



**Australian Army
Research Centre**

Strategic Assessment

Quarter 4, 2020

Serving our Nation



**Australian Army
Research Centre**

Strategic Assessment Quarter 4, 2020

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Executive Summary

- The impacts of the COVID-19 pandemic are seemingly stabilising, with global economies, including Australia's, on the road to recovery.
- The 'securitisation' of diversifying and expanding threats 'in the national interest' might counterintuitively inhibit the development of the resilience needed from across all of Australia's elements of national power.
- The Quarter 3 Strategic Assessment concludes that Army will face a planning challenge of 'building back better' via an expanding scope of resilience considerations and an expanding scope of partnership requirements.

Introduction

The Chief of Army recently updated guidance for Army's contribution to Defence strategy. This guidance notes that 'people, politics and a pandemic' are amplifying and accelerating the impact of advancing technology and tensions between states and other groups.¹ This year, 2020, has been a trying one. The Quarter 2 (Q2) and Quarter 3 (Q3) Australian Army Research Centre Strategic Assessments highlighted a convergence of issues and their impact upon the Army, if not the Australian Defence Force (ADF), Defence and even the nation more broadly. This convergence has resulted in greater uncertainty, amplifying the scale of risks that Army's commanders and staff at all levels must consider when planning for the future. The Army's decision-making milieu is, however, instructive of the uncertainty that all Australians now face. The Q4 Strategic Assessment aspires to summarise this uncertainty by reviewing the events of 2020.

In the Q3 Strategic Assessment, we noted the outcomes of the Lowy Institute Poll, which recorded that only 50% of Australians felt safe.² A conclusion that society under siege is understandable for a society that has now lost 907 citizens to the COVID-19 pandemic³ and had 33 deaths directly attributable and an estimated 445 deaths indirectly attributable to the 2019–2020 bushfires.⁴ A collective toll of 1,385 people does not include society's loss due to disaster-induced suicide over the past 12 months.⁵ These numbers are together greater than Australia's loss through military casualties since World War II.⁶ A perception of a society at war has further basis in that political science defines wars as conflicts involving over 1,000 battle deaths per year.⁷ Political leadership has exacerbated this perception, using 'wartime rhetoric ... [involving] the glorification of emergency workers as "heroes," [and] the framing of general citizens as "warriors"'.⁸



The Royal Commission into National Natural Disaster Arrangements identifies a society that will face further trials and therefore must move past preparing for natural disasters to being capable to 'build back better'.⁹ The ADF has a role in this but is not, and must not become, the primary mechanism of response to such disasters. Australia is not alone in its experiences with natural disasters this year. The COVID-19 pandemic has resulted in over 1.4 million deaths globally at the time of writing; wildfires in the United States during 2020 have destroyed over 2 million acres in California and a number of other states; and surging riots and protests seemingly occur daily around the world. Local issues can become international crises, requiring partner nations to work with one another.

Addressing collective security issues at an international level has been challenging as domestic politics around the world create the conditions for insularity. Deglobalisation might have begun with the 2008 Global Financial Crisis, but is being exacerbated as a consequence of the pandemic as health crises force political leaders to prioritise national efforts inward. Deglobalisation will partially improve resilience as local manufacturing removes vulnerabilities in global supply chains, improves responsiveness to consumer requirements, and opens the potential for rapid change like 'working on cars one month and washing machines the next'¹⁰—or distilling gin one week and hand sanitiser the next.

The Q4 Strategic Assessment continues the analysis of the trends introduced in the Q2 Strategic Assessment, balancing jurisdiction and capability, while expanding upon the key theme of the Q3 Strategic Assessment, resilience. It finds that 'securitisation' of diversifying and expanding threats 'in the national interest' might counterintuitively inhibit the development of the resilience needed from across all of Australia's elements of national power.

The Pandemic

The global economic impacts of the pandemic continue as global deaths pass 1.4million people. These statistics notably include over 232,000 in the US, 48,000 in the United Kingdom and 124,000 in India.¹¹ The economic consequences of national lockdowns have seen unemployment surge from 5.54% in March 2020 to 7.27% in September 2020 in OECD countries. Of note is that peak unemployment was reached in April/May 2020 at approximately 8.7%. The stabilising trend is seemingly replicated in the US, where peak unemployment of 14.70% in April 2020 rapidly decreased to 7.9% in September 2020 (although this still represents almost double the pre-pandemic rate of approximately 3.5%).¹² These trends suggest a steady road to recovery.

The Q3 Strategic Assessment noted that the OECD predicted Australia's GDP could fall by 5% in 2020. This figure was influenced by predictions that saw the unemployment rate peaking at 9.25% by December 2020. In September the OECD recorded Australia's unemployment rate at 6.94%, seemingly stabilising from a high of 7.48% in July.¹³ Nonetheless, the Australian GDP contracted by 6.3% from June 2019 to June 2020, suggesting the calendar year contraction of 5% will be generally accurate. These figures show the Australian economy is proving responsive to government intervention or inherent resilience, but the long-term consequences of these responses are not well understood.

The Q2 Strategic Assessment outlined the likelihood that the economic consequences of the COVID-19 pandemic would impact the fulfilment of Defence capability goals. This was prior to the release of the Defence Strategic Update (DSU), which, as outlined in the Q3 Strategic Assessment, reinforced the Defence budget as a consequence of the broad range of strategic responsibilities given to Defence and the ADF.¹⁴ Nonetheless, it is important that the Army is productive and makes the best use of the resources available to achieve the tasks set for it by the Australian Government. Prioritisation of resources and activities may be the cost of assuring the Army's resilience and capacity to respond to emergent strategic needs. The economy is still recovering, and little fiscal capacity exists to absorb shocks over the 2020–2021 cyclone and bushfire season.

There is opportunity for the Army to progress productivity reforms in the wake of the seemingly unique workplace practices required this year. It can learn from the broader Australian community. Australia has weathered the pandemic well; indeed, there are indications Australian businesses have adapted to the digital economy in ways that make them more efficient and resilient. 'Australian businesses implemented as much change in some technologies over the past year as they had over the past 10 years.'¹⁵ Importantly, productivity performance was stronger when digital adaptation was matched with 'new systems and workplace practices to make the most of new working arrangements'.¹⁶ The implication is that technology is not enough; people need to be empowered through new arrangements for their new working environment.

The difficulties of adjusting to a different economic paradigm are not unique to Australia. In the context of the US economic slowdown, Lt Gen. Barno (ret.) and Nora Bensahel warn of a coming cultural challenge to the US Army as a result of shrinking budgets and tensions pertaining to major power competition.¹⁷ This pressure is mitigated, however, by the US Army's Project Convergence¹⁸ and the Strategic Capabilities Office,¹⁹ both of which are driving innovative concepts within the US military. Emulating such innovation might prove to be a prescient consideration for the Australian Army.



Civil–Military Relations and Lessons from the Pandemic

Army must be attuned to a disquiet that will exist in civil–military relations as a tension emerges between Defence resourcing and economic pressures. On one hand, as Marcus Hellyer from the Australian Strategic Policy Institute notes:

The DSU states that we can't match major-power adversaries and need to develop capabilities to deter them through strike, cyber, and area-denial systems. This suggests a growing recognition of the need for asymmetric operational concepts and capabilities, yet the force is still largely being built around traditional, conventional capabilities such as expensive, multi-role, manned platforms of the kind Australia has relied upon to overmatch potential adversaries. Defence is also investing in an increasingly heavy conventional land force.²⁰

For the Australian citizen, these acquisitions present limited logic as responses to the daily threats they face. Little connects the majority of these acquisitions to preparations for a second wave of the pandemic or, indeed, for the next pandemic or bushfire. Little points towards Australia's ability to enhance human security regionally or internationally in ways that mitigate the civil wars driving refugees in their millions.²¹ The ADF, it has been argued, could be employed as a 'dual-use' force and support disaster relief responses to justify the resources given to it.²² Army must therefore demonstrate the quick wins already implemented, such as the invigoration of 13 Brigade in Western Australia and pivoting the focus of the 2nd Division towards domestic resilience. Army should also consider further 'announceable' quick wins that demonstrably help Army to be 'future ready' to meet a full range of circumstances.²³

Politics

The COVID-19 pandemic has accelerated the widening of fissures in national unity. As Madeleine Albright recognised, 'in 2017, *The Economist's* Democracy Index showed a decline in democratic health in seventy countries, using such criteria as respect for due process, religious liberty, and the space given to civil society'.²⁴ Democracy itself has been challenged in a manner that prompted Mark Galeotti to claim, 'The West is at war'.²⁵

The Globally Increasing Trend of Authoritarianism

*In the name of managing the disease, governments are already implementing surveillance and tracking systems that could result in permanent losses of privacy ... they can be used to spy on private citizens and expand social control.*²⁶

In every crisis, opportunity presents, and the COVID-19 pandemic is not immune. The establishment of social controls over a population improves the ability for autocratic regimes to repress popular protest. This dystopian vision of authoritarian government is now exportable through surveillance systems augmented with artificial intelligence (AI). This exacerbates the pressure upon democracy worldwide.

Authoritarian governance is simultaneously empowered through filtering information it makes available to the population and its employment of disinformation. Within a decade, online disinformation has now been normalised.²⁷ Within five years, the proliferation of election interference has manifested worldwide.²⁸ Accelerating change is empowering autocracies in a manner inimical to Australia's interests as a democratic nation. The security implications are well recognised by Australia's Minister for Foreign Affairs, Senator Payne:

*The disinformation we have seen contributes to a climate of fear and division when, at a time like this, what we need is cooperation and understanding ... Australia will resist and counter efforts of disinformation. We will do so through facts and transparency, underpinned by liberal, democratic values that we will continue to promote at home and abroad.*²⁹

In a 'war' against disinformation, citizens are increasingly frontline actors.³⁰ They are both an actor for generating national power and a target of efforts to undermine it. But we are not alone. AI may help us to identify, target and discredit an information warfare campaign, in a nuanced form of manned-unmanned teaming.³¹

Polarisation through Nationalism Undermines Collective Security Approaches

The rise of the radical right is both a symptom of an autocratic rise and an indirect consequence.³² Polarisation through extreme right-wing (XRW) groups may be a temporary bubble, likely to abate with increasing deglobalisation.³³ Nonetheless, the threat posed by XRW groups is being taken seriously by ASIO.³⁴

Domestic polarisation thus results as anti-establishment and anti-immigration narratives manifest as an XRW agenda, both domestically and internationally. Domestically, Army's counter-terrorism capabilities thus face expanding threat streams. Internationally, the rise of the radical right may serve to exacerbate youth bulge grievances that heighten the sense of relative deprivation within a segment of society.

Polarising politics also presents a threat to Australia's support for international alliance frameworks. When nations are overcome by domestic turbulence, possibly exacerbated through climate change induced disasters, their capacity and willingness to support their allies (or the United Nations) may be limited. For a middle power such as Australia, these dynamics threaten its advocacy for a global rules-based order.

So What?

The strongest state fragility indicator for the likelihood of civil violence is factionalised democracy.³⁵ Factionalised democracy features polarising politics and disenfranchised segments of society. Faced with daily inflammatory disinformation, disenfranchised populations can become insular, vulnerable to XRW narratives or to conspiracy theories. These dynamics pose a threat to Australian democracy and to its democratic values advocated worldwide. Army should be attuned to understanding how we can contribute to protecting against such a threat. 'In the long term, media literacy education offers the best hope of strengthening the immune system of democratic media environments.'³⁶

People

The intellectual component to military power is drawn from our people. Army is likely to need to think differently as it contemplates geopolitics, preparedness and concepts, as Australia's relative economic and military advantages decrease in size. Unprecedented situations that are likely to arise should not surprise us when trends clearly point to their emergence. Key trends that illuminate the contours of the future of war are accelerating—not emerging. Army's challenge is not one of problem identification but one of response. A response that develops asymmetric operational concepts and capabilities demands investment in the intellectual component of power, through people who can think differently, forecast imaginatively and innovate creatively.

Warfare is changing

Warfare is continually changing as adversaries look to take advantage in striking wars. Innovative operational concepts have recently been displayed in the Nagorno-Karabakh involving pervasive surveillance paired with long-range strike and incremental ground action.³⁷ These concepts have also been employed by non-state actors, exemplified by Islamic State and Hezbollah in the Middle East. Collectively these trends demonstrate that tactical concepts thought to be aligned to the 2030 timeframe have accelerated into employment today.³⁸ For example, Al Palazzo's argument of a no-man's-land of '2000 kilometres of death' was seemingly realised with Houthi and Kata'ib Hezbollah strikes against Saudi Arabian oil infrastructure.³⁹ Furthermore, the democratisation of space (and the proliferation of mobile smartphones) will mean that militaries must now expect to be under continuous surveillance.⁴⁰





The acceleration of change will lead to an erosion of traditional mindsets of preparedness. T.X. Hammes draws attention to the fact that the Joint Strike Fighter production line is slated to build approximately 17 jets per month at full capacity in 2020.⁴¹ The Future Frigate program will build approximately one ship per year.⁴² The capacity to rapidly mobilise ADF capability is somewhat limited by this industrial capacity—particularly if recovering from the loss of a number of these platforms and particularly if multiple countries are mobilising. Such limitations might demand an expanding breadth of capability requirements which could be generated through our limited industrial capability, possibly in the form of small unmanned systems, missile systems and the repurposing of existing equipment.⁴³

Conclusion

In 1999, Dr Jim Rolfe wrote that ‘the major lesson from the Second World War for New Zealand was [that] it could not defend itself by itself. Security was to be found through working with like-minded powers with similar values and similar world-views.’⁴⁴ These words are still valid for New Zealand and are just as applicable for Australia and our institutions. Thus, the national interest continues to prioritise building collective concepts, instruments and agreements.⁴⁵ In this context, Army’s mission that ‘enables the joint force’ serves to shift our orientation to collective action, with other services, departments and nations—a whole of society effort.

The Royal Commission into National Natural Disaster Arrangements recommends becoming a society that is able to ‘build back better’.⁴⁶ The Royal Commission notes that the ADF is not and must not become the primary mechanism of response to such challenges. Nonetheless, Army must be attuned to those threats that society regards as being in the national interest. Army’s response must not be a victim of its own demonstrated success. Our response to future challenges must be measured, with due consideration of broad societal impacts.⁴⁷ As Anne-Marie Slaughter cautions:

*Instead of widening our definition of national security, we need to start narrowing it. That means distinguishing national security from global security ... Traditional military security is ultimately focused on winning. But many global threats primarily call for greater resilience—that is, less winning than withstanding.*⁴⁸

A sustained effort for humanitarian and disaster relief operations, the 'Grey Zone' and combat operations—and, indeed, 'hybrid warfare' that is inclusive of all of these demands—requires new ways of thinking about preparedness. Understanding how economic structural challenges limit a 'future ready' Army requires engagement with society to mitigate such vulnerabilities or to 'design in' the flexibility to support future mobilisation requirements. The idea of 'scalability', creating an Army better able to expand and contract discrete components as threats are withstood, must take root. Developing the path to becoming 'anti-fragile' is the lesson from 2020, and its consequences should influence Army (and ADF) force structure, acquisition and force posture decisions.

In examining the convergence of technologies that empowers the 'small, smart and cheap weapons' revolution, Hammes notes that 'these weapons will dramatically increase the ability of small states and even nonstate actors to challenge major power'.⁴⁹ As a middle power, this revolution should be of particular interest for an Australia that seeks to 'punch above its weight'. It will also be a threat.

These factors demand an expanding scope of resilience considerations and an expanding scope of partnership requirements. Hew Strachan and Ruth Harris conclude this assessment by appropriately highlighting that:

The effect of ignoring domestic resilience is to undermine deterrence. As with resilience, societal ownership strengthens deterrence. If the public don't understand what they are interested in defending or what they will fight for, then the enemy will assume that the democratic state will pursue every policy option short of war, but not war itself.⁵⁰

Endnotes

- 1 Burr, Lt-Gen Rick, 'Ready Now, Future Ready', *Army News*, 1 October 2020; Chief of Army, *Army's Contribution to Defence Strategy*, Edition Two, 2020, available at: <https://www.army.gov.au/our-work/army-motion/armys-contribution-defence-strategy-edition-two>.
- 2 Kassam, Natasha, *Lowy Institute Poll 2020: Understanding Australian Attitudes to the World* (Sydney: Lowy Institute, June 2020). This finding was validated by The Australia Institute, whose polling found that 'regarding perceived threats for people living in Australia, in their top three, 49% had natural disasters, 47% had economic collapse, 44% had climate change and 42% and 40% respectively had chronic disease and infectious disease. Terrorism came in sixth at 23% who included this in their top three and only 9% did so for the risk of war. More tellingly, only 2% identified war as their top threat, the same number as those who responded that there were no threats.' The Australia Institute, *Polling—Threats and Security, June 2020* (Canberra: The Australia Institute, 2020), p. 3, available at: www.tai.org.au.
- 3 World Health Organization, 'WHO coronavirus disease (COVID-19) dashboard', at: <https://covid19.who.int/>.
- 4 Wahlquist, Calla, 'Australia's summer bushfire smoke killed 445 and put thousands in hospital, inquiry hears', *The Guardian*, 26 May 2020, available at: <https://www.theguardian.com/australia-news/2020/may/26/australias-summer-bushfire-smoke-killed-445-and-put-thousands-in-hospital-inquiry-hears>.
- 5 The Australian Institute of Health and Welfare reports rates of suicide in Australia cautiously, and therefore it will take time before the 2020 statistics are available (AIHW, 'Suicide and intentional self-harm', at: <https://www.aihw.gov.au/reports/australias-health/suicide-and-intentional-self-harm>). In 2018, 3,046 deaths by suicide were registered in Australia. Modelling has, however, forecast an extra 750 to 1,500 suicides per year over the period 2020–2025 (see Nicole MacKee, 'Suicide deaths forecast for 13.7% increase', *InSight*, Iss. 30 (3 August 2020), available at: <https://insightplus.mja.com.au/2020/30/suicide-deaths-forecast-for-13-7-increase/>).
- 6 Australian War Memorial, 'Deaths as a result of service with Australian units', at: https://www.awm.gov.au/articles/encyclopedia/war_casualties.
- 7 Reid Sarkees, Meredith, *The COW Typology of War: Defining and Categorizing Wars*, The Correlates of War Project, at: www.correlatesofwar.org.
- 8 Hewitt, Liane, 'This is what a war economy would actually look like', *Foreign Policy*, 12 May 2020. This argument is amplified by Amy Haddad, 'Metaphorical militarisation: Covid-19 and the language of war', *The Strategist*, Australian Strategic Policy Institute, 13 May 2020, available at: <https://www.aspistrategist.org.au/metaphorical-militarisation-covid-19-and-the-language-of-war/>.

- 9 Royal Commission into National Natural Disaster Arrangements, *Report of the Royal Commission into National Natural Disaster Arrangements*, available at: <https://naturaldisaster.royalcommission.gov.au/>.
- 10 Hammes, T.X., *Deglobalization and International Security* (Amherst, NY: Cambria Press, 2019), p. 82. Hammes notes that 'Robots are eliminating the cost of labour advantage. Proximity and responsiveness to the market, higher skills of the labour that is needed, fair legal systems, strong and transparent financial markets are increasingly driving decisions on where to produce products or provide services ... 3D printing is revolutionising manufacturing in many industries. The ability to change each product by changing the software means the era of mass customisation and local production is on us' (pp. 38–43).
- 11 World Health Organization, 'Coronavirus disease (COVID-19) pandemic', at: <https://www.who.int/>.
- 12 OECD, 'Unemployment rate', at: <https://data.oecd.org/unemp/unemployment-rate.htm>.
- 13 Ibid.
- 14 Department of Defence, *2020 Defence Strategic Update* (Commonwealth of Australia, 2020), available at: <https://www.defence.gov.au/strategicupdate-2020/>.
- 15 AlphaBeta Australia, *Australia's Digital Resilience: How Technology Strengthened Australian Business during COVID and Beyond* (2020), available at: <https://alphabeta.com/our-research/australias-digital-resilience/>.
- 16 Ibid.
- 17 Barno, David, and Bensahel, Nora, 'The headwinds looming for the U.S. Army', *War on the Rocks*, 27 October 2020, available at: <https://warontherocks.com/2020/10/the-headwinds-looming-for-the-u-s-army/>.
- 18 Army Futures Command, 'Project Convergence', at: <https://armyfuturescommand.com/convergence/>.
- 19 Mehta, Aaron, 'Meet the new head of the Pentagon's strategic tech office', *Defense News*, 2 August 2018, available at: <https://www.defensenews.com/pentagon/2018/08/02/meet-the-new-head-of-the-pentagons-strategic-tech-office/>.
- 20 Hellyer, Marcus, *The Cost of Defence 2020–2021 Part 1: ASPI 2020 Defence Strategic Update Brief* (Australian Strategic Policy Institute, August 2020), p. 8.
- 21 The United Nations High Commissioner for Refugees (UNHCR) estimates a total of almost 80 million forcibly displaced persons in 2019 (UNHCR, 'Figures at a glance', at: <https://www.unhcr.org/en-au/figures-at-a-glance.html>). The Q3 Strategic Assessment highlighted how human security and fragile state variables contribute to the likelihood of conflict.
- 22 Harris Rimmer, Susan, 'Should the ADF take a bigger role in bushfires and other domestic emergencies? The answer isn't so easy', *The Conversation*, 17 November 2020, available at: <https://theconversation.com/should-the-adf-take-a-bigger-role-in-bushfires-and-other-domestic-emergencies-the-answer-isnt-so-easy-147188>.
- 23 For example, the articulated expansion of engineer capacity could incorporate experimentation with concepts such as robotic bricklaying (see FBR, 'Hadrian-X', at: <https://www.fbr.com.au/view/hadrian-x>) that would further Army understanding of manned-unmanned teaming concepts and requirements and might inform broader societal implementation of such technologies.
- 24 Albright, Madeleine, *Fascism: A Warning* (London: William Collins, 2018), p. 112.
- 25 Galeotti, Mark, *Russian Political War: Moving Beyond the Hybrid* (New York, NY: Routledge Focus, 2009), p. 1.
- 26 Diamond, Larry, 'Democracy versus the pandemic: the coronavirus is emboldening autocrats the world over', *Foreign Affairs*, 13 June 2020.

- 27 The rise of the QAnon movement from a 'fringe conspiracy theory' into what is argued to be 'the most pressing threat to trust in government, public institutions and democratic processes' is a signal warning. See Melanie Smith, *House Intelligence Committee: Hearing on Misinformation and Conspiracy Theories Online—Statement of Record: Melanie Smith, Graphika*, October 2020, available at: https://public-assets.graphika.com/reports/house_intelligence_committee_statement_of_record_melanie_smith_graphika.pdf.
- 28 See for example Andy Carvin, *Operation Carthage: How a Tunisian Company Conducted Influence Operations in African Presidential Elections*, Atlantic Council Digital Forensic Research Lab, 5 June 2020, available at: <https://www.atlanticcouncil.org/in-depth-research-reports/operation-carthage-how-a-tunisian-company-conducted-influence-operations-in-african-presidential-elections/>; Hannah Smith, *Online Influence and Hostile Narratives in Eastern Asia* (Riga: NATO Strategic Communications Centre of Excellence, April 2020), available at: <https://stratcomcoe.org/online-influence-and-hostile-narratives-eastern-asia>; and DFRLab, *Operation 'Secondary Infektion': A Suspected Russian Intelligence Operation Targeting Europe and the United States*, Atlantic Council Digital Forensic Research Lab, 22 June 2019, at: <https://www.atlanticcouncil.org/in-depth-research-reports/report/operation-secondary-infektion/>.
- 29 Payne, Senator the Hon. Marise, 'Australia and the world in the time of COVID-19', speech, National Security College, Australian National University, 16 June 2020, available at: <https://www.foreignminister.gov.au/minister/marise-payne/speech/australia-and-world-time-covid-19>.
- 30 Mansted, Katherine, *Activating People Power to Counter Foreign Interference and Coercion*, National Security College Policy Options Paper No. 13, December 2019.
- 31 Knight, Will, 'The AI company helping the Pentagon assess disinfo campaigns', *Wired*, 20 October 2020, available at: <https://www.wired.com/story/ai-helping-pentagon-assess-disinfo-campaigns/>.
- 32 Sean McFate argues: 'When Russia wants to destabilise Europe, it does not threaten military action, as the USSR did. Instead, it bombs Syria. This tactic drove tens of thousands of refugees into Europe and exacerbated the migrant crisis, instigating Brexit and stoking antiestablishment politics across the continent.' Sean McFate, *The New Rules of War: Victory in the Age of Durable Disorder* (New York, NY: HarperCollins, 2019), pp. 104–105.
- 33 T.X. Hammes notes that 'one of the key drivers of the 2016 through the 2018 elections in the United States and Europe was the anger of those voters who perceive that globalisation has left them behind' (Hammes, *Deglobalization and International Security*, p. 20). Indeed, the result of the 2020 US election suggests social rejection of a rising right-wing narrative.
- 34 Greene, Andrew, 'Right-wing extremists using Islamic State tactics to recruit, ASIO warns, amid spike in surveillance', ABC News, 22 September 2020, available at: <https://www.abc.net.au/news/2020-09-22/right-wing-extremists-asio-islamic-state-tactics/12690002>.
- 35 In predicting the likelihood of conflict, Goldstone et al. found that 'the most striking result ... is the identification of partial democracies with factionalism as an exceptionally unstable type of regime. The relative odds of instability for such regimes were over 30 times greater than for full autocracies, other things being equal.' Jack Goldstone, Robert Bates, David Epstein, Ted Gurr, Michael Lustik, Monty Marshall, Jay Ulfelder and Mark Woodward, 'A global model for forecasting political instability', *American Journal of Political Science*, 54, No. 1 (January 2010), p. 197.
- 36 Lucas, Edward, *Firming up Democracy's Soft Underbelly: Authoritarian Influence and Media Vulnerability*, Sharp Power and Democratic Resilience Series (National Endowment for Democracy, February 2020), p. iii.

- 37 Bateman, Robert, 'No, drones haven't made tanks obsolete', *Foreign Policy*, 15 October 2020, available at: <https://foreignpolicy.com/2020/10/15/drones-tanks-obsolete-nagorno-karabakh-azerbaijan-armenia/>; David Hambling, 'The "magic bullet" drones behind Azerbaijan's victory over Armenia', *Forbes*, 10 November 2020, available at: <https://www.forbes.com/sites/davidhambling/2020/11/10/the-magic-bullet-drones-behind-azerbaijans-victory-over-armenia/?sh=7cec26535e57>.
- 38 For example, human-machine teaming was demonstrated by Islamic State through the employment of UAVs that guided suicide bombers into weak points in Iraqi formations. See Michael Knights and Alexander Mello, 'Defeat by annihilation: mobility and attrition in the Islamic State's defense of Mosul', *CTC Sentinel*, 10, No. 4, (April 2017).
- 39 Al Palazzo, 'Crossing 2000 kilometres of death', *Land Power Forum*, Australian Army Research Centre, 17 September 2019, available at: <https://researchcentre.army.gov.au/library/land-power-forum/crossing-2000-kilometres-death>.
- 40 'Planet, a private company, images the entire planet daily, and sells those images to businesses. Planet can provide images based on visual or infrared cameras, as well as synthetic-aperture radar. The days of hiding military activity are clearly drawing to a close.' T.X. Hammes, *The Melians' Revenge: How Small, Frontline, European States Can Employ Emerging Technology to Defend Against Russia*, Issue Brief, Atlantic Council, June 2019, p. 7.
- 41 Hammes, *Deglobalization and International Security*; Marcus Weisgerber, 'F-35 production set to quadruple as massive factory retools', *Defense One*, available at: <https://www.defenseone.com/business/2016/05/f-35-production-set-quadruple-massive-factory-retools/128120/>.
- 42 Nigel Pittaway, 'A quiet Hunter—Navy's Future Frigate', *Australian Defence Magazine*, available at: <https://www.australiandefence.com.au/defence/sea/a-quiet-hunter-navy-s-future-frigate>.
- 43 T.X. Hammes provides a number of examples of how a five-ton truck or commercial freighter might be repurposed to combat roles (Hammes, *Deglobalization and International Security*). This theme was also explored by Tyson Sara, 'Filling the hollow middle in Australia's defence industry', *The Strategist*, Australian Strategic Policy Institute, 6 November 2020, available at: <https://www.aspistrategist.org.au/filling-the-hollow-middle-in-australias-defence-industry/>.
- 44 Ball, Rhys, 'The strategic utility of New Zealand Special Forces', *Small Wars & Insurgencies*, 22, Iss. 1 (March 2011), p. 121.
- 45 Importantly, the creation of networks protects against what Robert Gates described as 'overmilitarization'. Robert Gates, 'The overmilitarization of American foreign policy: the United States must recover the full range of its power', *Foreign Affairs*, July/August 2020.
- 46 This concept is not infeasible; as a result of lessons from previous pandemics, South Korea's economy has recorded growth in quarter 3, 2020. See Cynthia Kim, 'South Korea economy returns to growth in third-quarter as stimulus kicks in', *Reuters*, 27 October 2020, available at: <https://www.reuters.com/article/southkorea-economy-gdp/south-korea-economy-returns-to-growth-in-third-quarter-as-stimulus-kicks-in-idUSKBN27C0B1>.
- 47 A recently released RAND report examining US Department of Defense responses to building resilience against climate change recommends that 'planning can ... be fortified through collaboration and coordination between neighbouring entities—governmental, military, and private—that share infrastructure systems, personnel, and natural resources'. Maria McColester, Michelle Miro and Kristin Van Abel, *Building Resilience Together: Military and Local Government Collaboration for Climate Adaptation* (RAND, 2020), available at: https://www.rand.org/pubs/research_reports/RR3014.html.

- 48 Slaughter, Anne-Marie, 'Redefining national security for the post-pandemic world', *The Strategist*, Australian Strategic Policy Institute, 4 June 2020, available at: <https://www.aspistrategist.org.au/redefining-national-security-for-the-post-pandemic-world/>.
- 49 Hammes, *Deglobalization and International Security*, p. xiv. Hammes continues to note that a shift in paradigm is needed: 'M982 Excaliber GPS guided rounds cost about \$70,000 each ... For less than the price of a precision fuze, commercially available autonomous drones already provide greater range than artillery without artillery's large logistics and training tails ... The key is to think of and develop some drones as expendable rounds of ammunition' (p. 174). The concept of 'bringing the detonator' that leverages drones with small charges to target fuel storage, rocket systems and ammunition storage is a similar paradigm shift for the employment of precision weapons.
- 50 Strachan, Hew, and Harris, Ruth, *The Utility of Military Force and Public Understanding in Today's Britain* (Cambridge, UK: RAND Europe, 2020), p. 25.

