD or CSIRO (for example, use of ship days @$100,00 per day).While these CRC ventures do look to cultivate international linkages, foreign influence can be detrimental. In the past 12 months the Australian Government's foreign influence taskforce has uncovered unsavoury linkages between various Chinese research entities and the Chinese Communist Party, thus underscoring potential national security risks for Australia.' See https://unitracker.aspi.org.au/

16 Sir Arthur Tange talking about Australian strategy once opined that 'until you are talking dollars, you are not talking strategy.' He served as Secretary Department of External Affairs (1954–65) and Secretary Department of Defence (1970–79). Dobell, 'Policy talks the way money walks'.

17 Andrew Carr, 'No longer a middle power: Australia's strategy in the 21st century', *IFRI – Focus strategique*, September 2019, vol. 92, p 15.

the application of national power are required – to abandon, pursue or defend these strategic ends.

In populated regions of the world with resource characteristics similar to Antarctica's, the primary source of conflict leading to war is often territorial disputes. Historical analysis indicates that territorial factors were central in 85 per cent of significant wars over the past 300 years.[18] However, an Australian Antarctic strategy analysis offers the understanding of significant political ends being realised through non-military forms of power such as ideation and diplomacy. Given Huth's analysis of conflict prevalence, this outcome is noteworthy when territorial ambition is a significant stimulus.

Thus far, the potential for conflict in Antarctica has been prevented in large part by the 1959 Antarctic Treaty, which states:

> Recognising it is in the interest of all mankind that Antarctica shall continue forever to be used exclusively for peaceful purposes and shall not become the scene or object of international discord.[19]

Given the intent that the region should remain exclusively for peaceful purposes and in light of Huth's analysis, the Treaty System warrants further examination.[20] Motivated by Cold War geopolitics between the USA and the Soviet Union, the ATS created a geopolitical stalemate. It also protected Australia's interests, especially the territorial claims through Treaty Article IV, which states: 'No acts shall constitute a basis for asserting, supporting or denying a claim to territorial sovereignty in Antarctica or create any rights of sovereignty in Antarctica.'

Australia has found the Antarctic Treaty a 'sound and valuable one', noting it as the first arms control treaty of the nuclear age and its utility for future negotiations in areas such as space.[21] Since 1959, the ATS has remained at the centre of Australian Antarctic strategy, and the evolving regime has served Australia's

18 Paul K Huth, *Standing your ground: territorial disputes and international conflict*, University of Michigan Press, USA. 1998, p 7, https://doi.org/10.3998/mpub.14335

19 Secretariat of the Antarctic Treaty, *The Antarctic Treaty*, 1959, accessed 21 March 2021, Available: https://documents.ats.aq/keydocs/vol_1/vol1_2_AT_Antarctic_Treaty_e.pdf

20 The Antarctic Treaty and its subsequent conventions and protocols (collectively known as the Antarctic Treaty System). Twelve nations are original signatories to the Antarctic Treaty. Claimant nations are Argentina, Australia, Chile, France, New Zealand, Norway and the United Kingdom. Non-claimants are Belgium, Japan and South Africa. The Russian Federation (Soviet Union) and the United States have retained a right to make claims to any or all of Antarctica. Since 1959, 42 other nations have acceded to the Treaty. Secretariat of the Antarctic Treaty 2021, The Antarctic Treaty, accessed 23 February 2021, https://www.ats.aq/e/antarctictreaty.html

21 Rob Hall and Marie Kawaja, 'Australia and the Negotiation of the Antarctic Treaty', in Marcus Haward and Tom Griffiths (eds), *Australia and the Antarctic Treaty System: 50 years of influence,* University of New South Wales Press, Sydney, 2011, pp 66–96; p 90.

interests.[22] The 2016 *Australian Antarctic Strategy* explicitly states, 'a strong and effective ATS is in Australia's national interest'.[23] However, an assessment of the treaty suggests that it does not give Australia everything. It does not fully protect Australia's sovereignty, and Australia cannot prevent other nations from operating in its Antarctic territory. It does, nonetheless, enable Australia to have a voice in the consensus forums.[24]

A consequence of the ATS consensus-based approach, particularly when combined with the growing number of treaty signatories and Consultative members, is that it makes decision-making more challenging. It has also meant that Australia's vote and influence has been diluted over time. The treaty, negotiated and signed by 12 nations in 1959, now has 54 signatories. Nonetheless, while some may consider the Treaty System a 'Cold War relic', analysts like Young suggest that it is better than anything we could negotiate today.[25]

While the Cold War may be over, Russia and the USA remain active in both the Arctic and Antarctica. However, it is China, Australia's 'unacknowledged magnetic pole', that is now influencing geopolitics and rapidly assuming the role of a global superpower once occupied by the former Soviet Union, and its potential role that must be considered in calculations of how effectively the ATS serves our interests. Buchanan poses an alternative, realist view to that of Young, which suggests a new Australian strategy and approach to resources is needed.

> The ATS worked well in the 1960s when nuclear weapons were seen as the key to global security. But this Cold War peace agreement is inadequate to respond to the security challenges of the 2020s.[26]

If the status quo is being challenged, so too are the assumptions that underpin it. In Antarctica, these rely on diplomacy and science levers of national power as well as a spirit of common interest with other stakeholders. However, if future cooperation evolves into a competition, especially over disputed territory, other elements of national power may be needed. To quote Sun Tzu, 'Plan for what

22 Marcus Haward and Tom Griffiths (eds), *Australia and the Antarctic Treaty System: 50 years of influence*, University of New South Wales Press, Sydney, 2011, p 1. The Treaty was negotiated in 1959 and entered into force in 1961.

23 Foreword by Malcolm Turnbull, AAD, *Australian Antarctic Strategy and 20 Year Action Plan*, p 1.

24 Claire Young, 'Eyes on the prize: Australia, China and the Antarctic Treaty System', *Lowy Institute for International Policy*, 16 February 2021, p 5. https://www.lowyinstitute.org/publications/eyes-on-prize-australia-china-and-antarctic-treaty-system

25 Young, 'Eyes on the prize', p 5.

26 Buchanan, 'Antarctica: A cold, hard reality check'.

is difficult while it is easy, do what is great while it is small.'[27] As a good global citizen and with genuine environmental and diplomatic intent – Australia can and should maintain support to the status quo of the treaty. This is good international governance and supports a rules-based global order. However, Australia can multitask, and it should guard against possible changes in the region, quietly wargaming the alternatives if they come to pass.

As a non-claimant state, China acceded to the Antarctic Treaty in 1983. In 2021, China has the largest Antarctic science budget, ahead of the USA.[28] China maintains four stations and is building a fifth (three of them are in the Australian Antarctic Territory). It has successfully mounted 37 Antarctic oceanic expeditions, established a seasonal intercontinental aircraft network and is constructing new indigenous icebreaker capabilities.[29] Comprehensive land and maritime survey activity is common, and the volume of scientific contributions is increasing.[30] Adding weight to ideational and influence factors, Chinese tourists represented 11 per cent of visitors to the Antarctic in 2019–20, second only to the USA.[31] Collectively, this is a *great leap forward'* in China's Antarctic presence since the arrival of its first two scientists in a 1979–80 Australian expedition 40 years ago.

While there is nothing new in states trying to shape, change or maintain a system that benefits them, China's global engagement policies have become more confident and assertive. These state behaviours are amplifying a change in international dynamics.[32] China is actively demonstrating an intent to work within existing systems to effect change and provide an alternative to the current norms and rules. The World Economic Forum on International Governance publishing an article stating:

27 Sun Tzu, *The Art of War,* (Thomas Cleary trans), Harper Press, 2005.

28 Anne-Marie Brady, 'China's expanding Antarctic interests: implications for Australia', *Strategic Insights*, Australian Strategic Policy Institute, no. 109, August 2017, p 30. https://www.aspi.org.au/report/chinas-expanding-interests-antarctica

29 Xinhua, 'China's polar icebreaker prepares for 37th Antarctic expedition', *Xinhuanet*, 11 September 2020, accessed 16 July 2021, Available: http://www.xinhuanet.com/english/2020-09/11/c_139360827.htm

30 Anne-Marie Brady, 'The past in the present: Antarctica in China's national narrative', in Klaus Dodds, Alan D Hemmings and Peder Roberts (eds), *Handbook on the politics of Antarctica*, Edward Elgar Publishing Limited, Cheltenham UK, 27 January 2017; China does not produce or share many working papers at either the ATCM/CEP or in CCAMLR, so it is not an Antarctic leader in this sense, Marcus Haward, 28 July 2021, research interview with the author.

31 IAATO, 'IAATO Antarctic visitor figures 2019–2020' [PDF], International Association of Antarctic Tour Operators, July 2020, accessed 25 June 2021. https://iaato.org/wp-content/uploads/2020/07/IAATO-on-Antarctic-visitor-figures-2019-20-FINAL.pdf

32 Bruce Jones, 'China and the return of great power competition', *Brookings Institute: Global China. Assessing China's Growing Role in the World*, Great Powers: Global China, 2020, p 11. https://www.brookings.edu/wp-content/uploads/2020/02/FP_202002_china_power_competition_jones.pdf

> We also need to think whether it is possible to jettison the existing order of power politics and construct a governance order with a new value system based on the essence of human civilization.[33]

This trend influences Antarctic politics, observers suggesting China has become 'an active, vocal and at times disruptive unconstructive presence in ATS meetings'.[34] State assertiveness and presence in Antarctica is permissible under the ATS. But China also has a national interest in accessing polar resources and is active in undermining the legitimacy of the current system; it argues the 'ownership of the sea, outer space, the polar regions, cyberspace, or any other kind of new frontier is not clear'.[35] This is a broader test of the international order.

With a review of the ATS Madrid environmental protocol impossible until at least 2048, China and others can play a strategic, long-term game – perhaps even choosing to change the game and rules entirely. President Xi's vision is that: 'By 2049, China's comprehensive national power and international influence will be at the forefront.' This vision, supported by an intent to displace the Western-led world order and strengthen military capabilities, aims for global parity with the USA by 2049.[36] If this happens, the Australian Government needs to consider Antarctic strategy options and possible resource requirements.

When the Australian Government released the *2020 Defence Strategic Update*, it highlighted three new strategic objectives: shape Australia's strategic environment, deter actions against Australia's interests and respond with credible military force when required.[37] Notably, the update was supported by a commitment to increase funding to approximately $575 billion by 2029–30.[38] In 2021, no similar strategic update or funding change has yet occurred in the Australian Antarctic strategy.

The shifting geopolitical environment we are seeing has the potential to cause Australian policy dissonance. In 2021, three of Australia's critical grand

33 World Economic Forum in collaboration with the China Institute of International Studies, *Governing the new frontiers – China's perspective*, World Economic Forum.Org, 21 March 2018, retrieved 15 June 2021, https://www.weforum.org/agenda/2018/03/governing-the-new-frontiers-china-s-perspective/

34 Anthony Bergin and Tony Press, *Eyes Wide Open – Managing the Australia-China relationship*, Australian Strategic Policy Institute, Special Report 153, April 2020, p 11. Available: https://www.aspi.org.au/report/eyes-wide-open-managing-australia-china-antarctic-relationship

35 China Institute of International Studies, 'Governing the new frontiers – China's perspective'.

36 Tuan N Pham, *The Chinese dream and Bejing's grand strategy*, Center for International Maritime Security, 19 December 2017, accessed 6 June 2021. https://cimsec.org/the-chinese-dream-and-beijings-grand-strategy/

37 Department of Defence, *2020 Defence Strategic Update*, Australian Government, pp 24–25. https://www1.defence.gov.au/strategy-policy/strategic-update-2020

38 Department of Defence, *Fact Sheet Defence Budget*, Australian Government, p 7. https://www1.defence.gov.au/sites/default/files/2020-11/Factsheet_Strategic_Update.pdf

strategy policy artefacts addressing its national interest are not integrated with one another in terms of Australia's Antarctic strategy, nor are they entirely consistent with observable trends. The 2016 Defence White Paper deferred risks associated with Antarctica by decades while remaining committed to the ATS and cooperation with like-minded partners. In a future world, this may be difficult as Australia's principal security partner, the USA, does not recognise or share Australia's Antarctica territorial interests. The *2020 Defence Strategic Update* highlighted global security changes and significantly increased funded, but it did not refer to Australia's interests in Antarctica. Finally, the 2016 *Australian Antarctic Strategy* is silent on geopolitical issues, with no meaningful change in funding, as will be argued next.

## Show Tange the money

The Australian Government's annual portfolio budget statement defines government objectives through departmental outcome statements and is the basis of resource budgeting and performance measurement. The Antarctic Division outcome currently states:

> Advance Australia's strategic, scientific, environmental and economic interests in the Antarctic region by protecting, administering and researching the region.[39]

The 2016 *Australian Antarctic Strategy* and the corresponding 2016–17 Commonwealth budget papers provided a generous $2.2 billion funding package.[40] This funding appears substantial at a cursory glance; however, $1.9 billion was dedicated towards an icebreaker ship replacement, the single biggest investment in the Antarctic program's history.[41] In the same papers, the Commonwealth government indicated an intent to provide an additional $200 million over ten years towards the Antarctic outcome. The government would reason this amount considers relevant factors and is sufficient to maintain Australian interests. Arguably, this, however, remains a negligible increase in the actual level of future investment in Antarctica when compared against the 2021 Australian Olympic Committee request for an additional $314 million over four

39 *Budget 2021–22: Annex A Agency Outcome Statements*, Commonwealth of Australia, 2020, p 187. Available: https://archive.budget.gov.au/2020-21/bp4/download/bp4_2020-21.pdf

40 AAD, *Australian Antarctic Strategy and 20 Year Action Plan – Overview*, [web page], last updated 27 April 2016, accessed 26 May 2021. https://www.antarctica.gov.au/about-us/antarctic-strategy-and-action-plan/

41 The new icebreaker RSV Nuyina arrived in Hobart on 16 October 2021. It provides Australia with a reinvigorated Antarctic maritime science and logistics capability. Funding associated with the acquisition of the replacement icebreaker is included in the Department of Environment and Water 2016–17 Departmental Capital Budget Statement. p 25. AAD, *Australian Antarctic Strategy and 20 Year Action Plan*.

years.[42] As President Biden once said, 'Don't tell me what you value. Show me your budget, and I'll tell you what you value.'[43]

Despite the 2016–17 budget intent, ongoing funding provisions to pursue the Antarctic outcome and, therefore, Australia's national interests in Antarctica remain inconsequential compared to the possible strategic consequences. The graph in Figure 1 below shows the last 20-years of Antarctic budgets (blue) against the budget allocated to support the operating functions of the Federal Parliament (green). The 2021/22 Commonwealth budget allocated only $228 million in direct support of Australia's Antarctic objectives.[44] In comparison, $303 million was allocated to support the Federal Parliament's function.[45] To visualise the magnitude of funding another way, it is worth noting that the annual direct budget to support and secure Australia's substantial interests in Antarctica is equivalent to 1.8 days of the Department of Defence FY 2021–22 budget.[46] Revisiting historic Antarctic funding levels will be required if Australia intends to manage ongoing interests and engagement effectively. This should include examining options should the ATS fail.

42 Michael Bleby, 'AOC asks for extra $314 million to boost medal tally', *Australian Financial Review*, 27 May 2021 – 12.00am.
https://www.afr.com/companies/sport/aoc-asks-for-extra-314m-to-boost-medal-tally-20210526-p57v6c

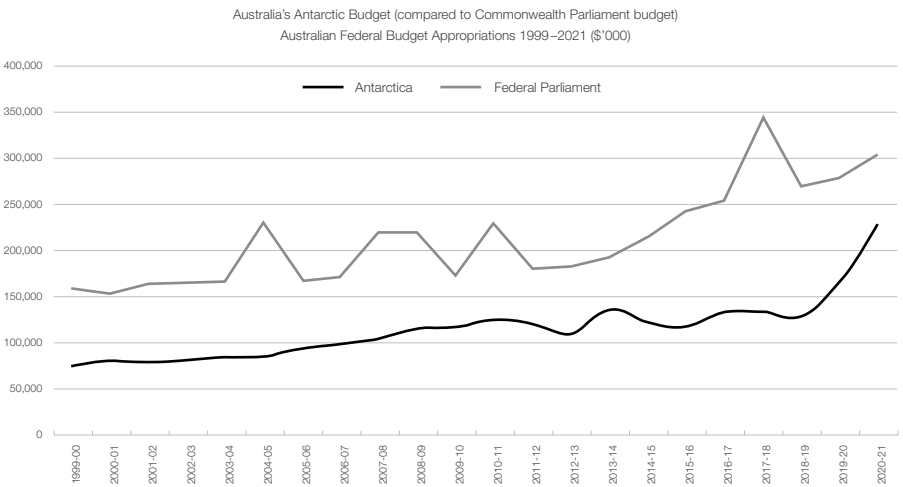
43 Joe Biden, *Don't tell me what you value. Show me your budget, and I'll tell you what you value – Quoting his Dad*, DailyKOS, Obama Nightly News, 4 November 2012, https://www.dailykos.com/stories/2012/11/03/1155042/-Obama-Nightly-News-Show-me-your-budget-and-I-ll-tell-you-what-you-value

44 The Department of Agriculture, Water and the Environment's *2021-22 Portfolio Budget Statement* highlights linked programs at section 2.3.1 but does not quantify any estimated expenditure. Programs include the Australian Research Council, Bureau of Meteorology, Commonwealth Scientific and Industrial Research Organisation, Department of Defence, Department of Foreign Affairs and Trade, Department of Industry, Science, Energy and Resources, and Geoscience Australia; Department of Agriculture Water and the Environment. *Portfolio Budget Statements 2021–22 Budget Related Paper No. 1.1, Agriculture, Water and Environment Portfolio*, Department of Agriculture Water and the Environment, Australian Government, 2021, pp 59–61; *Budget 2021–22: Agency Resourcing Budget Paper No.4*, Commonwealth of Australia, 2021. Available: https://budget.gov.au/2021-22/content/bp4/download/bp4_2021-22.pdf

45 The use of Federal Parliament as a budget comparison is not intended as a pejorative statement against the essential functions of the Parliament. Rather it was selected for comparison due to its profile, cost overheads and importance. The Treasury, *Budget 2021–22: Agency Resourcing Budget Paper No.4*, Commonwealth of Australia, 2021, pp 40–41.
Available: https://budget.gov.au/2021-22/content/bp4/download/bp4_2021-22.pdf

46 Hellyer's annual Defence budget analysis reveals a daily cost of $122,242,739 a day. Some of this allocation will be towards Antarctic support by limited Navy and Air Force programs such as C-17 air operations support. Marcus Hellyer, *The cost of Defence ASPI defence budget brief 2021–2022*, ASPI, Canberra, 2021. Available: https://www.aspi.org.au/report/cost-defence-aspi-defence-budget-brief-2021-2022

**Figure 1: 20 years of Australian Antarctic Outcome Budgets (Source: Willis – Analysis of Commonwealth budgets). Figures do not include the $1.9b allocated in 2016 to acquire a new icebreaker ship.**[47]




So, what should be done? In terms of risk management, there are an array of options that should be pursued. Some may argue for maintaining the current settings as so far, the strategy in the Antarctic has been successful. As a middle power, Australia has secured substantial outcomes and retained significant influence in the ATS. However, as the global status quo is being challenged, the status quo approach may not enjoy ongoing stability. Therefore, it is in Australia's interests to explore the options of any future risk and not ignore or defer it. When viewed through a risk management lens, likelihood and consequence are the critical assessment factors. The geopolitical changes are elevating the likelihood of the risks materialising, whereas the consequences to Australian interests remain. Accordingly, prudent risk management demands that mitigation is applied to treat the risk.

Resolving the emerging policy dissonance and improving resource commitments should be priorities. The 2016 *Australian Antarctic Strategy* needs to be updated accordingly. Increased whole-of-government integration with appropriate security and intelligence input is needed. The next revision of the Commonwealth government's Antarctic and defence strategies needs to revisit

47 Note that over a 20-year period, names of Departments responsible for Antarctica changed, as did the specific Antarctic Outcome number. The Treasury 1999–2020, *Australian Budget: Past Budget Papers*, The Treasury, Commonwealth of Australia, 2021.

its Antarctic assumptions, noting the *2020 Defence Strategic Update* identified three germane factors:

- the assumption of a 10-year strategic warning time is no longer appropriate for defence planning
- the acceleration of trends and drivers of global change
- the increasingly aggressive use of divisive grey-zone tactics to coerce states under the threshold for a conventional military response.

Investing in Antarctic diplomacy and the ATS creates robust norms of behaviour and supports a stronger rules-based global order. The appointment of a specific government minister or statutory body for the Antarctic would be ideal, bringing a sharper diplomatic and whole-of-government focus to parliamentary discussions. Australia's 42 per cent of Antarctica deserves one. An Antarctic ambassador has been previously recommended but seemingly not implemented by DFAT;[48] however, it should be reconsidered. A similar issues-based approach is used in other focus areas, including Ambassadors representing Australia's interests in Counterterrorism or at the Organisation for Economic Co-operation and Development (OECD).[49]

Connecting more Australians with the Australian Antarctic Territory through an expanded presence in Antarctica and more education would reinforce norms and improve the domestic ideational power base. Australians should know more about the continent and be able to visit and connect with Australia's Antarctic, including through better ecotourism options. Yet, Australians wishing to visit Antarctica will often do so via Argentina, Chile and the United Kingdom's claims in the Antarctic Peninsula. Furthermore, the Australian national curriculum only mentions 'Antarctica' or 'Antarctic' in six minor subjects yet refers to 'New Zealand' 954 times.

A comprehensive, well-funded Antarctic governance and science program would assist diplomacy and grow the Australian 'currency of influence', benefit the national economy and assist with global challenges such as climate change. A 2018 proposal to build year-round aviation access through the construction of a 2,700 metre runway supports these outcomes and Australia's long-term

48 Parliament of Australia, *Maintaining Australia's national interests in Antarctica: Inquiry into Australia's Antarctic Territory*, Joint Standing Committee on the National Capital and External Territories, May 2018. https://www.aph.gov.au/Parliamentary_Business/Committees/Joint/National_Capital_and_External_Territories/AntarcticTerritory/Report

49 An opposing view may suggest that Australia would not appoint an ambassador to its own territory; however, an Antarctic Ambassador would represent Australia's interests on the entire Antarctic continent and in associated international forums. Careful selection of the Ambassador would ensure appropriate whole-of-government coordination.

interests, including Australia's search and rescue options and obligations.[50] It could also support ecotourism options. However, the 20-year construction and target operational date of 2040 does not reflect the changing urgency or need. If Australia does not act, others may see legitimate opportunities to advance their state interests, as China has done in the South China Sea.

Consequently, Australia should advance the runway development's timing and be considering possible alternatives to the ATS while maintaining the existing structure and support to the ATS. The development of an ongoing Australian strategy should expect state assertiveness and presence as well as guard against changes in the region. This is about creating and sustaining acceptable norms. It does not mean Australia or other nations need to militarise Antarctica.

Improving the ambitions and financial resourcing of the Antarctic strategy to more than the level of Australia's Federal Parliament's budget is logical and reflects the changing geopolitical circumstances. Doing so acknowledges the desired political ends, helps treat the growing risk and demonstrates that Australia values the 42 per cent of Antarctica it claims.

## Conclusion

Antarctica matters to Australia. Australian interests in the region are significant, they are multidimensional and they are enduring. Between 2001 – 2021 Australian Governments have implemented a historical and consistent grand strategy for the Antarctic. The political ends pursued through the strategy outcomes are the maintenance of significant territorial claims, national security through strategic denial, enhanced global influence, access to potential resources and the pursuit of scientific knowledge.

The strategy has essentially been a continuation of the status quo created by the ATS in 1959 and the US-led global order. However, geopolitics are changing, and the status quo is being tested. Consequently, Australia's Antarctic strategy needs to adapt. In this context, analysing the primary diplomatic and science levers of national power and the overall funding levels with which the strategy is pursued reveals an emerging policy and resourcing dissonance.

50 In May 2018, Government announced, subject to environmental approvals, an intention to construct a 2700m paved runway near Davis research station with an operational date of 2040. As of July 2021, DAWE is awaiting the final business case decision by Minister Ley. No final decision has been made or long-term funding allocated. https://www.antarctica.gov.au/antarctic-operations/travel-and-logistics/aviation/davis-aerodrome/about-the-project/; Jeffrey McGee, Marcus Haward and Anthony Bergin, 'Gamechanger - Australian leadership for all-season air access to Antarctica', *Strategic Insights*, Australian Strategic Policy Institute, no. 160, 21 April 2021. https://www.aspi.org.au/report/gamechanger-australian-leadership-all-season-air-access-antarctica

With nations acting more assertively, the growing presence, capabilities and interests of other states in Antarctica will continue to generate risk to Australia's Antarctic strategy. Consequently, Australia's overarching grand strategy interests, including those in Antarctica, need to be reviewed and adapted accordingly to mitigate the risks. If the Australian Antarctic Territory matters to strategic decision-makers in Canberra, resourcing levels need to evolve beyond the historical trend.

# Reviews

# China's civilian army: the making of wolf warrior diplomacy

*Peter Martin*

Ebook, Oxford University Press, 2021

Reviewed by Yun Jiang


China's 'wolf warrior' diplomats have attracted attention around the world in recent years, smashing the formerly popular image of Chinese diplomats as bland, polite and conservative. Under Xi Jinping, China's diplomatic style appears to have transformed into one that is assertive and sometimes combative. Many analysts attribute this change to the rising power of China, as well as to the influence of Xi's ideology.

However, political reporter, Peter Martin's newly released book, *China's civilian army*, reminds us that the assertive and combative style that is now fashionably termed 'wolf warrior diplomacy' is not so new. The first generation of diplomats after the establishment of the People's Republic of China in 1949 were the original wolf warriors. As Martin notes, 'The People's Republic has had wolf warriors as long as it has had diplomats.'

As does any good book that touches on the history of the Chinese Communist Party, Martin's analysis goes back further than the establishment of the People's Republic of China. For instance, the main body of the book starts by reviewing a series of humiliations suffered by the Qing Dynasty, such as the Treaty of Shimonoseki in 1895 – a few years before the birth of Zhou Enlai, the People's Republic's first Premier and Foreign Minister. It also covers the Chinese Communist Party's early attempts at diplomacy, when it was still based in the remote region of Yan'an and was relatively isolated. Yet, it is evident that elements of the diplomatic tradecraft used by the Communist Party in Yan'an in the 1930s continue to this day. Peter Martin's book is thus a good reminder that the aggressive 'wolf warrior' diplomatic style is not new in China.

What is intriguing is that China's aggressive style of diplomacy is not due entirely to the rising power of China, as international relations observers may expect. At various periods in time, even when China was relatively weak internationally, China's diplomats have used aggressive tactics, including shouting revolutionary slogans.

Indeed, to understand China (like with any country), we must unpack the country and peak inside. Martin argues that the 'wolf warrior' style is due to China's diplomats looking inward to the political and bureaucratic system inside China rather than outward. Or, as he puts it, 'Chinese diplomats spend more of their time looking over their shoulders than out in the world.'

Why do China's diplomats act this way? To know the answer, we must understand the incentives of the individual diplomats and the Ministry of Foreign Affairs, as well as the institutional constraints they face. Martin does a wonderful job on this monumental task.

The Ministry of Foreign Affairs is not popular in China, especially among the nationalist voices often found online. These nationalist voices want the diplomats to be tougher, to throw their weight around, wolf warrior style. Similarly, the diplomats are also often under suspicion from other parts of the bureaucracy. On the latter, perhaps the public servants in Australia can relate – Australia's diplomats are also often accused of prioritising Australia's bilateral relationships over other interests, such as national security.

The Ministry of Foreign Affairs is historically weak. This has led to some seemingly absurd situations where the ministry's spokesperson has not had the full information on important matters affecting China's foreign affairs. When the spokesperson acknowledges their lack of information, most outsiders suspect that the ministry just did not want to reveal the information. But Martin argues that they may not have been lying – other parts of the bureaucracy may not have told the ministry.

This would seem unthinkable in most other countries. But it is actually expected in China due to its political system, which prioritises secrecy over coordination. To ensure secrecy and discipline, information flows only upwards and not horizontally. This is useful for keeping information secure but terrible for policy coordination. Such trade-offs exist in all bureaucracies, and China's choice is reflective of the closed and paranoid political system.

In such a paranoid political system where diplomats are under suspicion for their loyalty, the incentive is to be 'disciplined' and avoid making any mistakes. Thus, loyalty is rewarded; entrepreneurship is not. The drive is to prove your political reliability by sticking tightly to the approved message and, above all, ensure no one can 'grab your pigtail' (exploit your weak points). This is why sloganeering is often the norm and making friends with interlocutors can be potentially dangerous.

The institutional constraints binding the diplomats mean that Chinese diplomats usually have less flexibility

or authority when compared to diplomats in other countries. This has been the case since Zhou Enlai and the establishment of the People's Republic.

Constantly looking inwards means the diplomats are striving to be politically safe. Under such circumstance, the renewed 'wolf warrior' diplomacy reflects what the party leadership wants at this moment in time. But its inflexibility also means that its diplomacy is less effective than what we should expect from a big power like China. Martin observes that China's diplomats tend to 'focus excessively on small tactical wins at the expense of strategic victories'.

It is perhaps obvious that institutional constraints and incentives drive bureaucratic behaviours. However, for those who are used to only seeing China from the outside, *China's civilian army* paints a more complex picture of China's diplomacy. In addition, the book also contains many wonderful stories of China's prominent diplomats. Clearly the author has spent a lot of time researching and reading memoirs of retired diplomats.

What does it all mean for China's diplomacy in the next few years or decades? Considering the incentives and the institutional constraints that the diplomats are working under and the fact that Xi has explicitly promoted a more assertive stance among diplomats, wolf warrior diplomats are not going away any time soon. Instead, we should expect more and more wolf warrior diplomats will pop up. This stance is likely to persist until the top leadership comes to believes the costs of such a diplomatic style outweigh the benefits.

Finally, a word of caution. 'Reciprocity' has become popular in policies towards China but, in this instance, countries should respond with 'wolf warrior' diplomacy of their own or making their diplomats into a 'civilian army'. 'Wolf warrior' diplomacy is at best ineffective and, at worst, detrimental to China's national interest. It is practised for domestic popularity rather than advancing national interest. Policymakers should use it as a cautionary tale and not as an example to emulate.

# Our exceptional friend: Australia's fatal alliance with the United States

*Emma Shortis*

Hardie Grant Books, 2021

Reviewed by Elena Collinson


Currently, the US alliance has a prominence in national debate arguably comparable only to the times of the Vietnam and 2003 Iraq wars. Yet for 20 years, debates over the Anzac legend have been entwined in discussions of the alliance and vice versa. At the same time, successive Australian governments have presided over institutional enhancements to the alliance. In 2002, Australia committed to purchasing up to 100 F-35 fighter jets; 'the first Australian defence purchase with the explicitly stated intention of improving interoperability'.[1] Since 2012, American marines have been hosted on permanent rotation in the Northern Territory. Most recently, the relationship between Australia and the US has been further deepened with the agreement to build an Australian fleet of nuclear-propelled submarines, using highly sensitive technology shared by the US, under the auspices of the newly minted Australia-United Kingdom-United States trilateral partnership (AUKUS).

Emma Shortis' book, *Our exceptional friend: Australia's fatal alliance with the United States* (Hardie Grant, 2021), has been released at a time when the rattling of the alliance cage during Donald Trump's presidency and China's bullying and assertive rise under President Xi Jinping has intensified calls for Australia to 'do more' to shore up its relationship with Washington. As Australia scrambles to ensure that it is seen to be pulling its weight, Shortis throws down the gauntlet, arguing that the ANZUS treaty, as Australia's central foreign and defence policy principle, is ultimately antithetical to the Australian national interest, makes conflict inevitable and undermines Australia's moral posture abroad.

The book is an unabashed, colourful take on both America as a rapacious and imperfect great power and the shared history of the alliance. Shortis is upfront about the fact that she '[does] not approach the subject

1 Adam Lockyer, 'The logic of interoperability: Australia's acquisition of the F-35 Joint Strike Fighter', *International Journal*, 68(1):71–91. https://www.jstor.org/stable/42704961

as a dispassionate observer';[2] the contents are 'unapologetically anti-American power',[3] and a call to examine the 'poisoned heart of alliance politics'.[4]

Yet her work draws on a powerful, if long-established, strand of critical analysis of the alliance. A selection of examples collated by Australian historian David McLean provide a snapshot of this school of thought[5] – LG Churchward in *Australia and America 1788–1972: An Alternative History* (1979) argued that in the Menzies years Australia became 'an American satellite'; Stephen Alomes in *A Nation at Last?* (1988) described the alliance as 'the most dramatic form of dependence', lambasting Australia's 'bland subservience to the US'; while Dennis Phillips in *Ambivalent Allies* (1988) lamented that Australians 'so willingly and so totally handed over both their sovereignty and their freedom of choice to a foreign power'. In *Reluctant Nation* (1992), David Day bemoaned that '[f]or too long, Australia has looked at the world with British, and then American eyes', stating that Australia was inhibited by a 'dependent mentality'. Deep grievance runs through the veins of this 'radical nationalist' school. It argues that Australia's development and nationality have been inhibited by reliance on great and powerful friends; and what the country could be has been thwarted and held back by dependence, while national growth and maturity have been stifled.

Cleaving to this model, Shortis argues that ANZUS 'has perpetuated a craven and unquestioning fealty to the United States regardless of what American governments do in the world or who leads them'.[6] She presents myriad historical examples pointing to Australia's generally unwavering support for, and uncritical embrace of the US, its failure to safeguard Australia's independent interests and eagerness to sign on to America's global design. But the proposed antidote here goes further than most texts in this school, for Shortis advocates neither for an 'independent' foreign policy, nor for a move to 'trash the treaty and start again'.[7] Rather, Shortis seeks a root and branch rethink of the very structures – political, economic, cultural, social and environmental – which, as closely intertwined with the American model as they are, comprise the

2 Emma Shortis, *Our exceptional friend: Australia's fatal alliance with the United States*, Hardie Grant Books, 2021, p 13.

3 Shortis, *Our exceptional friend*, p 11.

4 Shortis, *Our exceptional friend*, p 101.

5 David McLean, 'From British colony to American satellite? Australia and the USA during the Cold War', *Australian Journal of Politics and History*, 2006, 52(1):64–76.

6 Shortis, *Our exceptional friend*, p 4.

7 Shortis, *Our exceptional friend*, pp 230–231.

framework for Australian domestic and foreign policy.

Critical of Australian eagerness 'to [leap] out of the blocks' in support of American adventurism,[8] Shortis compels us to interrogate why Australia 'so willingly follow[s] the United States into war after pointless war'.[9] It is a timely and important question. Defence Minister Peter Dutton in a 17 September interview indicated that should conflict between China and the US arise with respect to Taiwan then Australia would likely support the US: 'As to whether [the Communist Party of China] decide to do something in regard to Taiwan, in that case what is the American response and we obviously have an alliance with the US … so we need to be realistic about that.' [10] So after committing itself to fight alongside the US in the Second World War, Korea, Vietnam, the Persian Gulf, Somalia, Afghanistan and Iraq, the possibility looms that Australia may be drawn into another military conflict alongside its 'great and powerful friend'.

Crucially, Shortis also divines the cultural and racial prism through which policymaking is conducted, pointing to Australian and American governments' tendencies to concoct 'racist narratives which lump government actions together with entire peoples and ignore historic and national complexities and specificities'.[11] She notes that with respect to the alliance relationship's current major threat unifier, China, assumptions underpinning current policy and diplomacy 'are still based on a barely updated racist narrative of the yellow peril',[12] while acknowledging the '[entirely legitimate] concerns about the actions of the Chinese government, on the Chinese mainland and outside it'.[13]

Acknowledging and recognising the cultural and racial baggage that continue to attach themselves to Australian and American policy formulation and communication is critical not simply for the purposes of enhancing Australia's relationships on the global stage but for the country's domestic harmony. Worryingly, a Scanlon Foundation survey last year that tested Australian attitudes towards specific national groups showed that 47 per cent of respondents held negative views towards Chinese-Australians.[14] And in an Australia–China Relations Institute/

8 Shortis, *Our exceptional friend*, p 71.

9 Shortis, *Our exceptional friend*, p 12.

10 Samantha Maiden, 'Peter Dutton's blunt warning over prospect of war with China', *news.com.au*, 17 September 2021. https://www.news.com.au/technology/innovation/military/peter-duttons-blunt-warning-over-prospect-of-war-with-china/news-story/15d47f2f5b3d48ca2f43a4648a8b5531

11 Shortis, *Our exceptional friend*, p 30.

12 Shortis, *Our exceptional friend*, p 56.

13 Shortis, *Our exceptional friend*, p 52.

14 *Mapping Social Cohesion*, Scanlon Foundation, February 2021. https://scanloninstitute.org.au/report2020

Business Intelligence and Data Analytics poll conducted this year, about four in ten Australians said they believed that 'Australians of Chinese origin can be mobilised by the Chinese government to undermine Australia's interests and social cohesion'.[15]

Occurring alongside this rise of division and suspicion in the Australian public sphere is a recrudescence of the Anglosphere, evident in the way the scope of the Five Eyes intelligence sharing partnership has been expanded and applied more broadly across the conduct of Australian foreign policy. Described by the Department of Foreign Affairs and Trade this year as 'a vital strategic alliance and key to Australia's interests',[16] the grouping, with nudging from Australia and the US, coordinated to exclude Chinese telecommunications company Huawei from their domestic networks,[17] issued a joint statement condemning Beijing's actions in Hong Kong,[18] and, to an extent, welcomed an Australia push to lend an economic dimension to the partnership through means of coordinating economic responses to COVID-19.[19] This is not to say that these decisions are devoid of merit; rather that their execution via a grouping with a distinct lack of non-Anglo membership sends its own particular message.

The reflexive embrace of the Anglosphere is evident, too, in the AUKUS partnership, an exclusively Anglo-Saxon grouping purporting to take the lead in the promotion of 'security and prosperity in the Indo-Pacific'.[20] Prime Minister Scott Morrison confidently declared the

15 Elena Collinson and Paul Burke, *UTS:ACRI/BIDA Poll 2021: Australian views on the Australia-China relationship*, Australia-China Relations Institute and the Centre for Business Intelligence and Data Analytics, University of Technology Sydney, 16 June 2021. https://www.australiachinarelations.org/content/utsacribida-poll-2021-australian-views-australia-china-relationship

16 Stephen Dziedzic, 'New Zealand 'uncomfortable with expanding the remit' of Five Eyes, says Foreign Minister', *ABC News*, 19 April 2021. https://www.abc.net.au/news/2021-04-19/new-zealand-five-eyes-intelligence-sharing-china-australia/100078834

17 Eryk Bagshaw, 'How the US steamrolled Chinese tech giant out of Five Eyes', *The Sydney Morning Herald*, 7 July 2020. https://www.smh.com.au/world/asia/how-the-us-steamrolled-chinese-tech-giant-out-of-five-eyes-20200706-p559fa.html

18 Senator the Hon Marise Payne, the Hon Francois-Philippe Champagne, the Hon Nanaia Mahuta, the Rt Hon Dominic Raab MP, Mike Pompeo, *Joint statement on Hong Kong*, Australian Minister for Foreign Affairs, Canadian Minister of Foreign Affairs, New Zealand Minister of Foreign Affairs, Secretary of State for Foreign, Commonwealth and Development Affairs United Kingdom, United States Secretary of State, 19 November 2020. Available via the Department of Foreign Affairs and Trade website. https://www.dfat.gov.au/news/news/joint-statement-hong-kong-0

19 Daniel Hurst, 'Australia's reliance on Five Eyes for COVID-19 economic strategy excludes top trade partners', *The Guardian*, 14 June 2020. https://www.theguardian.com/australia-news/2020/jun/14/australias-reliance-on-five-eyes-for-covid-19-economic-strategy-excludes-top-trade-partners

20 The Hon Marise Payne MP, Prime Minister Scott Morrison MP, and the Hon Peter Dutton MP, *Australia to pursue nuclear-powered submarines through new trilateral enhanced security partnership*, [joint media statement], Minister for Foreign Affairs, Prime Minister of Australia, Minister for Defence, 16 September 2021 https://www.foreignminister.gov.au/minister/marise-payne/media-release/australia-pursue-nuclear-powered-submarines-through-new-trilateral-enhanced-security-partnership

partnership to be one 'that will benefit all in our region'.[21] The defence minister's insistence that '[t]here has been a universal acceptance of the plan, the logic, and the vision of AUKUS,'[22] sidelines reservations expressed by Indonesia, Malaysia and, to a degree, the Philippines.[23]

Shortis wants the political class, the foreign policy 'blob' and the Fourth Estate held to account for their general unwillingness to subject the alliance to the blowtorch of scrutiny. Both major parties are united in declining to turn too critical an eye on any aspect of Australia's relationship with America. The gentle criticisms in 2016 floated by then-Deputy Leader of the Opposition Tanya Plibersek – 'there have been times when we have made mistakes because of the alliance'[24] – and Shadow Foreign Minister Penny Wong – 'the fact that the alliance with the US is central to Australia's foreign and security policy has never meant that we trade away our values' [25] – are now a distant echo.

Shortis is particularly scathing of the kid glove treatment afforded to the alliance relationship by the press. The charge sheet here is long. She points to the Australian Broadcasting Corporation's describing the White House state dinner between the Prime Minister and then-President Trump as 'almost…romantic';[26] the fact that Morrison was 'generally let off the hook in Australian press coverage' for having attended a Trump campaign rally;[27] the lack of scrutiny over the joint intelligence facilities at Pine Gap;[28] and the 'generally congratulatory' tone of articles on the Morrison government's response to the American drone strike that killed Iranian Major General Qasem

21 Scott Morrison, 'Press conference – Canberra, ACT' [transcript], Prime Minister of Australia [website], 16 September 2021. https://www.pm.gov.au/media/press-conference-canberra-act-24

22 Tom McIlroy, 'AUKUS is the most significant step of our time, says Dutton', *Australian Financial Review*, 26 October 2021. https://www.afr.com/policy/foreign-affairs/aukus-is-the-most-significant-step-of-our-time-says-dutton-20211020-p591hf

23 Kate Lamb and Agustinus Beo Da Costa, 'Indonesia warns against arms race after Australian nuclear sub pact', *Reuters*, 17 September 2021. https://www.reuters.com/world/asia-pacific/indonesia-warns-against-arms-race-after-australian-nuclear-sub-pact-2021-09-17/; 'PM expresses Malaysia's concern over AUKUS at the East Asia summit', *The Star*, 27 October 2021. https://www.thestar.com.my/news/nation/2021/10/27/pm-expresses-malaysia039s-concern-over-aukus-at-the-east-asia-summit; Ruth Abbey Gita-Carlos, 'Duterte "concerned" over AUKUS nuclear submarine deal', *Philippine News Agency*, 28 September 2021. https://www.pna.gov.ph/articles/1154907

24 Henry Belot, 'Labor leaders call for careful rethink of US alliance, citing Donald Trump's foreign policy', *ABC News*, 16 November 2016. https://www.abc.net.au/news/2016-11-16/labor-leaders-call-for-careful-rethink-of-us-alliance/8029106

25 Penny Wong, 'Trump's election is a turning point for Australian foreign policy', *The Sydney Morning Herald*, 15 November 2016. https://www.smh.com.au/opinion/trumps-election-is-a-turning-point-for-australian-foreign-policy-20161114-gsp5kd.html

26 James Glenday, 'US state dinner: Donald Trump to serve Scott Morrison sole, serenade him with violins', *ABC News*, 21 September 2019. https://www.abc.net.au/news/2019-09-20/donald-trump-scott-morrison-us-state-dinner-menu-plan/11533608

27 Shortis, *Our exceptional friend*, p 17.

28 Shortis, *Our exceptional friend*, p 38.

Soleimani.[29] Her book is not short on other examples.

The lack of substantive and dispassionate reflection from these quarters deserves emphasis, and an honest, careful consideration as to *why* such reflection is lacking needs to be mulled over by those with any kind of a stake in the alliance debate.

But here's the rub. For all that *Our exceptional friend* is passionately argued, for all that it is a galvanising call to action through its insistence that we stop accepting existing structures as immoveable and focus instead on how these might be reshaped or dismantled in favour of a more inclusive domestic, regional and global reality, there are no practical means offered for how this might be implemented nor is any alternative myth of national community proffered, much less how it might be achieved. This is acknowledged by Shortis, who says, 'I don't know how we do that. I'm not sure I can even imagine what it looks like.'[30] Instead, she says, 'The starting point for … radical reshaping needs to be a genuine, historically informed understanding of why Australia behaves as it does in the world, and how deeply that is connected to both our relationship with the United States and the broader histories we share.'[31] This book, then, can certainly reinvigorate that conversation. But is this enough?

How realistic is it to dislodge the dominant prism through which Australia has viewed the world, namely the tension between its European and North American cultural moorings and the reality of its persistent geopolitical anxiety? It is true that in the 1970s and 1980s Australian governments of both political persuasions, while maintaining the US alliance as the first principle of Australian foreign and defence policy, did not invest the relationship with any new content or meaning? Yet from the mid-90s, as China's economic rise fuelled its military modernisation, Australia's anxiety about the region began to bubble slowly once more. And this concern has clearly taken a more concrete form in the new century. The US alliance is so embedded into Australia's strategic psychology and defence posture that, arguably, the only thing that can rupture it is severe internal political crisis in the US. It is America that will need to give up on the alliance: for Australia likely never will.

29 Shortis, *Our exceptional friend*, p 62.

30 Shortis, *Our exceptional friend*, p 232.

31 Shortis, *Our exceptional friend*, p 232.

# You shouldn't have joined: a memoir

*General Sir Peter Cosgrove*

Allen and Unwin, Sydney, 2020

Reviewed by Ross Boyd


General Sir Peter Cosgrove AK CVO MC (Retd) was not one of those obviously destined for greatness, but he definitely had it thrust upon him.

## Life story

In his most recent offering, Sir Peter fills in some of the gaps since his earlier memoir, *My Story*, published in 2006. There is plenty of new material in *You shouldn't have joined*, and many insights and anecdotes tracing his life's story, from humble beginnings as the son of an enlisted soldier in the 1950s and 60s through to his retirement from the Australian Army as the Chief of the Defence Force in 2005. It then picks up where *My Story* left off, illuminating his experience on several high profile Australian boards including QANTAS and Rugby Australia, his service leading both State and Commonwealth government recovery efforts in the aftermath of devastating natural disasters and, of course, his role as Australia's 26th Governor-General from 2014 to 2019.

It's certainly a broad canvas on which Sir Peter paints a fascinating picture of a life characterised by a sense of public duty and service, the importance of family, good humour and a touch of the larrikin.

## Luck or hard work?

In many respects, it's a remarkable story. In his characteristic self-deprecating and conversational style, Sir Peter professes to have had an enormous amount of luck on this journey. He recounts how first as a colonel, and again later as a brigadier he was informed by his army career manager that he had most likely reached ceiling rank. On the first occasion he acknowledges he was disappointed but not surprised, given at a time the army was reducing its top-heavy rank structure and there was intense competition for promotion. He resolved not to drop his bundle and to continue to do the best job he could. Then a few months later, 'blow me down… the same chap was on the phone to tell me that by the end of the year I was to be promoted to Brigadier'. The same story occurred later, when he was the Commandant of the Royal Military College, through sheer serendipity, the Commander 1st Division position became available and Sir Peter was selected. A great example of being in the proverbial right place at

the right time. It was from this position he took command of the International Force East Timor (INTERFET). Within weeks he was appearing on television screens across Australia and around the world. His magnificent performance in East Timor propelled him to subsequent high office.

To defy the odds and secure promotion is one thing, but *You shouldn't have joined* gives wonderful insights into the nature of the bloke and leads inevitably to the conclusion that luck had very little to do with his success.

## Leadership

Here is the story of a man with the kind of leadership qualities that Australians most admire – compassion, humility, empathy and self-deprecating humour. To paraphrase Rudyard Kipling, Cosgrove is as comfortable walking in the company of kings and queens, prime ministers and presidents, as he is talking with crowds, yarning with the average punter or his beloved diggers. Add to these qualities his political nous and strategic acumen and you have a study in leadership that should be read by every Australian who aspires to greatness, whether in the military, the boardroom or in parliament.

## Family

It would be easy for Sir Peter to focus his memoir on himself alone. Refreshingly for someone in such high office, again and again Sir Peter credits his successful career to the support of his beloved wife Lynne and his three sons. Recalling his time as a 'newly minted' company commander in the 5/7 Battalion in 1975, he writes 'the best part was that I met the most wonderful girl, my life partner, mother to the Cosgrove tribe and my wife of 44 years: Lynne, the reason for all the rest that follows'.

Whether as an army wife re-establishing a warm and loving family home on enumerable postings around Australia and abroad or maintaining a relentless five years of social engagements as the Governor-General's partner, Sir Peter acknowledges the enormous unpaid and often unrecognised role Lady Lynne Cosgrove played.

## Life as Governor-General

Sir Peter apportions several chapters of the memoir to lifting the veil on his time as Governor-General. Honoured to be appointed to this high office, Sir Peter describes in illuminating detail the exercise of the Governor-General's constitutional powers, as well as the informal duties of the office – as cheer leader, encourager, acknowledger and mourner-in-chief. He dispels ill-informed assumptions about privilege and prestige in this

office. In reality, it's an enormous and unrelenting amount of hard work.

Getting down to what might best be described as the 'nuts and bolts' duties of the office, Sir Peter's descriptions of what might be considered mundane, such as the Governor-General's role as the president of the Federal Executive Council, show just how seriously he took his official duties. In his five years, he chaired 137 such meetings and considered 2,489 items, including senior judicial appointments. Each of these items came with long explanatory memorandums that needed to be carefully read. Where appropriate, Sir Peter required the responsible minister to explain some of the detail. Having been the victim of ministers' inquisitorial questioning of detail himself as Chief of the Defence Force, Sir Peter notes with some irony that the shoe was now on the other foot. Of course, this didn't stop him from asking the difficult questions, but as he says, 'I could feel their agony but my opinion was that we just had to get it right'.

## Just an ordinary bloke

While his official duties were clearly important, Sir Peter also describes many of the informal duties he undertook with Lady Cosgrove, in particular the importance of acknowledging Australians contributing their time and effort to our community. His commitment to encouraging and recognising those in our community in need of our understanding and support – including people with disabilities, First Nations Australians and our often unsung volunteers – is indicative of his love for his fellow Australians. It's amazing to think that in his time as Governor-General, Sir Peter officiated at 4,200 official events, 800 of these overseas and, often with Lady Cosgrove at his side, hosted more than 230,000 people at either Government House in Canberra or Admiralty House, the official residence in Sydney. He jokes that 'his mates gleefully opine that he would attend the opening of an envelope, and when opening a fridge door would immediately say: "Distinguished guest, ladies and gentlemen…" as the light came on!"' Joking aside, the reader who reflects on these numbers can immediately discern enormous commitment and a huge amount of hard work over his 5 years and 95 days in office.

## Significant events as G-G

Having gained insights into Sir Peter's character, it comes as no surprise to the reader that time and again the government turned to him to represent Australian interests abroad. As a great lover of sport, Sir Peter no doubt enjoyed attending the Olympics and Paralympics in Rio in 2016, but not all engagements were such joyous occasions. As Sir Peter acknowledges himself, the shooting down of MH17 by a Russian-made missile over Ukraine on 17 July 2014 was a watershed moment during

his time in office. In an instant, this heinous crime took the lives of 298 souls, including 38 Australians. In one of the more emotional sections of the book, Sir Peter records how within hours he was leading the nation's condolences to those who had lost loved ones. Then, days later, he and Lady Cosgrove were racing to get to the Netherlands in time to represent Australia at the ceremony to receive the remains of the deceased, recovered from the crash site.

Sitting on the tarmac with other dignitaries, Sir Peter describes the scene: 'As the caskets came into view at the start of the ceremony, distraught members of the crowd called out their grief, and you would have had to be made of stone not to be desperately sad for those bereaved people.'

It's a deeply moving chapter of the book. Apart from sadness, Sir Peter's acknowledgement of the role played by members of the Australian Federal Police, Australian Defence Force and our diplomatic corps as part of the recovery operation are bound to also invoke great pride in being Australian.

## Perspectives

Sir Peter's experience in high office gave him a unique perspective on several controversial issues; these included the Governor-General's powers of dismissal, reconciliation with Indigenous Australians and climate change. Sir Peter is not afraid to share his personal views on these matters of ongoing national importance and debate.

Perhaps the question Sir Peter was most often asked during his time as the Governor-General concerned his views on the question of whether Australia should become a republic. While in office, he confesses to becoming 'a dab hand at stepping delicately through this issue'. However, he has clearly thought deeply on the issue and considered all the angles for and against, as he devotes an entire chapter to this question. Cutting to the chase, and noting that ultimately it really is a matter for the people to decide, he concludes that he will take some convincing that any proposal is for the better if it '…dilutes the responsibility and authority of our system of parliamentary government'.

On this and the other weighty issues discussed, politicians and policymakers would be wise to heed his sage advice.

## Controversy and reflection

Recounting his time as a cadet at the Royal Military College Duntroon in the 1960s, Sir Peter turns to an episode of his life that on reflection he regrets and wishes to atone. As many fellow graduates of the Royal Military College of his generation know, bullying among cadets – or bastardisation as it was infamously to become known – was common. It could be funny and taught cadets

the importance of punctuality, cleanliness and personal organisation. It also served to bond members of the same class intake closer together and worked as a leveller 'so that even the most self-confident, capable and high-performing junior cadets would not get ahead of themselves'.

Sir Peter acknowledges that as a young and not particularly organised cadet he 'certainly copped it', and as a senior cadet he 'certainly handed it out'. But Sir Peter is quick to acknowledge that sometimes it went too far and left lasting scars on its victims. While his own involvement in the practice over 50 years ago was nothing out of the ordinary, Sir Peter has reflected on it and apologised to those he may have inadvertently harmed. For mine, it's a measure of the man that he has now publicly done so.

## Why read this book?

Historians, political scientists and commentators looking for the inside scoop on the private discussions that went on behind the scenes ahead of momentous decisions Sir Peter was privy to are likely to be disappointed. As one should expect, Sir Peter has maintained the confidentiality of the conversations and material in which he was entrusted.

Rather, this book is aimed at the average Australian punter: the ordinary folk who routinely volunteer, to the men and women he has served with, to the mums and dads who entrusted him with the lives of their children in earlier days, and to his fellow sports loving Australians. In fact, his audience is anyone who has wondered what goes on behind all the ceremony and glamour that is often the public face of the Governor-General's office. The conversational tone of the prose, filled as it is with humorous as well as poignant anecdotes, brings the reader 'into the same room as the man' and as such very much speaks to his audience.

At a time when many Australians might be questioning the character of our national leaders, it is refreshing to know that men like Sir Peter Cosgrove still exist. Exemplifying the attributes of duty and selfless service, combined with humility, good humour and sound judgement, Sir Peter's memoir restores faith in those to whom we entrust high office and has the power to inspire.

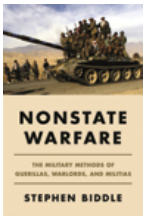
We have all seen this man in his public guise, some have seen and felt his command presence, but now everyone has an opportunity to understand his life's journey and move with him along its illustrious pathway of achievement, honour, gains and losses. Sir Peter Cosgrove's memoir is a must-read if you wish to develop an appreciation of one of Australia's finest sons. His is a model for all to emulate in work, duty and life.

# Nonstate warfare: the military methods of guerrillas, warlords, and militias

*Stephen Biddle*

Princeton University Press, 2021.

Reviewed by Andrew Maher




As we have marked the twentieth anniversary of the September 11 attacks, it is pertinent to reflect upon the lessons of these contemporary conflicts. This period did not neatly fit our characterisations of 'peace' and 'war', and thus it has inspired a re-discovered interest in the spectrum of conflict. It was an era characterised by shades of grey where states, such as Russia, pursued foreign policy goals in Crimea in ways more akin to the methods of nonstate actors; and nonstate actors, such as Islamic State, pursued foreign policy objectives in ways akin to those of states. We unhelpfully responded to the challenge of ambiguity with new terminology; the 'grey zone' to describe this environment, with little clarity as to how conflict is fought in the grey zone.

It is to the challenge of better understanding this shift in our conception of warfare that Stephen Biddle's latest book, *Nonstate warfare*, responds. The military practitioner should, of course, be familiar with Biddle's earlier work, his magisterial quantitative exploration of conventional *Military Power*.[1] A brief re-cap should, however, serve to remind of the authority with which Biddle approaches the topic of war. In *Military Power*, Biddle took issue with the way scholars and practitioners relied on 'simpler measures of gross preponderance per se: the greater A's numerical superiority over B, the greater its relative capability'.[2] Instead, he convincingly argued that:

> [t]he modern system is a tightly interrelated complex of cover, concealment, dispersion, suppression, small-unit independent manoeuvre, and combined arms at the tactical level, and depth, reserves, and differential concentration at the operational level of war … Where fully implemented, the modern system damps the effects of technological change and insulates its users from

1 Stephen Biddle, *Military power: explaining victory and defeat in modern battle*, Princeton University Press, Princeton and Oxford. 2004.

2 Biddle, *Military power*, p 15.

> the full lethality of their opponents' weapons.[3]

With this statement, Biddle describes the opiate of operational excellence to which every arms-corps army officer aspires. Further, for an Australian Defence Force that will struggle to attain numerical superiority (and into the future, technological superiority), Biddle's analysis should serve as essential reading.

It is from this basis that Biddle expands with *Nonstate warfare* into describing a spectrum of warfare from Fabian to Napoleonic methods. This is an incisive simplification that cuts through the complexity observed over the past 20 years of conflict. He breaks with the dichotomous categorisations of regular and irregular strategy, conventional and unconventional war, and state and nonstate actors. This approach is helpful, as dichotomies tend to fuel either/or debates while masking subtleties and nuance. As Biddle explains:

> [T]he characteristics of pure *Fabian* methods include an absolute unwillingness to defend ground via decisive engagement at any point in the theatre; dispersed operations … insistence on concealment obtained via intermingling with the civilian population; exclusive reliance on coercion … and rejection of heavy weapons, even when available, in favour of light arms and equipment more suitable to concealment among the population. By contrast, the characteristics of pure *Napoleonic* methods include an insistence on decisive engagement to defend or seize ground that will not be voluntarily relinquished; local concentration … exclusive reliance on brute force rather than coercion; and preferential employment of the heaviest weapons available.[4]

At one end of Biddle's spectrum, Napoleonic warfare offers decision; the Austerlitz to which Clausewitzian adherents aspire. Seeking decision might also prove unfavourable – we must remember that Napoleonic warfare risks a Waterloo. At the other end of the spectrum, Fabian warfare argues the strategic purpose of an 'army in being' – much like the 'fleet in being' – that threatens by simply existing. Through, or in concert with guerrillas, it offers attrition, exhaustion, and cost imposition, an Iberian 'bleeding ulcer' that frustrates the policymaker.[5] It risks an absence of decision, erosion of political will and local popular support, much like the failed Neapolitan resistance against Joseph Bonaparte. As these examples demonstrate, these forms of war

3 Biddle, *Military power*, p 3.

4 Stephen Biddle, *Nonstate warfare: the military methods of guerrillas, warlords, and militias*, Princeton University Press, Princeton & Oxford 2021, pp 12–13. https://press.princeton.edu/books/hardcover/9780691207513/nonstate-warfare.

5 This terminology alludes to the Iberian campaign bleeding Napoleonic France of its resources over a long period of attrition. David Gates, *The Spanish ulcer: a history of the peninsular war*, Birlinn Limited, 2002.

carry costs and benefits, and might be adopted by state or nonstate actors alike. Further, these examples demonstrate that such dilemmas have also faced military leaders throughout history; they are hardly novel challenges.

Biddle's spectrum of warfare indicates that our conflict of the past 20 years has demonstrated it is a mistake for us to approach nonstate actors and nation states differently.[6] The term, 'asymmetric warfare' is an example of this mistake; the term often being synonymous with what *they* do, despite the logic that all warfare should be asymmetric, whether by numerical, firepower, decision or technological superiority. Instead, Biddle describes a convergence of factors that are eroding the technological edge nation states once enjoyed. Man-portable lethality, in the form of the anti-armour rocket or the surface-to-air missile, creates an asymmetry that has now diffused to nonstate actors. The outcome of such capabilities manifest in Somalia, Iraq and Southern Lebanon, and was consistent with Frank Hoffman's conception of 'hybrid warfare'.[7] Today, the diffusion of enabling capabilities, such as commercially available satellite imagery, weaponised commercial-of-the-shelf drones and encrypted messaging applications, are giving nonstate actors capabilities that were recently associated with that of states. This diffusion means that 'all combatants, whether states or not, must respond to a common set of incentives … [meaning] almost all real actors occupy points somewhere in the middle'.[8]

As the Australian Army adopts a training enemy termed DATE – the Decisive Action Threat Environment – a 'hybrid' adversary is our new benchmark.[9] We thus require sound logic to inform the way we educate our people to engage with such an adversary. By recognising this 'blending' of methods of war as the norm, we might better engage within such training and operational environments. For example, Operation Desert Storm in 1991 appeared to be an application of Napoleonic warfare by both sides of the conflict. In 2003, the American-led coalition was predominantly Napoleonic in orientation, but also employed the more Fabian methods of unconventional warfare. Importantly, Saddam Hussein learnt from the 1991 experience, and conducted extensive preparations for a midpoint conflict characterised by a *Fedayeen* resistance, extremist

6 Stephen Biddle, *Nonstate warfare*, p 2.

7 Frank Hoffman, *Conflict in the 21st Century: the rise of hybrid wars*, Potomac Institute for Policy Studies, Arlington VA, 2007.

8 Stephen Biddle, *Nonstate warfare*, p xvi.

9 The Cove, 'Implementing the decisive action training environment', *The Cove*, 23 August 2020, https://cove.army.gov.au/article/DATE.

terror and conventional mobile warfare.[10] To simply expect a particular type of adversary, who does not adapt lessons from their own experience, alongside those experiences of others, is naïve.

At a strategic level, Australia's security studies discourse is presently filled with a return to major power competition and a state-centric view of future warfighting. This orientation conforms with what Biddle would define as the Napoleonic end of his spectrum. This is a spurious and oversimplified assertion if viewed as the only type of threat Australia will face. The most recent period of major power competition witnessed the superpowers support proxies in Third World nations that fought in a decidedly un-Napoleonic manner. Does this insight suggest a continuity of recent insurgencies as the primary means of conflict? Maybe, but not necessarily. As Biddle notes:

> The scale of resources needed to wage state-like mid-spectrum warfare has now shrunk to the point where many nonstate actors can fight effectively in this style – *if* their institutions are up to the job… [Thus], Nonstate combatants *with permissive internal politics* will be able to exploit modern weapons to wage increasingly state-like mid-spectrum warfare.[11]

In other words, the barrier to entry for nonstate actors to engage in more sophisticated means of warfare are lower and more readily adopted. If Biddle is correct, this would suggest an increased frequency of conflicts similar to campaigns waged by Hezbollah in 2006, Hamas in 2008, Islamic State between 2012 and 2015, and between Azerbaijan and Armenia in 2020. The implication being that:

> [n]umerically preponderant, once-Napoleonic states have an incentive to become more Fabian in the search for cover against increasingly lethal weapons; numerically inferior, once-Fabian nonstate actors have an incentive to become less Fabian as real territorial control becomes more realistically possible for them.[12]

Biddle's model and resultant analysis pose significant implications to Australian policy, strategy and acquisition considerations. The *2020 Defence Strategic Update* articulated a strong investment in what Biddle would term the Napoleonic end of the warfighting spectrum. With such acquisition decisions, we must note:

> High-tech, standoff precision forces perform well against massed, exposed, near-Napoleonic foes but perform poorly against better-concealed, mid-spectrum enemies

10 Malcom W Nance, *The terrorists of Iraq: inside the strategy and tactics of the Iraq insurgency, 2003–2014*, 2nd edition, CRC Press, Boca Raton FL, 2015.

11 Stephen Biddle*, Nonstate warfare*, pp 8–9.

12 Stephen Biddle, *Nonstate warfare*, p 48.

> – and the new theory predicts fewer of the former and more of the latter over time as many nonstate actors join astute state militaries in moving toward the middle of the Fabian-Napoleonic spectrum… Conversely, a force transformed for low-tech, low-firepower population security would lack the lethality needed against mid-spectrum enemies, whether these be states or the nonstate actors who will be increasingly capable of such methods in the future.[13]

Biddle elegantly demonstrates how militaries need to respond up and down the spectrum of conflict with this prescription. He notes that one of the largest armies he examined was Mao's Chinese People's Liberation Army in the Chinese Civil War of 1945 that fielded two million troops.[14] This army operated in a decidedly Napoleonic manner in the Korean War, yet 15 years earlier, was a guerrilla army that operated in decidedly Fabian ways. Biddle's resultant prescription is to develop flexibility and adaptability in moving along the spectrum, as appropriate to the adversary faced. Indeed, if needing a primary azimuth, he advises against a Napoleonic or conventional orientation, prescribing that:

> Mid-spectrum war fighting demands much more extensive training than do simpler Napoleonic or Fabian methods… This is because mid-spectrum methods required combatants to combine Napoleonic lethality and Fabian survivability.[15]

Biddle's writing style will appeal to most audiences. His rich quantitative foundation, established with *Military Power*, is complemented by clear language that presents a compelling argument. With his simple model, he affords reflective insight into key lessons of our past 20 years of conflict and prescriptions into the future about what type of threats the West will face. In so doing, he appeals to audiences from the practitioner to the policymaker.

13 Stephen Biddle, *Nonstate warfare*, pp 9–10.

14 Stephen Biddle, *Nonstate warfare*, p 50.

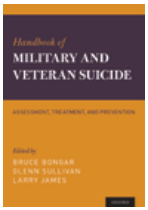
15 Stephen Biddle, *Nonstate warfare*, pp 74–75.

# Handbook of veteran and military suicide: assessment, treatment, and prevention

*Bruce Bongar, Glenn Sullivan, Larry Charles James (eds)*

Oxford University Press, Oxford, 2017

Reviewed by Darren Cronshaw




***Note: Content within this article regarding suicide, trauma and mental health may be distressing to some people.***

Suicide prevention is on the agenda of a Royal Commission and Defence leaders at every level for a very good reason. Since 9/11 there have been over 1,273 veteran and Defence suicides in Australia.[1] And as Prime Minister Morrison said, 'The death of any Australian Defence Force member or veteran is a tragedy that is deeply felt by all Australians.'[2] When someone we care for takes their life, or attempts to or thinks about it, we ask why and what could we do to help? When the person is a Defence colleague, we ask questions of how the training and health care system might have better prepared, looked after or sustained them? And what can be done to keep them 'safe for now' and heal for a better future?

As a pastor and chaplain, I grieve to think of the too many suicidal people I have worked with, including those whose self-destructive choices led to death albeit not labelled as suicide. Yet I am also heartened by those who have worked through and overcome the mental health, vocational, relationship, bullying or trauma issues that led them to suicidal ideation. There are signs to watch for, ways friends and professionals can help, and paths to healing for those who feel hopeless.

With 19 chapters from over 50 contributors, this book offers a comprehensive overview of some of the latest research and reflection on best

1 Recent data from Australian Institute of Health and Welfare (AIHW) revealed 1,062 ex-service people and 211 serving personnel took their lives 2001-2019. Andrew Greene, 'New research reveals full extent of veteran suicide crisis as royal commission begins work', *ABC News*, 29 September 2021. https://www.abc.net.au/news/andrew-greene/4827818. Accessed 2 October 2022

2 Prime Minister Scott Morrison MP, *Defence and Veterans Suicide* [media release], Prime Minister of Australia, 8 July 2021, accessed 21 September 2021, https://www.pm.gov.au/media/defence-and-veterans-suicide. The Royal Commission into Defence and Veteran Suicide is inquiring into issues, risk and protective factors with interim report by 11 August 2022 and final report by 15 June 2023. https://defenceveteransuicide.royalcommission.gov.au/

practice for assessment, treatment and prevention of military and veteran suicide.[3] It offers historical overview of the issue, how treatment has developed, insights into causes and research-based proven strategies. It has a US focus and engages with suicide risk around engagement in Iraq and Afghanistan, its relation to post-traumatic stress disorder (PTSD) and traumatic brain injury, unique challenges of special operations forces, and older veterans. Suicide is a complex and multifaceted public health concern and has another level of complexity in military contexts.

Suicide risk has been exacerbated by new challenges of war in Iraq and Afghanistan: lengthy and multiple deployments with limited time at home, asymmetrical combat, an indefinable battlefield, and new distinctive wounds especially traumatic brain injury and PTSD from improvised explosive devices (IEDs). Yet the research shows that connections between these factors and suicide is often more complicated than might be expected.[4] Some battle behaviours, such as driving fast and erratically to avoid IEDs, can inculcate a 'speed is security' default setting that is self-destructive post-deployment.[5] Other background factors are also risk factors that can be screened: past sexual and interpersonal trauma, isolation, impulsiveness, alcohol/substance abuse, relationship breakdown or loss and health, financial or legal problems.[6] Demographically, US Army suicides are most common for those aged 17 to mid-20s.[7] Naturally, if a person has a suicide plan and access to the means, previous attempts, rehearsals or acts of preparations (for example saying goodbye), intervention is needed. These are the kind of details that help with screening, referral and follow-up – not for predicting suicide ideation likelihood with certainty but identifying

3 Bruce Bongar, Glenn Sullivan, Larry Charles James (eds), *Handbook of veteran and military suicide: assessment, treatment, and prevention,* Oxford University Press, Oxford, 2017, https://doi.org/10.1093/med:psych/9780199873616.001.0001

4 Joseph Tomlins, Whitney Bliss, Larry James and Bruce Bongar, 'Suicide and the American Military's Experience in Iraq and Afghanistan', in Bongar, Sullivan and James (eds), *Handbook of veteran and military suicide*, pp 23–38.

5 Glenn Sullivan, Phillip C Kroke, Timothy B Hostler 'Driving Themselves to Death: Covert and Subintentioned Suicide among Veterans', in Bongar, Sullivan and James (eds), *Handbook of veteran and military suicide*, pp 103–113.

6 Victoria Kendrick, Lori Holleran, David Hart, Dana Lockwood, Tracy Vargo and Bruce Bongar, 'Why Suicide?', in Bongar, Sullivan and James (eds), *Handbook of veteran and military suicide*, p 16; Tomlins et al., 'Suicide and the American military's experience in Iraq and Afghanistan', pp 31–33; Afsoon Eftekhari, Sara J Landes, Katherine C Bailey, Hanah J Shin, Josef I Ruzek, 'Evidence-based treatments for PTSD: *Clinical Considerations for PTSD and Comorbid Suicidality*', in Bongar, Sullivan and James (eds), *Handbook of veteran and military suicide*, p 136.

7 James Griffith, 'Suicide in the Army National Guard: *Findings, Interpretations, and Implications for Prevention*', in Bongar, Sullivan and James (eds), *Handbook of veteran and military suicide*, pp 39–52.

risk factors that may not emerge in clinical interviews.[8]

The most helpful chapter for understanding risk was 'Combat Experience and the Acquired Capability for Suicide'.[9] It urges attentiveness not just to trauma and major stressors, but more 'benign' interpersonal-psychological factors. What is labelled the 'acquired capability for suicide', in the interpersonal-psychological theory of suicide illustrated in the figure below, suggests that three factors are commonly present for death by suicide: (1) perceived burdensomeness, feeling one detracts from the wellbeing and security of those around in one's family or unit cohesion; (2) thwarted belongingness, isolated from social support, and (3) acquired capability, as when soldiers learn to face death and deal with pain, adversity and aggression from basic training through to combat experience, or also developed from previous suicide attempts, experience of abuse or drug use. Although this is not a new theory, as introduced earlier by Thomas Joiner in *Why people die by suicide*,[10] it is a helpful diagnostic framework. Moreover, it is wrong to claim that these three factors *must be* present as if to imply that death by suicide cannot happen unless these three factors apply. Any one-size-fits-all model can be misleading, and then people blame the caregiver for being wrong. But its utility is especially helpful in explaining that the first two factors are why someone wants to die; the third adds the capability of fearlessness and pain tolerance. Thus the writers comment: 'Among military personnel, fearlessness of death and high pain tolerance paradoxically serve as both a strength and valued trait of an effective warrior *and* as a risk factor for suicide.'[11]

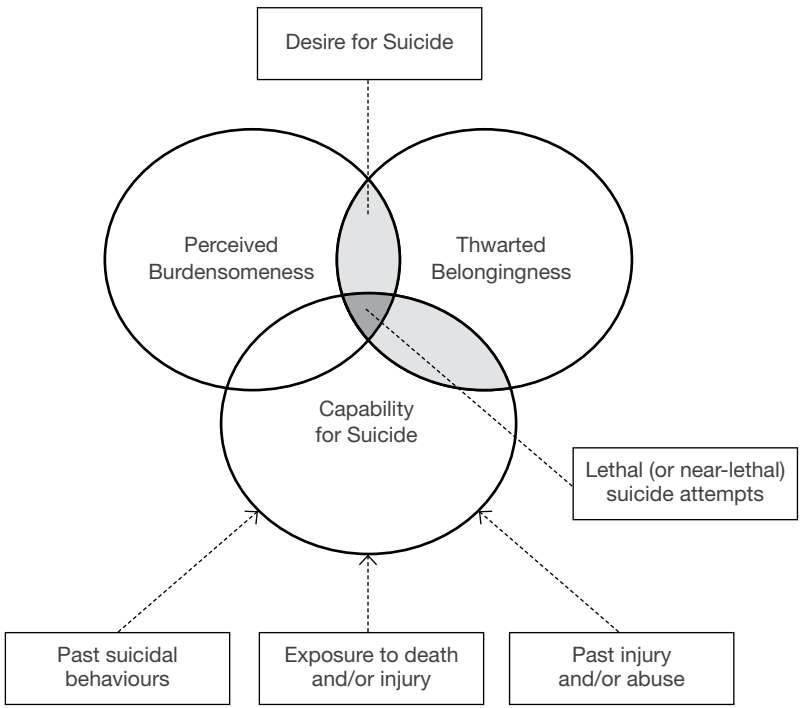
8 Eftekhari et al., 'Evidence-based treatments for PTSD', pp 131–146.

9 Craig J Bryan, Tracy A Clemans and Ann Marie Hernandez, 'Combat experience and the acquired capability for suicide', in Bongar, Sullivan and James (eds), *Handbook of veteran and military suicide*, pp 53–63; also Lindsey L Monteith and Shira Maguen, 'Combat-related killing and the interpersonal-psychological theory of suicide', in Bongar, Sullivan and James (eds), *Handbook of veteran and military suicide*, p 69, pp 64–78.

10 Thomas E Joiner Jr, *Why people die by suicide,* Harvard University Press, Cambridge MA, 2005.

11 Bryan, Clemans and Hernandez, 'Combat experience and the acquired capability for suicide', p 55.

**Figure 1: Assumptions of the interpersonal-psychological theory of suicide**[12]




12 Sources: CJ Bryan and KC Cukrowicz, 'Associations between types of combat violence and the acquired capability for suicide', *Suicide and life-threatening behavior*, 2011, *41*(2): 126–136; Joiner Jr, *Why people die by suicide*; in Bryan, Clemans and Hernandez, 'Combat Experience and the Acquired Capability for Suicide', p 55.

Unfortunately, the survival behaviour needed in warzones without a clear front line – not trusting people, staying tight-lipped, numbing emotions, 'moving on' from pain – can undermine mental health help-seeking engagement post-deployment.[13] Of American service members who completed suicide, 90% had been diagnosed with a mental health condition. In America only half of the veterans with mental health challenges seek treatment (because of barriers to care including appearing weak or having career affected), and only half of those receive adequate treatment.[14]

For treatment, the *Handbook* helped me understand differences of prolonged exposure therapy, cognitive-processing therapy, eye-movement desensitisation and reprocessing, motivational interviewing, pharmacotherapy, and stress inoculation training such as relaxation, positive self-talk, breathing retraining, assertiveness and distressing thought stopping.[15] Yet for me and other non-psychologists, the *Handbook* is practical in simply encouraging protective factors: hope for the future, responsibility to others, life-affirming spirituality, willingness to adopt a safety plan, supportive networks and confidence in the potential of treatment to help.[16]

The writers also modelled helpful language; for example, rather than 'You haven't thought about it have you?' being more upfront with 'Have you ever had thoughts you would be better off dead, or of hurting yourself in some way?' and 'If you are ever suicidal in the future, please tell me; this is something I would want to know.'[17] It is a person-centred preventative approach that many of the writers advocate.[18] For example, the final chapter, 'Caring letters for military suicide prevention', suggests personalised caring contact is not rocket science but helps foster the interpersonal connectedness and belonging that it is at the core of life-affirming choices, as Jerome A Motto, MD is cited: 'The forces that bind us willingly to life are mostly those exerted by our relationships with other people,

13 Christopher G AhnAllen, Abby Adler and Phillip M Kleespies, 'Suicide risk assessment with combat veterans – Part I: *Contextual Factors*', in Bongar, Sullivan and James (eds), *Handbook of veteran and military suicide*, pp 79–88.

14 Elvin Sheykhani, Lori Holleran, Kasie Hummel, Bruce Bongar, 'Introduction to military suicide', in Bongar, Sullivan and James (eds), *Handbook of veteran and military suicide*, p 2.

15 Afsoon Eftekhari, Sara J Landes, Katherine C Bailey, Hana J Shin and Josef I Ruzek, 'Evidence-based treatments for PTSD: *Clinical considerations for PTSD and comorbid suicidality',* in Bongar, Sullivan and James (eds), *Handbook of veteran and military suicide*, pp 131–146.

16 Eftekhari, et al., 'Evidence-based treatments for PTSD*',* p 136.

17 Eftekhari, et al., 'Evidence-based treatments for PTSD*',* p 135.

18 For example, Paul R Duberstein, Marsha Wittink, Wilfred R Pigeon, 'Person-centered suicide prevention in primary care settings', in Bongar, Sullivan and James (eds), *Handbook of veteran and military suicide*, pp 213–239.

whether they be intimately involved in our lives or influence us by other psychological processes.'[19]

The most affecting sections of the book for me were case vignettes offering insight into both the lived experience of suicidal thinking and best practice supportive responses. Strong therapeutic rapport is a critical part of all evidence-based treatments. For example, a female nurse who experienced Military Sexual Trauma reported nightmares, anxiety about leaving her house and difficulties with intimacy, and the *Handbook* explained how the therapist led her through assessment, safety plan, treatment options and consideration of culture and religion.[20]

Another therapist used 'Collaborative Assessment and Management of Suicidality' (CAMS) training to express respectful understanding that a client saw suicide as a coping mechanism response but the therapist had 'a bias in favour of other means of coping that are not so costly and irreversible as suicide' and that with CAMS the client could have hope.[21] After therapy, his suicidal ideation did not recur but he continued mental health treatment for PTSD and coping strategies: 'Jon had once stared into the abyss of suicidal despair, convinced that nothing could make a difference. But with appropriate clinical care, engagement and management, he came out the other side, able to re-embrace his competence and reclaim his life with a hard-earned sense of purpose and meaning.'[22]

The chapter titled 'The problem of suicide in the United States special operations forces',[23] examined the sharp increase in suicide in Special Operations Forces (SOF) in the context of the unique challenges of their duties, the huge divide from operation to home life, and exacerbated hesitancy to disclose mental health challenges. The chapter details the Preservation of the Force and Family (POTFF) initiative that fosters integrated supports and facilitates resilience and training across performance spheres: physical, including nutrition and strength and conditioning; psychological, including reducing stigma around mental health; social, including support for family cohesion; and spiritual, including values and resilience resources. POTFF

19 David D. Luxton, 'Caring letters for military suicide prevention', in Bongar, Sullivan and James (eds), *Handbook of veteran and military suicide*, p 240.

20 Eftekhari, et al., 'Evidence-based treatments for PTSD', pp 139–140.

21 David A Jobes, Blaire C Schembari and Keith W Jennings, 'The collaborative assessment and management of suicidality with suicidal service members', in Bongar, Sullivan and James (eds), *Handbook of veteran and military suicide*, p 149.

22 Jobes, Schembari and Jennings, 'Collaborative assessment and management of suicidality', p 157.

23 Bruce Bongar, Kate Maslowski, Catherine Hausman, Danielle Spangler and Tracy Vargo, 'The problem of suicide in the United States Special Operations Forces', in Bongar, Sullivan and James (eds), *Handbook of veteran and military suicide*, pp 190–200.

urges SOF leaders to lead by example by talking about mental health challenges, even to the point of vulnerably and transparently explaining their own experiences with mental health. It also embeds psychologists and chaplains in units in order to establish familiarity and normalise conversations about mental health, resilience and spirituality.

Different writers recognised how atrocities and moral injury can also link to suicide.[24] Being a survivor of unethical combat actions can lead to guilt: 'Witnessing or participating in atrocities … may also be a risk factor for suicide.'[25] This suggests the need for confession and forgiveness to deal with shame and guilt. Hendin helpfully advised:

> It is better for the therapist to accept and respect the veteran's guilt, to acknowledge the pain of the experience, to indicate that he [or she] has already punished himself enough, and to work to help him not let the event continue to define his life. Telling a veteran who feels appropriately guilty about his behavior in combat "These things happen in war" is counterproductive.[26]

On the other hand, one study suggested that veterans who could say they had not dehumanised the enemy when others had, and who were able to exercise calmness in the pressure of combat and demonstrate maintain a strong sense of humanity and compassion, were less likely to develop PTSD.[27] This suggests the imperative of ethical combat behaviours.

*Handbook of veteran and military suicide* is highly recommended reading for caring professionals or commanders interested in a deeper understanding of suicide assessment, treatment and prevention. It gave me appreciative insight into the methods of mental health professionals. It was also of practical help for me in reflecting on how best to help members of my unit work together to keep each other safe, now and for the future.

If you found any of this content distressing and would like to talk to someone, there are a variety of support services available to you:

Lifeline: **13 11 14**

Open Arms: **1800 011 046**

ADF Chaplaincy Services: **1300 467 425** and ask to speak to your area on-call Chaplain

Your on base health centre or mental health professional

ADF Health and Wellbeing Portal: **www.defence.gov.au/health/healthportal/**

24 Monteith and Maguen, 'Combat-related killing and the interpersonal-psychological theory of suicide', p 72; Eftekhari et al. 'Evidence-based treatments for PTSD', pp 141.

25 Phillip M Kleespies, Abby Adler and Christopher G AhnAllen, 'Suicide risk assessment with combat veterans – Part II: assessment and management', in Bongar, Sullivan and James (eds), *Handbook of veteran and military suicide*, p 96.

26 Herbert Hendin, 'Healing the hidden wounds of war: *treating the combat veteran with ptsd at risk for suicide'*, in Bongar, Sullivan and James (eds), *Handbook of veteran and military suicide*, p 174, pp 166–177.

27 Hendin, 'Healing the hidden wounds of war', p 172.

# Correspondence

# ‘Trust, but verify’? The shaky foundations of Sino-Russian cooperation

*Matthew Sussex*

During the final years of the Cold War the Russian rhyming proverb ‘Trust, but verify’ (Доверяй, но проверяй) entered America’s strategic lexicon. Former President Ronald Reagan became particularly fond of invoking it to explain the US attitude to Soviet denuclearisation commitments. Although the precise origins of the phrase are unclear, it is virtually synonymous with Joseph Stalin’s famous maxim that mutual mistrust creates a sound basis for cooperation.

The issue of trust is a recurring theme in Alexey Muraviev’s somewhat puzzling article ‘Strategic reality check: the current state of Russia–China defence cooperation and the prospects of a deepening “near alliance”’, published in the July 2021 issue of *Australian Journal of Defence and Strategic Studies*.[1] Reviewing Sino-Russian defence coordination ties, Muraviev speculates that these have become so closely coordinated as to indicate ‘strategic trust and confidence in each other as allied nations, not just as strategic partners’.[2] Elsewhere he characterises the two nations’ military-technological cooperation as having reached ‘levels normally seen among trusted allies’.[3]

Muraviev also goes to great lengths to paint the relationship as one between equals, deploying a number of homilies about Russian power. He writes glowingly of Russia’s ‘political, diplomatic and military influence’;[4] its ‘modern

1 Alexey Muraviev, ‘Strategic reality check: the current state of Russia-China defence cooperation and the prospects of a deepening “near alliance”’, *Australian Journal of Defence and Security Studies*, July 2021, 3(1): 27–48.

2 Muraviev, Strategic reality check’, p 39.

3 Muraviev, Strategic reality check’, p 43.

4 Muraviev, Strategic reality check’, p 44.

military force';[5] and an 'advanced strategic nuclear arsenal, which is vastly superior to the Chinese strategic nuclear deterrent'.[6] He also sees Russia as offering China more sophisticated doctrine, claiming that it shapes 'the views of PLA commanders at all levels',[7] allowing the People's Liberation Army (PLA) to be 'upskilled by the Russian military',[8] and 'highlighting China's ongoing reliance on Russia as a leading military power'.[9] He also notes approvingly that when exercising with Russian forces, PLA command and field units 'for the most part' operate 'under Russian command', or 'under close guidance of Russian military advisers'.[10]

More controversially, Muraviev appears to suggest that Russia and China are fundamentally defensive – or at least neutral – in their respective postures. This comes uncomfortably close to echoing official Russian and Chinese talking points. Here Muraviev downplays Russia's relationship with NATO as a 'balancing game',[11] refers to Georgia's 'breakaway provinces',[12] and calls the Russian-initiated insurgency in Donbas a 'geopolitical and military stand-off with Ukraine'.[13] He also hints that Sino-Russian cooperation over missile defences was a response to aggression in the form of US deployments of theatre-level ballistic missile defence (THAAD) in the Republic of Korea, as well as Japanese and Australian deployment of antiballistic missile systems.[14]

Leaving aside some semantic quibbles, not least of which is that 'deepening' a 'near alliance' sounds suspiciously like becoming increasingly but not quite pregnant, one senses that the author has secretly reached the same conclusion as many other watchers of the Sino-Russian relationship: nobody really knows how important it is, or how far it will go. Following some speculative alternative scenarios about a return to animosity or a full-scale alliance, Muraviev eventually settles on the heavily caveated idea that Russia and China will become '*occasional de facto allies*' [author's italics],[15] while actually making a more convincing case that in many respects they probably won't.

5 Muraviev, Strategic reality check'.
6 Muraviev, Strategic reality check'.
7 Muraviev, Strategic reality check', p 42.
8 Muraviev, Strategic reality check', p 40.
9 Muraviev, Strategic reality check', p 39.
10 Muraviev, Strategic reality check', p 40.
11 Muraviev, Strategic reality check', p 46.
12 Muraviev, Strategic reality check'.
13 Muraviev, Strategic reality check'.
14 Muraviev, Strategic reality check', p 39.
15 Muraviev, Strategic reality check', p 47.

This, as Muraviev notes, is due to mutual suspicion that has stymied cyber cooperation; ongoing intelligence and commercial espionage activities against one another; the lack of desire in either Moscow or Beijing for supporting each other's territorial aggrandisement efforts in the South China Sea or Crimea; the reticence of both parties about the value of alliances; and 'a certain lack of trust' between the two.[16]

The upshot is that the reader is left wondering whether the Sino-Russian relationship is knowable at all, given the broad spectrum of contradictory opinions presented in the article.

In fact, we certainly can – and should – try to understand the relationship, although very few would make the case that the glue to bind China and Russia together will be mutual trust. There is also a general consensus that, nuclear weapons aside, Russia is by far the junior partner in the relationship. This is realised by moderate Russian analysts, who increasingly speak of the need for 'equilibrium' in favour of being locked into a Sino-centric order.[17] Even Sergei Karaganov, the hardline commentator well known for his support of deep Sino-Russian ties, recently warned against selling Russia's sovereignty to China, in an interview with *Argumenty i Fakty*.[18]

Nonetheless, there are good cases to be made about whether China's and Russia's security cooperation will develop further into a formal anti-Western balancing alliance; or remain an unequal partnership based on coinciding interests in which Moscow is gradually entrapped by Beijing's centrifugal pull. On the former proposition, Graham Allison has argued that shared perceptions of an 'American threat' are making a strategic alliance between the two increasingly likely.[19] On the latter, Bobo Lo's 'Once More with Feeling' makes the important point that despite Russia dutifully following China's lead on many issues, there is little evidence Beijing and Moscow are prepared to coordinate on grand strategy or cooperate in the construction of post-Western norms and institutions.[20]

16 Muraviev, Strategic reality check', p 41.

17 Dmitri Trenin, 'How Russia can maintain equilibrium in the post-pandemic bipolar world', *Carnegie Moscow Centre Commentary*, 1 May 2020. https://carnegiemoscow.org/commentary/81702

18 Sergei Karaganov, 'A new 'Cold War' has already started, but Russia and China are winning against a 'weakening' West', *Russia in Global Affairs*, 4 August 2021. https://eng.globalaffairs.ru/articles/new-cold-war-has-already-started/.

19 See for instance Graham T Allison, 'China and Russia: a strategic alliance in the making', *National Interest*, 14 December 2018, https://www.wsj.com/articles/a-sino-russian-entente-again-threatens-america-11548806978. See also Graham T Allison and Dmitri K Simes, 'A Sino-Russian entente again threatens America', *Wall Street Journal*, 29 January 2019. https://www.wsj.com/articles/a-sino-russian-entente-again-threatens-america-11548806978.

20 Bobo Lo, 'Once more with feeling: Russia and the Asia-Pacific', *Lowy Institute Analysis*, Lowy Institute, August 2019. https://www.lowyinstitute.org/sites/default/files/Bobo%20Lo_Russia%20and%20the%20Asia-Pacific_Web.pdf

The implications are significant either way. If Moscow is increasingly forced to default to Beijing on its security and economic preferences, the risk of a neutered Russia becoming China's raw materials appendage significantly strengthens the People's Republic of China's geopolitical position in Eurasia, not to mention providing it with strategic resource autonomy. Conversely, a Russia–China alliance – perhaps in the form of a somewhat looser entente – threatens to recreate the Cold War by proxy.

The response from some members of the US security policy commentariat – that the US can (or should) avoid this by trying to somehow reverse-engineer the Sino–Soviet split, prying Russia away from China[21] – has been startlingly naïve. Trust between the US and Russia is probably lower now than at the darkest point of the Cold War, and neither is prepared to pay each other's prices for a full 'reset'. Washington and Brussels are hardly likely to hand Russia a sphere of influence over independent sovereign states that the Kremlin claims as part of the former USSR, especially when Moscow has made a mockery of its much-touted respect for the UN Charter by invading some of them. And on the flip side, policymakers in Moscow would have to be staggeringly incompetent to agree to become a de facto Eurasian battleground as Sino–US rivalry heats up.[22] Instead, given the deep animosities between Russia and the US, the relationship between Moscow and Washington is likely to remain competitive in virtually every national security sphere.[23]

Meanwhile, the future of Russia's relationship with the People's Republic of China is likely to retain elements of competition and cooperation, and it is closely tied to the Kremlin's broader tilt to Asia. The story of Russia's Asian pivot is a bifurcated one: Moscow has doubled down on the perceived benefits of bandwagoning with China at the same time as it has sought to mitigate its reliance on Beijing via commercial and military security opportunism, especially with ASEAN states. Recent semiofficial statements on the importance of foreign policy independence, the Biden–Putin summit in June 2021, and Russia's new National Security Strategy, which discusses relations with China and India in only

21 See for instance Charles Kupchan, 'The right way to split Russia and China', *Foreign Affairs*, 4 August 2021. https://www.foreignaffairs.com/articles/united-states/2021-08-04/right-way-split-china-and-russia?utm_source=twitter_posts&utm_campaign=tw_daily_soc&utm_medium=social

22 Sergey Radchenko, 'Driving a wedge between China and Russia won't work', *War on the Rocks*, 24 August 2021. https://warontherocks.com/2021/08/driving-a-wedge-between-china-and-russia-wont-work/

23 Matthew Sussex, 'In search of a clear-eyed US strategy on Russia', *The Strategist*, Australian Strategic Policy Institute, 21 September 2020. https://www.aspistrategist.org.au/in-search-of-a-clear-eyed-us-strategy-on-russia/

one paragraph, have all hinted at the desire for a course correction.[24] Yet Russia's wariness of entrapment by China is counteracted by its almost visceral hatred of the US as Russia's chief adversary, which drives it back towards Beijing. At the same time, its desire to avoid upsetting China too much militates against a truly pan-regional engagement strategy. Put simply, Russia has embarked on a pivot to Asia with Chinese characteristics.

This is underscored by other realities of Russia's regional engagement approach. First, apart from energy deals with China, it has not been especially successful economically. In fact, the wider East Asian and Pacific share of Russia's exports was lower in 2019 than in 2008.[25] Second, Russian influence in the Indo-Pacific remains dwarfed by China and the US, and probably by India and Japan as well. Third, a flexible Russian pivot role in the region is consistently held back by Moscow's reliance on outmoded great power tropes, its paranoia about regime survival, and its desire to characterise its international wrecker role as somehow virtuous. Given that, having an occasional Russian de facto ally that is long on rhetoric but short on ability to affect regional power dynamics would actually suit Beijing very nicely. Still, it is far from clear how much it would suit Moscow.

For Australia, the main implications have more to do with how Moscow might threaten Canberra's interests in various arenas that have little to do with Sino-Russian cooperation and more to do with the knock-on effects of Russian strategic pathologies. Beyond the rhetoric about an 'axis of authoritarians',[26] Russia has the capacity to enact serious harms on Australia through grey-zone tactics: in information operations; in cyberspace; through espionage; and by engaging in the same societal manoeuvring that it has directed against other Western democracies. Equally important will be what China learns from Russia in this space. Further, that Australia and Russia are economic competitors in the realm of energy, resources and potentially agricultural goods, such as wheat, should also figure into Australia's strategic trade calculus. Moscow will not hesitate to supplant Australia in any of its core Asian or planned expansion

24 *O Strategii natsional'noy bezopasnosti Rossiyskoy Federatsii* [On the National Security Strategy of the Russian Federation], Moscow, Decree of the President of the Russian Federation, 3 July 2021. http://publication.pravo.gov.ru/Document/View/0001202107030001

25 Richard Connolly, 'Russia's economic pivot to Asia in a shifting regional environment', *RUSI Emerging Insights*, September 2021. https://static.rusi.org/297_EI_RFE.pdf

26 See for instance Mark Beeson, 'The axis of authoritarianism: China, Russia and the new geopolitics', *Australian Outlook*, Australia Institute of International Affairs, 27 June 2019. https://www.internationalaffairs.org.au/australianoutlook/the-axis-of-authoritarianism-china-russia-and-the-new-geopolitics/

markets. Russia has already demonstrated its willingness to do so by taking up the slack following China's imposition of tariffs on Australian coal.[27]

At least superficially, this puts Beijing and Canberra in a similar position where Moscow's zero-sum approach is concerned, which is probably not something with which either would be comfortable.

Fortunately, the Russians have a useful proverb for that.

27 Gerard Cockburn, 'Russian coal set to benefit from trade spat between Russia and China, *The Australian*, 8 March 2021. https://www.theaustralian.com.au/news/latest-news/russian-coal-set-to-benefit-from-trade-spat-between-australia-and-china/news-story/55b6872873e743bd19e378335deef8df

**Author response**

# Proverb inspired versus evidence driven: in support of a constructive debate in defence and strategic studies

*Alexey D Muraviev*

The rapidly evolving international threat environment presents analysts, operators and decision-makers with a multitude of short-term and long-term challenges. This new reality necessitates timely and accurate reflections on the changing international and strategic circumstances affecting Australia's and its allies' international national security and defence settings. Furthermore, it demonstrates an even greater need to adapt long-established narratives to rapidly changing realities if required.

I read with great interest a critical review of my article, 'Strategic reality check: the current state of Russia–China defence cooperation and the prospects of a deepening "near alliance" ', by Matthew Sussex. His critique of my publication is evidence of an existing gap in Australian academia as well as, I suspect, policy and defence settings with respect to a comprehensive analysis of Russia's strategic and defence affairs.

The removal of the Soviet strategic threat at the turn of the 1990s, from what was then known as the Asia–Pacific geopolitical system, did not only lead to the end of systematic analysis of the Russian doctrine, strategic approach towards the region, and capabilities assessments in the context of the Australian policy and defence discourse. It led to an eventual eradication of a school of academic thought on Russian strategic affairs in Australia and the larger Asia–Pacific.

Currently, Russia-related research in Australia is driven by a small number of researchers who specialise in Russian art, history and linguistics, political economy and geopolitics. Those few with interests in the latter tend to follow an established pessimistic narrative that emerged back in the 1990s. This narrative effectively describes Russia as a declining power with no chance of regaining

some of its lost strategic ground, a country with an almost paralysed national economy, a fragile domestic political and security environment, and a shaky political regime that, above all else, is paranoid and concerned with its own survival.

Echoes of that dominant narrative are reflected in Sussex's observations of my key points, as well as his own reflections on Russia's current and future positioning in the region, and of the Chinese vector of Russia's strategic policy. Sussex's prognoses should leave the reader with no doubt that:

- Russia's regional engagement is nothing more than 'commercial and military security opportunism'; Russia's influence in the Indo-Pacific 'remains dwarfed by China and the US, and probably by India and Japan as well'
- Moscow is a convenient partner for Beijing because of an all-talk-no-action factor; 'its long on rhetoric but short on ability to affect regional power dynamics'
- there is 'a general consensus that, nuclear weapons aside, Russia is by far the junior partner in the relationship'.

In an attempt to strengthen his points, Sussex refers to views expressed by a well-respected critic of Russian policy in Asia, Bobo Lo. He goes further by referring to remarks made by Sergei Karaganov, a 'hardline commentator' who, in response to his latest publication 'On the Third Cold War' in *Russia in Global Affairs*, 'warned against selling Russia's sovereignty to China'.

In his opening remarks, Sussex refers to a well-known Russian proverb 'trust, but verify'. When it comes to the verification of presented narratives or counter narratives, the accuracy of all views becomes very important. With that in mind, let's look at some of my academic colleague's criticisms, starting with his interpretations of my points on Russia's and China's cooperation in the field of strategic deterrence.

According to Sussex, my statement that this 'aspect of deepening Russian–PRC defence cooperation can be seen as a response driven by US deployments in theatre-level ballistic missile defence elements (THAAD)'[1] should be interpreted as a response to '*aggression* in the form of US deployments of... THAAD in the Republic of Korea, as well as Japanese and Australian deployment of antiballistic missile systems'.[2]

1 Alexey D Muraviev, 'Strategic reality check: the current state of Russia-China defence cooperation and the prospects of a deepening 'near alliance', *Australian Journal of Defence and Strategic Studies*, 2021, 3(1), p 39.

2 Matthew Sussex, 'Trust but verify'? The shaky foundations of Sino-Russian cooperation', *Australian Journal of Defence and Strategic Studies*, 2021, 3(2), p 294. [emphasis added]

The term 'aggression' is more likely to be associated with the country's threat perceptions.[3] The choice of appropriate terminology, including understanding the difference between risk and threat, is essential in defence analysis, as it helps to offer the end users accurate analysis of an adversary's intent and their subsequent actions or counter-actions.

Currently, there is no evidence to suggest that either Russia or China look at the deployment of the THAAD or the antiballistic missile defence (ABM) elements across the Indo-Pacific as a direct military threat. Instead, Moscow and Beijing tend to view the THAAD/ABM dilemma as an emerging *military risk*.[4]

Another example of the need to exercise accuracy is illustrated by Sussex's critique of my points about Russia and China sharing a common strategic agenda, among them active defence, including strategic pre-emption as a form of active defence.[5] Sussex boldly assumes that I interpret Russia and China as 'fundamentally defensive – or at least neutral in their respective postures', concluding that by that statement my reflections come 'uncomfortably close to echoing official Russian and Chinese talking points'.[6]

When it comes to understanding adversarial strategy and intent one of the main purposes of analysis is to reflect accurately on the other side's thinking and planning. To make an informed judgement of the nature of Russian and Chinese doctrines it is pivotal to differentiate defensive/neutral strategic approaches from active defence and strategic pre-emption. A closer examination of Russian and Chinese operational doctrines demonstrates that the implementation of either active defence or strategic pre-emption presupposes a set of economic, political, and military non-kinetic and kinetic preventive or pre-emptive counter-activities, which would hardly describe them as passive defensive or neutral. By adopting an active defence/strategic pre-emption approach, by default both countries confirm their intent to undertake pre-emptive coercive action as a form of defence. Just like in the case of Karaganov's remarks, a thorough examination of available open-source data helps to avoid making such errors of judgement. Or, as an old Russian army saying goes, 'study [military] hardware' (*uchite matchast'* (учите матчасть)).

With respect to Karaganov's views noted earlier, instead of going to the source, Sussex limits his analyses to a newspaper interview. However, if one refers to

3 A military threat can be understood as imminent adversarial military capability, which is endangering one's national security now.

4 A military risk can be understood as a longer term/emerging military challenge, which may affect one's national security in the medium to longer-term future.

5 Muraviev, 'Strategic reality check', p 45.

6 Sussex, 'Trust but verify', p 294

Karaganov's original publication, *Russia in Global Affairs*, he describes Russia and China as 'almost allies', contrary to Sussex's interpretation that Karaganov advocated for an informal alliance based on mutual need:

> Powerful China draws on more and more military and political resources of the United States. Russia is doing the same for the PRC. For China, it is a strategic pillar in the military-political sphere and a safe source of vital natural resources... China is our most vital external support base. History has brought us closer to each other. And this is a huge gain at the moment. Over the next decade it is not only necessary to deepen cooperation but to bring it to the state of an informal alliance.[7]

However, the established narrative remains strong: Russia cannot play a bigger role than that of a junior partner; its global power has diminished; and its military capability is of no strategic concern to the West. This is particularly evident in Sussex's reflections of my analysis of the current state of Russian military power, which he describes as a 'number of homilies' and glowing writing.[8] The tone of Sussex's commentary should leave the reader with a clear impression Sussex is sceptical at best of those assessments and that there is no real reason for describing Russia's transformed military power as a modern military force with an advanced strategic nuclear arsenal.

However, in the spirit of what is supposed to be a constructive academic polemic Sussex does not offer any counter narrative to my points, even though a gradual appreciation of Russia as a formidable military power with 'global capabilities'[9] (to quote General John E Hyten, USAF, Vice Chairman of the Joint Chiefs of Staff) is becoming a reality for the western defence and intelligence community.

A couple of examples. Back in 2017, the Defense Intelligence Agency (DIA) released the unclassified version of its *Russian Military Power* report. In its preface, Lt Gen Vincent Stewart, Director of the DIA stated, 'Within the next decade, an even more confident and capable Russia could emerge... Our policymakers and commanders must have a complete understanding of Russia's military

7 Sergei Karaganov, 'O Tretiei Kholodnoi Voine' [On the Third Cold War], *Rossiya v Global'noi Politike*, July–August 2021, 4(110), published on 1 July 2021. О третьей холодной войне – Россия в глобальной политике (globalaffairs.ru)

8 Sussex, 'Trust but verify'.

9 'Toward integrated deterrence. A conversation with vice chairman of the Joint Chiefs of Staff Gen John E Hyten, USAF' [embedded video] Scowcroft Center for Strategy and Security, *Atlantic Council*, 17 September 2021. https://www.atlanticcouncil.org/event/toward-integrated-deterrence-a-conversation-with-vice-chairman-of-the-joint-chiefs-of-staff-gen-john-e-hyten-usaf/

capabilities, especially as US and Russian forces may increasingly encounter each other around the globe.'[10]

In 2020, the International Institute for Strategic Studies published *Russian Military Modernisation*, which offers a comprehensive overview of the outcomes of Russian military modernisation efforts since 2009–10. In its summary, the authors of the assessment noted, 'Today, Russia fields capable conventional armed forces, which Moscow has been willing to use operationally, as well as one of the world's two largest strategic arsenals.'[11]

Finally, in one of his latest public appearances, Gen Hyten, also spoke 'glowingly' on the current state of Russian military power:

> Russia has unbelievably powerful military, and it's also important to realise how they transformed their military in the last twenty years. I think it's also important to realise that it's also not an overnight surprise either…. We have to figure out how in the Pacific how to deal with China and Russia at the same time.[12]

But following the established pessimistic narrative that Moscow can only be a junior partner to Beijing does not let Sussex appreciate what the Chinese military do: that deepening security and defence cooperation with Russia helps the People's Liberation Army (PLA) to close the existing capability and operational expertise gaps.

This also leads to another shortfall in Sussex's attempt to offer critical analysis of my work: he misses a key argument of the article, which focuses on the military-strategic aspects of Russia–China cooperation rather than attempting to address a broader set of issues that affect the current state of Moscow–Beijing bilateral relations.

There is an existing gap in understanding Russia as a re-emerged major military power as well as its relations with another major military power, China. Indeed, it is a complex relationship, which is characterised by both strategic trust – for example evolved confidence in key information, technology, and operational planning sharing and coordination – and the ongoing challenges, ranging from a lack of will to support each other's particular geopolitical agendas to industrial espionage. In the security and defence spheres, strategic trust cannot be gained overnight. It is a long process of gradual endorsement by all relevant parties.

10 *Russian military power: building a military to support great power aspirations*, Defense Intelligence Agency, 2017. rmp-2017.pdf (fas.org)

11 *Russian military modernisation. An assessment*, Routledge, IISS, September 2020. https://www.iiss.org/publications/strategic-dossiers/russias-military-modernisation

12 'Toward an integrated deterrence', fn 9.

In the case of Russia and China that process has lasted over 30 years. Even established allies or close strategic partners do encounter problems; yet, political will and longer-term strategic considerations could ease some constraints in the relationship.

Russia's and China's deepening defence cooperation trajectory continues upwards. For example, since the publication of my article, the two militaries have staged a number of high-level consultations and joint activities. The two most significant were the *Sibu/Interaction 2021* operational-strategic manoeuvres, and the first joint naval deployment to western Pacific, also indirectly pressuring Japan.[13] Held in August 2021, the *Sibu/Interaction 2021* was the second significant joint exercise to be held in China since 2005. Similar to the *Kavkaz–2020* manoeuvres,[14] for the first time, elements of the Russian military were integrated in the PLA's battle setting; Russian personnel operated China-supplied equipment and armaments. A particular emphasis was given to the creation of multi-level coordination and coalition command organisational structures,[15] specifically designed for joint defensive and offensive operations.

The first joint deployment of a combined naval task group (10 units) was staged in late October 2021, following the *Maritime Interaction 2021* naval exercises.[16] The deployment manifested further deepening of the bilateral naval cooperation, and a possible regularisation of joint operational naval activities, similar to joint strategic bomber patrols.

The extent of Russia–China defence cooperation and its future trajectory (hence my three scenarios) requires even greater recognition now that Australia has committed itself to a new security and defence configuration, the AUKUS Pact. Although, the main objective of the pact is to contain Chinese strategic manoeuvring in the Indo-Pacific, Russia is growing concerned about the intent of the AUKUS members vis-a-vis Moscow, and the possible implications for its security in the Far East and the Arctic.[17] The sceptics of Russia's capacity to be a major military-strategic influencer should be asking themselves why part of China's immediate reaction to the creation of AUKUS was an attempt to bring

13 The possibility of such activity was noted in the article. Muraviev, 'Strategic reality check', p 36.

14 Muraviev, 'Strategic reality check', p 32.

15 Aleksandr Aleksandrov, 'Na Puti k Tesnomu Vazaimodeistviu' [On road to close interaction], *Krasnaya Zvezda*, 13 August 2021, p 6.

16 Make Yeo, 'Chinese-Russian task force sails around Japan', *Defense News*, 23 October 2021. https://www.defensenews.com/global/asia-pacific/2021/10/22/chinese-russian-task-force-sails-around-japan/

17 Alexey D Muraviev, 'After AUKUS, Russia sees a potential threat – and an opportunity to market its own submarines', *The Conversation*, 23 September 2021. https://theconversation.com/after-aukus-russia-sees-a-potential-threat-and-an-opportunity-to-market-its-own-submarines-168374

the Russia power factor into the equation?[18] Why would they do that if Russia, by default, is China's junior or inferior partner?

The possibility to engage in a coordinated response to the new pact – which brings together the United Kingdom and the US, two nuclear-armed states, plus Australia – may become that catalyst 'push factor', which I referred to in my third scenario (a formal Russia–China alliance).[19] Perhaps, the first joint naval patrol carried out in western Pacific could be viewed as a form of such coordinated response.

Finally, I would like to note the following: a constructive debate is essential in defence and strategic studies. Scholarly and professional contributions to the ongoing national and international debate on matters of strategic significance, also through expressions of different views and opinions, offer end users a range of options to consider. But these deliberations, including critiques, should be evidence based, evidence driven and evidence supported. Also, these deliberations have to be accurate.

Intelligence and academic products in the field of national security and defence are supposed to be effective and user-friendly guiding tools, assisting their end users with better situational awareness as well as more effective strategy and policy formulation.

A debate that triggers a critique with no real evidence-based counternarrative offers little in terms of being constructive or practical. 'Verify first, then trust' should really be the right order in defence and strategic analysis. So is 'study [military] hardware'. Even proverbs could inspire that.

18 Yang Sheng, 'Nuke sub deal could make Australia 'potential war target'', *Global Times*, 16 September 2021, 04:01pm. https://www.globaltimes.cn/page/202109/1234460.shtml

19 Muraviev, 'Strategic reality check', p 44.

# Australian Journal of Defence and Strategic Studies

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