A Warning from the Crimea: hybrid warfare and the challenge for the ADF ¹

Captain Nicholas Barber, Australian Army

Introduction

Russia's annexation of Crimea was like a magician sawing a woman in half: mysterious, orchestrated and cunning. President Putin's illusion began on 20 February 2014, after several months of protests threatening the government of then-Ukrainian President Viktor Yanukovych, and culminated in the pro-Kremlin leader fleeing Kiev for Moscow. As opposition protestors seized control of the Ukrainian Parliament and voted for a new direction for Ukraine, Putin led his audience through tales of misinformation, diverting their attention away from the realities of the magic box at the centre of his act.

The audience watched in awe as 'volunteers' from the crowd—referred to by many as 'little green men'—helped the young lady clamber into Putin's magic Crimean box.² Some in the audience began to question if the 'little green men' were indeed Putin's associates—in fact, online commentators observed that they appeared to be elite Russian Special Forces, *Spetsnaz*, with their identifying insignia removed.³ Yet Putin denied he knew the men or had tampered with the Crimean box.

In the darkness of 27 February 2014, the audience observed the 'little green men' saw the Crimean box in two—securing key government infrastructure in Simferopol on one side, and isolating Ukrainian military bases on the other.⁴ Amazingly, the young lady remained alive. As quickly as she was sawn apart, she was soon back together—but oddly, she had replaced her Ukrainian legs for Russian ones.

The audience was shocked. Some believed Putin's magic; some knew all along it was a trick; and some were Putin's cronies paid to lead the applause. In the fragile situation, Ukraine and NATO did not respond militarily to Russia's actions. Weeks later, Putin would acknowledge that he had indeed supported the 'little green men'. Regardless, the illusion was complete, Putin was still in control, and Russia was again the centre of global attention. The stunned audience simply asked—how did he do it?

'Non-linear warfare', 'ambiguous warfare' and 'special war' have all been labels applied to Russia's method of seizing the Crimea and destabilising eastern Ukraine. Another term is 'hybrid warfare', which has been described as a complex blend of conventional and unconventional warfare techniques, combined with firepower, deception, misinformation and cyber attacks.

Like its allies, Australia cannot ignore the challenges posed by hybrid warfare. Indeed, while it is unlikely that Australia will ever be engaged in combat against Russian military forces or their proxy fighters in Ukraine, the success of hybrid warfare may indicate that its application in other parts of the world, including the Asia-Pacific, is not far-fetched.

This article aims to stimulate discussion as to whether Western militaries are appropriately structured to respond to hybrid warfare. It is divided into three components: the threat, the challenge, and Australia's response. Firstly, the article defines the hybrid threat by use of a model that emphasises how hybrid warfare converges regular and irregular warfare methods. In examining the challenge, it contends that hybrid warfare effectively exploits vulnerabilities in Western political and military decision-making. The article concludes that the ADF should invest in its ability to understand complex operating environments and empower subordinates to seize opportunities and build tempo to counter hybrid modes of war.

The threat

Hybrid warfare, like all forms of war, is an instrument of policy and exhibits the characteristics of danger, uncertainty, friction and chance. Indeed, Williamson Murray and Peter Mansoor have already argued that hybrid warfare is 'nothing new'.⁸ Reflecting on the effectiveness of Hezbollah's use of hybrid warfare

against Israel, Frank Hoffman has argued that this blurred character of conflict would severely confront Western conceptions regarding classifications of war, contending that:

[T]he convergence of various types of conflict will present us with a complex puzzle until the necessary adaption occurs intellectually and institutionally.9

Arguably, Hoffman's warning has gone unnoticed—and this is perhaps why the Western response to events in Crimea was so clumsy and deserves examination. Indeed, there are two key reasons why the West cannot ignore Russian hybrid warfare. Firstly, the events in Crimea illustrated how a nuclear-enabled re-emerging superpower chose non-state actors, reinforced by state-based capabilities, to secure physical territory instead of employing traditional conventional warfare techniques. Secondly, the threat of Russian hybrid warfare remains, with Ukrainian military forces struggling against Russian hybrid adversaries in eastern Ukraine at the time of writing.

Phillip Karber has created a useful model of Russian hybrid warfare, which compares levels of warfare intensity with the degree of state responsibility (see Figure 1).

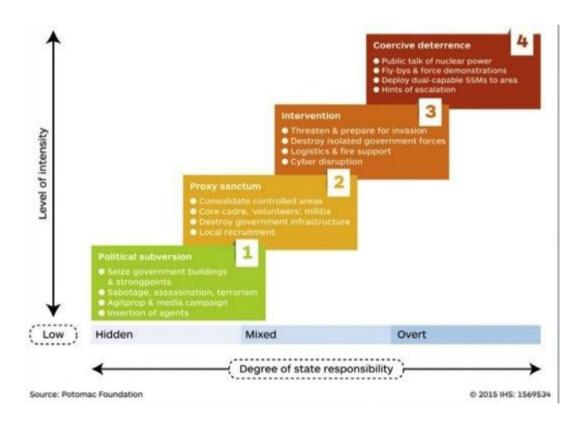


Figure 1: A model of hybrid warfare¹⁰

The best feature of this model is that it highlights the hybrid threat's diverse character—and that there is no enemy hybrid template. However, the model does not illustrate how a belligerent converges regular and irregular warfare techniques to overwhelm their opponent, which is a key factor underlying the success of hybrid warfare. Moreover, Russia's hybrid warfare model in Crimea boasted at least five unique elements of national power: economic pressure; information operations; conventional military posturing; unconventional destabilisation; and political activities, which are now discussed further.

Economic pressure

Underpinning all Russian military action in Ukraine was overwhelming Russian regional economic pressure. Energy dependence on Russian state-owned giants aimed to limit Ukraine's strategic response, as well as compel Europe to exhaust diplomatic options in the first instance.¹¹

Information operations

The principal objective of Russian information operations, which are activities designed to affect the attitude and behaviour of a target audience, was to establish plausible deniability. ¹² Messaging was principally facilitated through state-owned media agencies, such as *Russia Today*, which then cleverly facilitated redistribution of the narrative through social media networks. Russian themes centred on threats to ethnic Russians in Crimea, opposition ideological links to neo-Nazism, and Kiev's broken promises to Yanukovych. ¹³

Russia also used electronic warfare and cyber attacks to isolate the Crimea and disrupt Kiev's immediate response to the situation. For example, unknown forces severed telecommunication lines between Ukraine and the Crimea, while Russia blocked Internet sites and social media accounts linked to Ukrainian opposition groups. Reportedly, cyber attacks were less prevalent than the previous Russian invasions of Estonia and Georgia, although the full extent of cyber activity in Crimea is unknown.

Following the establishment of a credible political alternative, Russia used direct coercion of Ukrainian military forces stationed in Crimea in order to compel their defection/surrender/withdraw.

Conventional military posturing

In late February 2014, Putin ordered snap combat readiness drills of military forces in the western and central Russian military districts, involving over 150,000 soldiers. The exercises provided Russia with concealment for any additional military movements to the Crimea, as well as communicating a significant diplomatic message to Kiev that the Russian military was ready to respond to any Ukrainian actions in the Crimea.

Unconventional destabilisation

The centrepiece of Russian intervention in Crimea was the presence of the 'little green men'. While Russia consistently claimed that pro-Russian militants in Crimea were 'self-defense' squads, initial reporting indicated that *Spetsnaz* operatives had entered Crimea.¹⁷ These well-trained and well-equipped operatives likely raised and led local militia to seize government facilities. Regular Russian military forces also supported destabilisation activities. In particular, the employment of armoured vehicles to deter media and international observers was denied by Russian officials, who claimed that armoured vehicles were permitted as part of the military force supporting the Black Sea Fleet.¹⁸

Political activities

Establishing a political alternative was the decisive point, when Russia's focus could switch from achieving plausible deniability to providing full political support. The process commenced with the expedited issue of Russian passports to ethnic Russians in order to establish the pretext that Russia was defending the rights of its citizens abroad. Subsequently, pro-Russian militants actively supported Sergey Aksynov in assuming leadership in the Crimean Parliament, in a clear display of deliberate and aggressive political intervention, even though Aksynov's 'Russian Unity' party had only received four per cent of the vote in the previous election.¹⁹

However, hybrid warfare is not simply a collection of these five elements of national power. Janis Berzins has highlighted that the key attributes are planned strategically and converge across the spectrum of conflict while balancing two important considerations.²⁰ Firstly, a significant action that is not sequenced correctly can undermine the purpose of adopting a hybrid approach. Secondly, effects are best distributed widely in order to aid the appearance of a 'bottom-up' revolution and overwhelm any Western ability to accurately identify and counter the source.²¹

A conceptual model of the hybrid threat is at Figure 2. The model compares the convergence of the five elements of national power across six phases. Importantly, it is only in phase 6 that Russia's political control and influence became overt. The model highlights Putin's ability to balance the considerations mentioned above. Firstly, Putin deliberately employed broad phasing to develop plausible deniability and maintain positive control of the overall campaign. This ensured that Moscow could appropriately layer the cumulative effects of the hybrid approach.

Secondly, Putin decentralised his effects to create multiple dilemmas and overwhelm his adversary in phases 5 and 6. He likely achieved this through empowering state-directed actors to facilitate his intent through multiple subsidiaries which, in turn, replicated the effects through their associates. This approach meant that Putin's intent would not be entirely clear nor his messaging always consistent—but arguably this is not a requirement in hybrid models.

The hybrid approach aims to promote ambiguity. Western political and military systems barely identified and responded to the first threat (such as military posturing in phase 3), when their confusion was compounded by subsequent considerations (unconventional destabilisation in phase 4). Overall, the confusion added time—through which Russia achieved political legitimacy and established political control (phases 5 and 6).

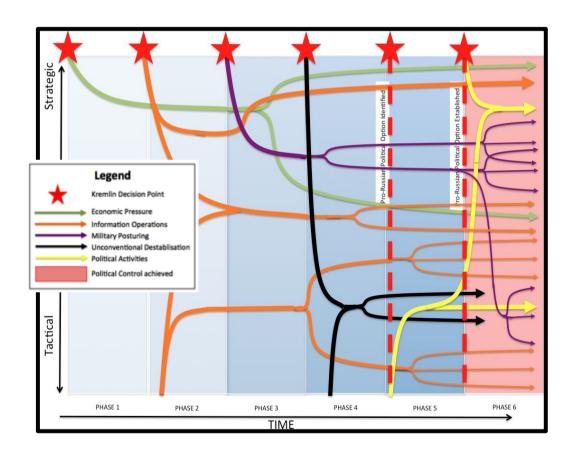


Figure 2: Russia's hybrid warfare model (as developed by the author)

It should be noted that the hybrid model was less effective in eastern Ukraine for a number of reasons. Perhaps most importantly, the rapid response of the Ukrainian military during phases 4 and 5 degraded the opportunity for political legitimacy to be easily established. Nevertheless, the Crimea is now in Russian hands, and one must ask why hybrid warfare was so effective.

The challenge

Over the past decade, Russian planners have cleverly developed an approach to exploit the vulnerabilities in current Western political and military systems. In hindsight, the remarks of Russia's Chief of the General Staff, Army General Valery Gerasimov, should have enlightened the world to Russia's impending approach to warfare, when he argued in February 2013 that:

The very 'rules of war' have changed. The role of non-military means of achieving political and strategic goals has grown, and, in many cases, they have exceeded the power of force of weapons in their effectiveness.... All this is supplemented by military means of a concealed character, including carrying out actions of informational conflict and the actions of special-operations forces.²²

Russia's political aim in Crimea was simple: achieve political control without provoking an overwhelming military response from NATO.

Politically, Russian hybrid warfare was effective because it provided NATO with unclear options—a situation which allowed Western politicians to err on the side of diplomacy. Like the invasion of Georgia in 2008, Russia specifically targeted Ukraine because it assessed that NATO would not be politically and socially compelled to act.²³ Equally, Russia's denial of involvement in Crimea made it difficult to reach an international consensus regarding a response. While some stakeholders desired a full-scale response, others remained concerned about escalating the situation.

It was Western debate and disagreement that allowed Russia to install a political alternative and gather political legitimacy.²⁴ Russia achieved this effect through a focus on two temporal considerations: 'timing' and 'time'. 'Timing' simply refers to the 'when' for the hybrid actor. Western political and military decision makers were arguably preoccupied when Russian hybrid forces seized the Crimea. Political and public interest was focused on other priorities, including counter-terrorism, the military withdrawal from Afghanistan, unrest in Syria, and rising tensions in the South China Sea. Preoccupation with these issues allowed Russia to achieve strategic and operational surprise, which only enhanced intervention reluctance. Western debate ensued and established the conditions for the second consideration of 'time' to become decisive.

Western disagreement regarding intervention in the Crimea took time, and allowed Russia to consolidate political control. In fact, in the current global media environment, where politico-strategic decisions are scrutinised in an almost real-time manner, time becomes the most valuable resource for the hybrid belligerent.²⁵ A Western society with real-time media access demanded real-time diplomatic solutions, which could not be achieved as Western debate sought to understand hybrid chaos. As time progressed, a pro-Russian political alternative was established and overt Russian support made it even more unlikely that the Western political community would respond. Western societies observed this change, and accepted the new *status quo*. This relationship is conceptually evident in Figure 3.

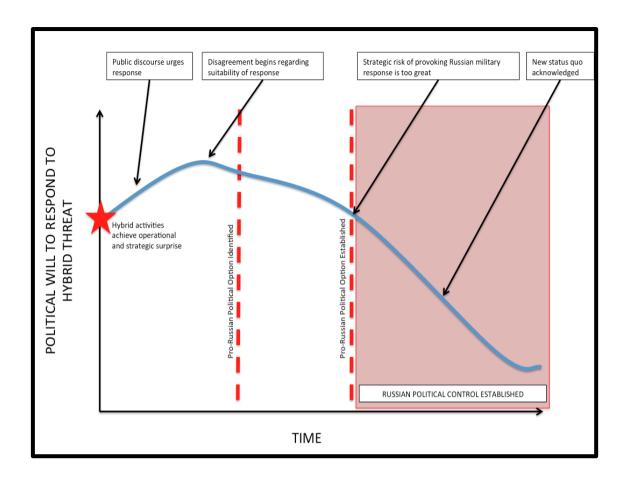


Figure 3: The effect of hybrid warfare on political will to respond (as developed by the author)

In the event that political consensus is reached, the hybrid model is also designed to disrupt the military response. However, hybrid warfare does not boast of its ability to destroy military units—an acknowledged consequence of adopting irregular warfare is the degraded ability to mass combat power against a regular counterpart.²⁶ Instead, hybrid warfare exploits the unresponsiveness of Western military decision-making to non-traditional methods of war in two areas: identifying and understanding the threat; and deciding and executing a plan.²⁷

As articulated by David Alberts and Richard Hayes, 'understanding' is the basis for sound decision-making, as the situation informs the relevance, completeness, accuracy, timeliness and confidence of one's choice. Hybrid threats are difficult to identify and understand. Hybrid threats do not declare war, answer to a clear chain-of-command or wear identifying insignia. Despite recent Western military experience in identifying threats in complex environments, a hybrid threat can have the unique advantage of state-based capabilities to aid its concealment. Distinguishing a threat will be difficult for a soldier confronted with the combined effect of numerous unconventional stakeholders, extensive misinformation and state deniability.

Furthermore, if an element of hybrid warfare is identified, making sense of this entity or action in the wider context is an even greater challenge. Russia's decentralisation of effects was central to this problem. As subsidiaries were empowered to perpetuate Putin's intent, non-uniform threat characteristics became evident across the battlespace. This heterogeneity made it difficult to recognise whether the threat was part of a larger, coordinated plan or simply an anomaly.

Additionally, hybrid warfare employs decentralised activities to overwhelm Western military hierarchical structures. Hierarchical military structures are designed to facilitate control and discipline of subordinate units, and have not evolved significantly from the professionalisation of militaries in the 19th century. A

by-product of this structure is that hierarchical systems are generally slower to respond to new circumstances—as each hierarchical level considers the situation and applies additional control measures particular to their subordinates. In comparison, the hybrid model uses unconventional, decentralised systems that are more difficult to control but can act and react significantly faster than their hierarchical counterparts.

Structural problems are exacerbated when Western militaries are confronted with ambiguity. Western militaries have increasingly imposed strict control measures and procedures on tactical activities because past actions have resulted in potent strategic consequences. Self-imposed risk aversion has centralised responsibility for important decisions, meaning that higher headquarters are usually required to evaluate complex circumstances. Importantly, such restrictions are not only present in the physical environment but decision-making constraints in the information environment are even more demanding. A single 'Tweet' could take hours of research, development and approval, by which time it is no longer relevant.

All decisions when confronting a hybrid threat will be complex, and the time taken for a unit to seek and receive approval to act will usually mean that fleeting opportunities to disrupt a hybrid threat will be missed. Moreover, the hybrid threat will subsequently evolve as the effects perpetuate across more stakeholders. It is in the context of these challenges that Western militaries are considering how they should respond to hybrid warfare.

Australia's response

Australia currently does not have an adequate response for dealing with the hybrid threat—and this is exactly why Australia's future adversaries may adopt hybrid modes of war. Although ADF combat operations against Russian hybrid opponents in Ukraine are unlikely, security analysts have already highlighted the existing threat of 'grey zone' conflicts in Australia's near region.³⁰ China already possesses many of the elements of national power utilised by Putin, notably overwhelming economic pressure and electronic/cyber warfare capabilities. Conventional military posturing is also occurring as China increases its anti-access/area denial and blue-water navy assets. But it is the expanding role of non-traditional military techniques that should be a cause for concern for countries in the Asia-Pacific region.

State technical and financial support for thousands of fishing entities in rival claimant areas, unprecedented land reclamation activities and the expansion of an increasingly-militarised Coast Guard are signs that China is possibly exploring the utility of irregular warfare methods. Taiwan and the East and South China Sea disputes all represent opportunities for China to employ hybrid warfare to counter the traditional strengths of Western militaries in the Asia-Pacific—and avoid provoking a full-scale conventional military response—while still achieving its strategic objectives. These scenarios are too grave for Australia to ignore, and a valid reason why reviewing Australia's preparedness for hybrid warfare is of paramount importance.

Considering Gerasimov's writings regarding the primacy of non-military means in the hybrid fight, Mark Galeotti has justly questioned the extent to which responsibility for hybrid warfare rests outside the military.³¹ This is a reasonable assessment, as a national effects-based approach is undoubtedly required to respond to any strategic threat. In combating hybrid warfare, friction in a whole-of-government framework will present a self-generated obstacle against an already-challenging opponent. Silos of excellence in intelligence agencies, foreign policy branches and security services will only contribute to confusion and disagreement in and among Western countries, thereby creating an opportunity for the hybrid threat to exploit.

A whole-of-government response requires clear direction and integration. Australian departments and agencies should war game hybrid-warfare scenarios in order to better appreciate the features of Australia's response if confronted with a hybrid adversary. Moreover, Australia should promote similar scenario analysis with its regional allies. A better understanding of the opportunities and constraints of Australia's response will only assist in degrading the temporal advantage of the hybrid enemy. Nevertheless, overcoming politico-strategic vulnerabilities to hybrid warfare may be the most profound challenge of all—which is beyond the scope of this article.

The ADF's established and diverse capability will likely make it central to identifying the threat and providing response options to the Government in times of hybrid crisis. Indeed, in circumstances

dissimilar from Crimea, the ADF may already be in an area of unrest when a hybrid threat becomes clear. While widely acknowledged for leading Western analysis on complex operating environments in the past, the ADF has arguably struggled to deal with the hybrid challenge. Instead, the organisation has promoted a 'back to basics' approach and is currently reinvigorating its focus on foundation warfighting in order to prepare for combat against a peer threat.

In some respects, this approach is valid. But the ADF should not neglect the lessons from Russia's annexation of Crimea. Hybrid warfare exposes specific vulnerabilities in Western political and military decision-making—and rectifying these weaknesses will only complement training for 'a war'. Indeed, it is unlikely the next threat will employ an identical model to Russian hybrid warfare. But, more broadly, the ADF's ability to make faster and superior decisions than its adversaries is fundamental to the Australian approach to war. Consequently, intellectual and institutional reform in decision-making should be a priority.

European and Western militaries are already searching for the best method to respond to hybrid warfare, with a UK Defence Committee warning in July 2014 that NATO was 'not well prepared for a Russian threat against a NATO member-state'.³² In response, militaries are seeking to develop 'adaptable' force structures. However, adaptable manoeuvre groups are only part of a solution. In fact, they fail to address why hybrid warfare is so effective, given that hybrid warfare targets decision-making not combat forces. Adaptable force structures are limited unless they are accompanied by a more responsive decision-making framework.

Reducing the susceptibility of ADF decision-making to the hybrid threat is not only important for the military but can also form a central component of a larger strategic response to hybrid warfare. Because hybrid belligerents converge all attributes to achieve their political end-state, even a small tactical event can have strategic ramifications. This is not an unfamiliar concept for the ADF—most soldiers would be aware of the 'strategic corporal'.³³ However, the 'strategic corporal' concept is normally negatively depicted: an Australian small team leader must be conscious of the media and legal implications of warfare in order to avoid damaging national objectives. Against a hybrid threat, the strategic corporal may be the ADF's most powerful weapon.

The MH17 incident in eastern Ukraine highlighted that a single tactical failure can severely disrupt the effectiveness of a campaign designed to promote plausible deniability and ambiguity. If presented with a similar situation, an Australian 'corporal' who not only secured the crash site but acted strategically—informing their chain-of-command, engaging with the local community, isolating and back-loading evidence, publishing media all before their hybrid adversary could respond—will effectively disrupt the orchestration of their opponent's illusion. Alone, these events are not decisive but his/her actions can be complemented by similar occurrences by other 'corporals' across the air, sea and land domains. Small tactical victories 'buy' time, gather evidence and build momentum for a larger strategic response to prevail.

Empowering strategic corporals appropriately for hybrid warfare will require intellectual and institutional reform to address the two military challenges, namely identifying and understanding the threat; and deciding and executing the plan.

Firstly, access to information will not be the problem that constrains the ADF's ability to understand the hybrid threat. Over the past decade, Western militaries have significantly increased the number of intelligence, surveillance and reconnaissance (ISR) platforms that can 'sense'. Regardless, military sensors will likely be of no greater utility than many civilian systems in the hybrid fight. In fact, a majority of information will likely be available through open-source media.

Civilian journalists, passionate citizens and hybrid activists will all be active in the virtual space and every article, post, video, Tweet and blog becomes a valuable source of information in understanding hybrid activities. For example, the first report of Russian Special Forces entering Crimea emerged in a Ukrainian newspaper almost three days prior to the 'little green men' storming Parliament.³⁴ The ADF should harness the ISR capability of the millions of eyes and ears that are active in the battlespace.

The greater challenge for ADF ISR will be the ability to process this information into usable intelligence. Analysis of hybrid complexity will always require intelligent people. However, it is becoming increasingly

clear that smart humans alone cannot efficiently achieve the fusion of all information in hybrid warfare into actionable intelligence. Processing volumes of military and civilian information in a timely manner requires investment in automated analytics that search and process unordered data from all sources in order to direct intelligence staff to key areas of interest.³⁵ Intelligent people will subsequently be able to understand the hybrid threat and reduce the complexity of the situation to aid the commander's decision-making process.

Building frameworks that promote responsiveness in decision-making and action will be equally as important. Improved battle management systems and processes are not the only answer to this challenge—in fact, they are a superficial remedy to a more fundamental problem. The centralised hierarchical military structure generates friction, and friction slows decision-making in time-sensitive situations. The ADF should be aiming to reduce friction in decision-making in order to build tempo and overwhelm its adversary. This must be achieved in two areas: between levels of command, and internally to command.

Firstly, friction must be reduced between levels of command. Given the increased interconnectedness of soldiers, sailors and airmen in a battlespace, the practicalities that drove the foundation of command structures prior to the information age are less relevant. The ADF should at least explore opportunities to decentralise power in organisational structures and reduce unnecessary friction between levels of command.³⁶

This concept is not unfamiliar to the ADF—indeed, it already espouses the theory of 'mission command'. However, mostly mission command is applied to physical manoeuvre and is rarely practised when the environment is complex and strategic implications are foreseeable, such as media or legal matters. But as Russian hybrid warfare has illustrated, the environment will always be complex and the inability to respond quickly to a given situation will be detrimental as the hybrid threat perpetuates further over time. Consequently, mission command in hybrid warfare must establish clear parameters to allow decentralised units to make decisions quickly and seize fleeting opportunities in the physical, human and informational spaces.

Some will argue that there is increased risk in empowering the strategic corporal. For example, consider the strategic consequences when a corporal inadvertently publishes the wrong narrative. This risk is not insurmountable; in fact, it can be overcome through education and clear articulation of a higher commander's intent. It is strange that the ADF allows a soldier to decide to fire their weapon at an adversary but does not allow the soldier the same capacity to autonomously 'Tweet', engage or train with indigenous security forces or promote local engagement strategies. Decentralisation will promote faster decision-making and the collective ability to disrupt the hybrid threat will be increased. The alternative is that the ADF remains unresponsive—and the hybrid threat is simply overwhelming.

The second area to reduce friction is internal to command. To respond to the totality of hybrid warfare, commanders must be selected for their ability to influence all stakeholders within the operating environment, rather than their skill in tactically manoeuvring combat formations. If nothing else, hybrid warfare has reminded the world that warfare remains a contest of human will. Influence is not messaging and media but is the combined effect of all actions to change perceptions and behaviours. Proficiency in traditional warfighting skills will be necessary. But there will be an increasing requirement for commanders to have at least a basic understanding of the human sciences to inform their human and informational effects.

Additionally, commanders will need an increased understanding of the virtual domain to apply offensive and defensive cyber tactics. Importantly, such skills will be essential for all commanders, from the strategic corporal engaged in the 'Three Block War' to the general commanding the joint interagency task force. Candidates who only focus on finding and destroying 'red force' will be simply unsuitable—they will generate friction against the mission.

To assist commanders in achieving influence, the ADF should explore whether the current staff system is appropriate. The staff system has been developed over centuries of industrial warfare and promotes information silos. Hence, its applicability in the information age should be examined. Headquarters are becoming cumbersome organisations. Every staff branch and supporting organisation entrenches a hierarchical structure of staff officers, embeds liaison officers and maintains watchkeepers for 'situational

awareness'. Rather than promoting better decisions, current staff structures allow officers to 'run interference' for the key decision-maker.

In the time-sensitive and complex environments characteristic of hybrid warfare, this interference is counter-productive and will only degrade the capacity of the commander to make decisions that will influence the environment.³⁷ As an alternative, regular military forces should seek inspiration from other decision-making frameworks, such as the headquarter models practised by Special Operations Command or innovative corporate frameworks, such as Google, which promote passage of information, reduce friction and allow faster and better decisions.

Conclusion

Russia's annexation of Crimea is a warning that future conflict may not neatly fall within Western categorisations of conventional and unconventional war. Hybrid warfare converges regular and irregular warfare techniques, and the Kremlin's actions in Ukraine demonstrated how the clever use of the hybrid approach can exploit vulnerabilities in Western political and military decision-making. The success of hybrid warfare in Europe should concern Australia, as the possibility of similar conflict in the East and South China Seas has already been raised. For the ADF, responding to hybrid warfare will require much more than the acquisition of new fighter jets, submarines, battle management systems or indeed training against a peer threat in foundation warfighting.

The ADF will need to enhance its ability to gather information and understand the hybrid threat. Exploitation of open-source information and refined automated analytics will likely assist the ADF in comprehending an adversary that promotes ambiguity. The ADF will also require structural reform. Most importantly, the ADF must decentralise decision-making in complex environments in order to become more responsive. Empowering the 'strategic corporal' to command and influence the physical, human and informational environments will be necessary to build tempo against a hybrid adversary. Faster and better decisions will disrupt the hybrid illusionist—his magic exposed, his trick incomplete—and contribute to the restoration of peace and security in the international system.

Captain Nicholas Barber is an intelligence officer at the 1st Intelligence Battalion, Australian Army. He deployed to Afghanistan as part of the Australian Artillery Mobile Training Team in 2012. He holds a Bachelor of Arts in History and Politics from the University of New South Wales. He recently completed a fellowship with Global Voices, in partnership with the Department of Defence, which included his attendance at the 2015 Shangri-La Dialogue and the 2015 Global Security Conference in Bratislava.

Notes

This is an edited version of a research paper developed by the author during his fellowship with Global Voices. Global Voices is a youth-led organisation, with an ongoing partnership with the Department of Defence, which currently sends two delegates each year to attend international defence and security forums as part of a leadership development program: see http://www.globalvoices.org.au/>

Michael Cecire, 'The Russian Invasion of Ukraine', *Foreign Policy Research Institute*, [website], March 2014, available at http://www.fpri.org/articles/2014/03/russian-invasion-ukraine accessed 14 October 2015.

- Peter Felstead and Georg Mader, 'OSCE evidence lifts lid on "little green men" in Crimea', *IHS Jane's Defence Weekly*, 14 March 2014.
- William Booth and Will Englund, 'Gunmen's seizure of parliament building stokes tensions in Ukraine's Crimea', Washington Post, 27 February 2014.
- ⁵ 'Putin acknowledges Russian military servicemen were in Crimea', Russia Today News, 17 April 2014.
- Mark Galeotti, "The "Gerasimov Doctrine" and Russian Non-Linear War', *In Moscow's Shadows* [website], 6 July 2014, available at https://inmoscowsshadows.wordpress.com/2014/07/06/the-gerasimov-doctrine-and-russian-non-linear-war/ accessed 14 October 2015.
- Reuben F. Johnson, 'Russia's hybrid war in Ukraine "is working", *IHS Jane's Defence Weekly*, 26 February 2015; John Schindler, 'We're Entering the Age of "Special War", *Business Insider*, 25 September 2013.
- Williamson Murray and Peter R. Mansoor (eds.), *Hybrid Warfare: fighting complex opponents from the ancient world to the present*, Cambridge University Press.
- Frank Hoffman, *Conflict in the 21st Century: the rise of hybrid wars*, Potomac Institute for Policy Studies: Arlington, 2007.
- Phillip Karber, 'The Russian Military Forum: Russia's hybrid war campaign: implications for Ukraine and beyond', *Center for Strategic and International Studies* [website], 10 March 2015, available at http://csis.org/event/russias-hybrid-war-campaign-implications-ukraine-and-beyond accessed 14 October 2015.
- Putin emphasised his dominant position in this dependent energy relationship when he threatened to cut gas supplies to the Ukraine in April 2014: Natalia Zinets, 'Ukraine looks to Europe for gas as Russia ups pressure', *Reuters*, 11 April 2014.
- Pierre Vaux, 'Provocations, Proxies and Plausible Deniability', *The Interpreter* [website], 24 June 2014, available at http://www.interpretermag.com/provocations-proxies-and-plausible-deniability/ accessed 14 October 2015.
- NATO, 'Analysis of Russia's Information Campaign against Ukraine', *Strategic Communications Centre of Excellence* [website], available at http://www.stratcomcoe.org/analysis-russias-information-campaign-against-ukraine accessed 14 October 2015.
- The Associated Press, 'Russia Blocks Web Pages Linked to Ukraine Protests', Moscow Times, 4 March 2014.
- Robin Hughes, 'Ukraine braces for cyber offensive', Janes International Defence Review, 5 March 2014.
- Similar activities occurred prior to the invasion of Georgia in 2008: see 'Russia reminds the world it still has a military', STRATFOR [website], 27 February 2014, abstract available at https://www.stratfor.com/sample/geopolitical-diary/russia-reminds-world-it-still-has-military accessed 14 October 2015.
- 'Russia pulls in Sevastopol and Ukraine's border troops Tyagnibok', NB News, 24 February 2014.
- 'Movement of Russian armored vehicles in Crimea fully complies with agreements Foreign Ministry', *Russia Today*, 28 February 2014.
- Simon Shuster, 'Putin's Man in Crimea is Ukraine's Worst Nightmare', *Time*, 10 March 2014.
- Janis Berzins, 'Russia's New Generation Warfare in Ukraine: implications for Latvian defense policy', *European Leadership Network* [website], 14 October 2014, available at http://www.europeanleadershipnetwork.org/russian-new-generation-warfare-implications-for-europe 2006.html accessed 14 October 2015.
- Roger McDermott, 'Myth and Reality A Net Assessment of Russia's 'Hybrid Warfare' Strategy Since the Start of 2014', *Eurasia Daily Monitor*, Vol. 11, Issue 184, 17 October 2014.
- Valery Gerasimov, 'The Value of Science in Prediction', *Military-Industrial Courier*, 27 February 2013.
- Russia's use of hybrid warfare did not invoke NATO Article V and thereby avoided NATO's requirement to respond: see UK Defence Committee, *Towards the next Defence and Security Review: Part Two NATO*, UK House of Commons: London. 31 July 2014.
- Nadia Schadlow, 'The Problem with Hybrid Warfare', *War on the Rocks* [website], 2 April 2015, available at http://warontherocks.com/2015/04/the-problem-with-hybrid-warfare/ accessed 14 October 2015.
- Philip Seib, *Real-Time Diplomacy: politics and power in the social media era,* Palgrave Macmillan: New York, 2012.

- David Kilcullen, *The Accidental Guerrilla: fighting small wars in the midst of a big one,* Oxford University Press: New York, 2009, pp. 22-6.
- Sascha-Dominik Bachmann and Hakan Gunneriusson, 'Hybrid Wars: 21st century's new threats to global peace and security', *Scientia Militaria: South African Journal of Military Studies*, Vol. 43, No. 1, 2015, pp. 5-6, available at http://www.journals4free.com/link.jsp?l=26559277 accessed 14 October 2015.
- David Alberts and Richard Hayes, *Understanding Command and Control*, CCRP Publications: Washington DC, 2006, pp. 144-6.
- Fred Wieners, 'Operation Enduring Freedom Preliminary Lessons', Air War College: Maxwell Air Force Base, 25 October 2002, cited in Richard Gomez, 'Centralised Command-Decentralised Execution', Air War College, Maxwell Air Force Base, 2003, available at http://www.au.af.mil/au/awc/awcgate/awc/gomez2003.pdf accessed 14 October 2015.
- Linda Sieg, 'Japan, US differ on China in talks on 'grey zone' military threats', *Reuters*, 9 March 2014; Ken Jimbo, 'Maritime Security Challenges in Asia: implications for Japan and Australia', *Lowy Institute* [website], 30 October 2014, available at <http://www.lowyinstitute.org/news-and-media/audio/maritime-security-challenges-asia-implications-japan-and-australia-dr-ken-jimbo accessed 14 October 2015.
- Mark Galeotti, 'NATO and the new war: dealing with asymmetric threats before they become kinetic', *In Moscow's Shadows* [website], 26 April 2014, available at https://inmoscowsshadows.wordpress.com/2014/04/26/nato-and-the-new-war-dealing-with-asymmetric-threats-before-they-become-kinetic/ accessed 14 October 2015.
- UK Defence Committee, *Towards the next Defence and Security Review*.
- Lynda Liddy, 'The Strategic Corporal', Australian Army Journal, Vol. 2, No. 2, Autumn 2004, pp. 139-48.
- 'Russia pulls in Sevastopol and Ukraine's border troops Tyagnibok', NB News, 24 February 2014.
- Neil Couch and Bill Robins, 'Big Data for Defence and Security', Occasional Paper, Royal United Services Institute: London, September 2013, abstract available at http://apo.org.au/research/big-data-defence-and-security accessed 14 October 2015.
- Such structures are already under consideration by US Army Special Operations Command, *Counter-Unconventional Warfare*, White Paper, September 2014, pp. 15-6, available at https://info.publicintelligence.net/USASOC-CounterUnconventionalWarfare.pdf accessed 14 October 2015; Hoffman, 'Hybrid Warfare and Challenges', p. 38
- Gary Luck, *Joint Operations: Insights and Best Practices*, 2nd Edition, Joint Warfighter Center US Joint Forces Command: Suffolk, July 2008, pp. 21-2.