

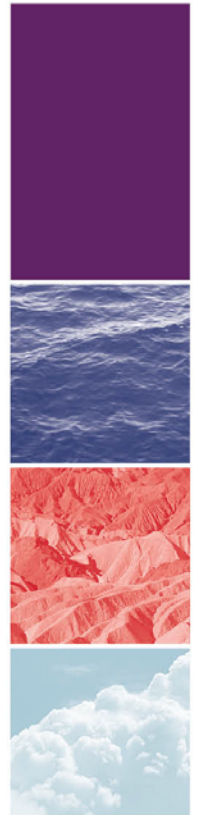


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In the wake of an Admiral: some reflections on sea command in the modern era

Navigating uncertain times: the need for an Australian 'grand strategy'

The future of the ADF

The ADF beyond Afghanistan – four possible scenarios

Securing space: Australia's urgent security policy challenge for the 21st century

A warning from the Crimea: hybrid warfare and the challenge for the ADF

The future of war debate in Australia. Why has there not been one?
Has the need for one now arrived?

Abuse of power and institutional violence in the ADF: a culture transformed?

Thoughts on joint professional military education

Creating strategic corporals? Preparing soldiers for future conflict



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Foreword

I'm pleased to launch this new-look format of the *ADF Journal*, following its 40th anniversary and the publication of its 200th issue. Over the past four decades, the *Journal* has published articles and reviews by some 2000 contributors, totalling around ten million words related to the profession of arms in Australia.

However, like any reputable journal, the critical output is not about quantity. It's about the quality of the material and, in our case, how those articles and reviews have contributed to the Australian Defence Force's professional development by stimulating thinking and debate on the issues of importance to a modern military organisation.

This special issue features a selection of some of the best articles published by the *Journal* over the past ten years. They cover a range of topics and contributions by ADF members representing each of the Services, as well as several articles from non-Defence contributors. I am particularly pleased that several articles are from relatively junior ADF members, which hopefully will provide encouragement to others to similarly contribute in future.

Indeed, I am conscious that one of the criticisms of the ADF is that we have been so actively engaged in operations over the past two to three decades that we have not taken the time to pause and reflect on our profession, nor have we given sufficient encouragement to our members to contribute and actively participate in professional debate through avenues such as the *ADF Journal*.



Some of you will recall the excellent article published in this *Journal* in 2010 by Admiral James Stavridis, US Navy, stressing the importance of ongoing professional development and professional military education more broadly. Admiral Stavridis quoted Thucydides as saying that 'the nation that makes great distinction between its scholars and its warriors will have its thinking done by cowards and its fighting done by fools'.

I commend that sentiment to everyone in the ADF. We need our future leaders to be both warriors and scholars. Importantly also, our current leaders need to actively encourage those under their command to be thinking about the issues we face and to be prepared to debate those issues in forums such as the *ADF Journal*. The profession of arms in Australia is in good shape. But we can and need to be more proactive.

I encourage all ranks to participate in our professional discourse. Your ideas and your experiences are valuable and necessary to our internal deliberations and to the public debate on the profession of arms in Australia.

Air Chief Marshal Mark Binskin, AC
Chief of the Defence Force

Chair's comments

Welcome to Issue No. 201 of the *Australian Defence Force Journal*.

I am particularly pleased that the Chief of the Defence Force has provided the foreword to this issue. His support and encouragement to ADF members to actively participate in the professional debate is much appreciated by the Board, as is his exhortation to senior leaders to encourage the ADF's future leaders to contribute to the ongoing development of the profession of arms in Australia.

As CDF has indicated, this issue contains a selection of articles published by the *Journal* over the past ten years. Some were awarded 'best article' recognition in their respective issue. Others have been selected to highlight a particularly topical issue. Collectively, they hopefully represent an interesting and readable compendium of issues addressed by the *ADF Journal* over the past decade.

In this issue, we also launch the new-look format of the *Journal*, which we will utilise for both the ongoing e-version and planned printed version. It has been designed by Defence Publishing Service to incorporate contemporary trends in graphic design and publishing. We will change the cover-page photos for each issue.

Our next issue, to be published in July/August, will revert to the normal content of contributed articles and book reviews. Contributions are sought by mid-June and should be submitted to the editor in accordance with the guidelines – see <http://www.adfjournal.adc.edu.au/site/authguidance.asp> The planned printed version, which we are aiming to introduce later in the year, will be based on the e-version but will include a selection of full-colour images.

In closing, I would like to thank Group Captain Mark Green for his work on the Board over the past two years. His replacement, representing Air Force, is Group Captain David Millar, Director of the Air Power Development Centre.

I hope you enjoy this issue and encourage your contribution to future issues.

Ian Errington, AM, CSC

Principal

Centre for Defence and Strategic Studies

Chair Australian Defence Force Journal Board

In the wake of an Admiral: some reflections on sea command in the modern era¹

Rear Admiral Peter Jones, DSC,
AM, Royal Australian Navy

In this article, I offer some thoughts on command at sea in the modern era. This is very much a personal perspective that will hopefully be of interest not only to those who will embark on such a command but also to those who need to appreciate the vicissitudes of this complex environment.

In late 2002, I was Commander of the Maritime Interception Force (MIF) maintaining sanctions against Iraq in the North Arabian Gulf. At the time, I was operating from the USS *Milius*, a new Arleigh Burke Aegis destroyer. When not absorbed in the daily demands of sanction enforcement and monitoring Iraqi naval movements, my staff and I pondered the possibility of a command role in the looming war against Iraq.

As luck would have it, nestled in the wardroom bookshelf was a copy of Admiral 'Sandy' Woodward's classic *One hundred days*, which is his memoir of commanding the Royal Navy (RN) task force in the Falklands War.² I had not read the book since I was a Lieutenant Commander but, with the need to mentally change gear from sanction enforcement to littoral warfare, I reread with renewed interest. It is a treatise on naval task group command in the missile age.

Like many a successful submariner, Admiral Woodward is astute, analytical and decisive. He is also an insightful student of naval and strategic affairs. Fortunately for future naval officers, this taciturn officer was assisted in his memoirs by the writer Patrick Robinson, who had previously helped the America's Cup skipper John Bertram write *Born to win*. As a result, Woodward's book was a much more revealing personal account than is the norm for naval memoirs.

As events turned out, I became the Maritime Interception Officer Screen Commander during the invasion of Iraq, with a mixed force of Australian, British, US and Polish ships. From a practical viewpoint, *One hundred days* proved to offer significant insights that I will now discuss.

Organisation

Woodward found it vital to have his battle watches headed by experienced captains that understood his intent and could make quick decisions. They had also to judge when and when not to call him to the operations room. The fluid and demanding environment of war makes it difficult to be prescriptive in this regard. Also, the staff had to be sufficient to allow for sustained 24/7 operations which enabled Woodward to preserve his strength and objectivity as best he could.

On the basis of this advice from the book—and with a couple of months of unpredictable sanction enforcement under my belt—I knew that my staff needed augmentation. Fortunately, the RN was willing to provide an additional six officers and sailors to my staff of 18. Taking Woodward's lead, both my RAN and RN Operations Officers, Lieutenant Commanders Peter Arnold and Andrew Stacey, became the 'battle watch captains'. This arrangement worked wonderfully well.

Admiral Woodward developed a routine of frequent but short visits to his operations room in HMS *Hermes*. This allowed him to maintain his

situational awareness yet not get bogged down in the detail. It became clear to him that he had also to be looking at the big picture and have a good grasp of the longer-term issues. As part of that routine, he would adjourn to his cabin at day's end, have a scotch and pore over his notebook to review issues.

While not having the luxury of a night cap, I found the frequent but short visits to the operations room similarly effective. Obviously, when significant events were underway, there was only one place to be. However, it was only when slightly removed that the broader context could be more clearly grasped.

Fortunately for my staff and I, during the war we were embarked in HMAS *Kanimbla*. She is well laid out with planning areas which allowed room for informal exchanging of ideas with task group staff, ship's company and the various 'visiting firemen' that came our way. This informal 'brain's trust' was invaluable for sifting ideas and testing them in discussion.

I believe, given the complexity of modern warfare, the need to informally access subject matter experts—no matter what their rank—is essential. To facilitate this, it is important for a task group staff to be a friendly, low-maintenance bunch that encourages involvement in the enterprise by those beyond the staff inner circle.

Planning

Admiral Woodward vividly described his planning process. He used a wide array of staff and emphasised the use of liaison officers. Importantly, he brought commanding officers into the planning loop once the 'straw-man' was done. This was to get their input, provide a sanity check and give them ownership. This principle is as old as Nelson, who gathered his captains (his 'band of brothers') prior to the Battle of the Nile. This was also the approach taken with our planning of the Khor Abd Allah (KAA) clearance operation.

The role of the chief of staff, in my case the competent and upbeat Commander Peter Leavy,

was critical in this phase. In any large operation, there are an array of plans, interdependencies and de-confliction that require close attention. The chief of staff has to orchestrate and facilitate that interchange. The corridor to *Kanimbla*'s planning space became well-worn as planners from adjoining operations arrived with charts under their arms. Let there be no doubt—and this is especially the case in littoral warfare—a mistake in the planning phase can lead to fratricide. Indeed, we were to have one close call with a special forces boat coming out of the KAA unalerted. This incident showed that my Task Force Commander, Rear Admiral Barry Costello's fixation on measures to prevent 'blue-on-blue' was well justified.

A divergence from Admiral Woodward's planning experience was that, in our case, the MIF was essentially a bit-player in a large and highly complex invasion. Our remit was to:

- Inspect and clear any merchant ships and dhows exiting the KAA waterway
- Defeat any Iraqi naval forays
- Screen the coalition force from any Iraqi naval incursion
- Prevent any Iraqi mining operations
- Support the take-down of the Iraqi offshore oil terminals
- Bombard Iraqi Army positions on the Al Faw peninsula
- Escort the mine countermeasures force clearing the KAA, and
- Conduct riverine patrols to support the free flow of humanitarian aid shipping to Umm Qasr.

Our very closely prescribed duties effectively negated use of the joint military appreciation process. This may not always be the case and a firm grounding in joint planning is essential.

A cautionary note about the plan is that it is only that—a plan. One is not obliged to follow it to the letter. Yet there is a great reluctance at different levels to deviate from it. This is even when the enemy does the unexpected, the circumstances have changed or that the plan is not working. The

MIF fell into that trap and had great reluctance to overhaul our riverine patrols. We did change but about a day later than we should have done. A key role for a commander, therefore, must be questioning the continued efficacy of the operational plan.

Relationships

In his new foreword in the 1997 edition of his book, Admiral Woodward talks about how each headquarters could only see part of the picture. As such, their actions can be perplexing. Woodward considered it essential to remind his staff that the other headquarters were just trying their best and not trying to muck them around. In fact, my staff and I experienced a similar situation. Over time, the relations and temper of the staff in the various headquarters get frayed and this is particularly so when people are tired or the pressure comes on.

Related to this, caution should be exercised in reacting tersely to issues by signal or email. I would not criticise anyone in print and gave out praise in at least equal measure – the old maxim: praise in public, criticise in private. The other rule was only take on one headquarters at a time. A commander and his staff being known as difficult does not encourage help when things go wrong (as it will).

In coalition operations, the command arrangements are often more cumbersome than they need be. An additional command layer (or more) will often exist. Moreover, national considerations are an ever-present factor and the existence of command areas with little role other than reporting back home or raising a red flag to the mis-assignment of forces is not unusual. To make this arrangement work requires goodwill, a personal relationship with each superior commander and good liaison officers.

In the Gulf in 2003, the RAN fielded liaison officers in the cruiser USS *Valley Forge*, the carrier USS *Constellation*, the 5th Fleet Headquarters, with the Royal Marines ashore, in a Kuwaiti missile boat, the lead US missile boat USS *Chinook* and the Polish support ship ORP *Czernicki*.

Importantly, the liaison officers were the glue that held things together and, among other things, good liaison officers can tell you when your decisions look good or are not playing well at all. To do this, they need to be kept in the picture and trusted. My guide in picking liaison officers was: unless you sorely missed their presence in your own ship, then they were not the right officer.

To navigate this potential command and control minefield, I found there were three things that need to be remembered:

- When an incident occurs, there is invariably at least two levels of headquarters watching events from a 'chat room' or some other electronic means. The actions of the on-scene commander are keenly watched, and do not be surprised if helpful suggestions flow. It is important before this occurs that the commanders at the different levels clearly understand and communicate to their staffs the authority of each commander to undertake their role.
- There can be a clash of cultures between the people doing the fighting and those further removed with the soul-destroying job of monitoring and preparing the next 'PowerPoint' briefing.
- Be thankful you are at the sharp end and not a watcher of events.

Like Nelson, Admiral Woodward placed great stock in his commanding officers. He established individual relationships with his commanding officers and would talk to them personally if he had difficult tasks for them. That sat well with me and I made the time to get in a boat and go talk to them individually where possible. In my time in command of the MIF, we had 37 ships pass through the command for varying periods. It was fascinating to see the difference in the approach of each captain and the resultant feel of each ship.

As the invasion planning neared its end, Admiral Costello came to the *Kanimbla* to review and hopefully approve our plan. All the MIF captains

were present and, instead of a PowerPoint brief, we had a chart and cut-out ships to move around. The most potent advocates for the plan were the captains. All the Admiral's difficult questions were directed to his captains. He knew it was they who were taking their ships into danger and he would get candid and well-considered answers. They could only do this through their active involvement in the final operational planning.

In wartime, captains can come under immense pressure and the way they deal with pressure varies greatly. Furthermore, how a task group commander manages a highly-stressed captain is a difficult matter. In my case, the vast majority of captains did a magnificent job but a few struggled. I took the view that my job was to encourage and get the captains through; not to recommend to a captain how to fundamentally review their command style. On reflection, I am not sure whether I dealt with this aspect as well as I could. Perhaps what I can say is that the captains that performed best were those who were professionally competent, shared information with their ship's companies and delegated as much as was reasonable.

In coalition operations, one is generally dealing with assigned units that are of first-class quality. But there are rare cases where a captain can make his ship a danger to itself and the force. In that case, there can be no hesitation and I had one such coalition ship. My approach was to go discreetly through the respective national channels and the ship was promptly reassigned.

Another challenge for a task group commander is that the intent is to develop a synergy—an effect greater than the sum of the units involved. In the case of the MIF, this was evidenced by the need to field much larger number of boarding teams at any one time than we normally could. This required a much more interchangeable approach between Coalition ships, helicopters, boats and boarding parties. An impediment to this aim can be rivalry between ships. Over my time, I had three pairs of ships that were keen rivals. One ship built its whole ethos on 'bagging' its rival. In wartime, this is unacceptable. I asked the captain to see the issue from a broader task group

perspective and he put initiatives in place to develop a more positive culture in his ship.

Risk

In wartime, the placing of mission achievement above the safety of your people is one of its defining characteristics. Like everything else related to command, it is not black-and-white. Admiral Woodward talks about the need to harden yourself to make decisions for the mission success and it is a difficult balance between regularly reviewing risk and allowing it to get in the way of other decision making.

For important decisions, where higher risk is involved, it is important for the Commander to talk to the affected party. Admiral Woodward did this with the commanding officer of a frigate prior to her run through a sound where there was a risk of mines. I had a similar conversation with the commanding officer of the *Chinook* to explain why I was taking non-essential personnel off his ship. The ship was going to escort the mine countermeasure vessels and so was to be the first non-low magnetic signature ship going up the KAA. Among other things, the face-to-face meeting ensures both parties know the risks and the rationale for the decision.

Media

Admiral Woodward found issues related to the media drew on a surprising and, at times, an inordinate amount of his energies. I was therefore not surprised that media affairs came to be my second priority after operations. Fortunately, like all MIF commanders before me, I had many and diverse media representations visiting the ships at sea. This reflected the US Navy's relatively open and confident approach to its media relations.

The best approach in facilitating media engagement was concentrating them on the command ship and sending them to ships where the action was likely to be. This reduces the burden on smaller units who should not have the management overload, and the command ship can also provide the broader context for what is

going on in the conflict. It is also vital to understand what each media group wanted to achieve and where they want to go. I was surprised how much these factors could vary.

A proactive and open approach to media increases the chances that accurate coverage of the task group's activities can be provided. This is not only important for the public, but also for families and provides a historical record of the sailors' contribution to a campaign.

Stress and pressure

Task group command is extremely draining and Admiral Woodward explains his need for routine. One must be aware of looking after yourself and developing a sustainable 'battle-rhythm'. Related to this was the importance he placed on being calm in public. Admiral Woodward recounts the confused scene in his operations room when HMS *Sheffield* was hit by an Exocet. All eyes were on him. I also became very conscious that when events were a bit tense or generally not going to script there were quite a few eyes, young and old, checking on how I was coping with it all.

A useful aid is to have trusted friends who will give you a few home truths about how you are travelling both in terms of performance and general well-being. Fortunately, a couple of the more senior members of my staff filled that role and I was also fortunate in having a Naval College classmate, Captain Peter Lockwood in the *Anzac*, keeping a weather eye on me.

Communications

Admiral Woodward emphasises that communications are the major cause of command and control problems. I also found this to be the case. It was the reason I moved from *Milius* to *Kanimbla*, where greater bandwidth and more ready access to Australian national systems could be assured.

One of the defining aspects in maritime operations is the rapid adoption of information

communications technology and it is vital to seize the benefits of any advances where they can be obtained. There is a key competitive advantage to the maritime force that does so.

Summation

A point Admiral Woodward made in the foreword to Andrew Gordon's remarkable book, *The rules of the game: Jutland and British naval command*, was that:

It is difficult—but not necessarily impossible—in peacetime, when the stresses and unpredictabilities of war are hard to imagine (and still harder to simulate), to identify who would be good at it.³

This may be true. However, I believe the better we professionally prepare our prospective commanders, the more likely it is that they will succeed. As I have tried to demonstrate in this article, part of that preparation is to read about those who have gone before. It will provide context and, more often than not, show that what you are experiencing as a commander is not unique.

Rear Admiral Jones joined the RAN in 1974 and was a surface warfare specialist. His postings included Commanding Officer HMAS Melbourne, Commander Australian Surface Task Group, Commander Australian Naval System Command and Head ICT Operations/Strategic J6. Rear Admiral Jones has contributed to number of books on naval history and strategy, the latest being 'Naval Power and Expeditionary Warfare' (Routledge, 2011).

He is a graduate of the Advanced Management Program of the Harvard Business School and has been a Visiting Fellow at ADFA. He was promoted to Vice Admiral in November 2011 and appointed Chief of the Capability Development Group. He was appointed an Officer of the Order of Australia in 2012. He retired in October 2014.

Notes

¹ This article was printed in Issue No. 184 of the *Australian Defence Force Journal*, published in 2011.

² Admiral Sandy Woodward, *One hundred days: memoirs of the Falklands Battle Group Commander*, HarperCollins: London, 1992.

³ Andrew Gordon, *The rules of the game: Jutland and British naval command*, Naval Institute Press: Annapolis, 1996, p. xii.

Navigating uncertain times: the need for an Australian ‘grand strategy’¹

Colonel Wade Stothart, DSC, AM, Australian Army

Introduction

The world currently faces a complex and challenging security environment. While it could be said that the world has always faced a difficult and demanding security situation, the number, diversity and magnitude of the current challenges have the potential to radically change the current international order in an enduring way. Perhaps it is the most challenging security environment since the end of World War 2, due to the large number of both traditional and non-traditional security threats, accompanied by difficult governance circumstances.

There are a number of key pressure points, at play simultaneously, that have the potential to seriously destabilise and potentially re-design the current world order. The first is the rise of China, with the shift in the balance of power manifesting itself in tensions in the South China and East China Seas over territorial and maritime boundary claims. The second is the crisis in the Ukraine as Russia resists Western influence on its borders, indicating that Europe is not immune to the threat of nation-state aggression, with profound consequences for the European Union and NATO.²

The third is the civil wars in Iraq and Syria, as part of a larger failure of the ‘Arab awakening’ and the transfer of radical Jihadism from South Asia to the Middle East.³ The fourth is the recent fighting between Israel and the Palestinians, suggesting that no sustainable peace will be possible in the current circumstances.⁴ The fifth is the ongoing threat of nuclear proliferation in Iran and further developments in North Korea. Lastly, non-traditional security threats are ever present, such as the Ebola pandemic in western Africa, as well as cyber security, water security and climate change concerns.

These challenges are manifesting themselves in many guises. The world has enjoyed an absence of violent great power rivalry and widespread conflict since the end of the Second World War. However, the international system that has overseen this remarkable period of stability is now under threat. The basic unit in the international system, the nation-state, is being subject to a number of pressures. Weak states either cannot control their territory—and are being subject to sectarian and ethnic conflict that threatens their existence—or they are fostering rampant nationalism and encouraging historical enmity that is straining relationships.⁵

The situation is made even more complex by the economic weakness affecting the Western world since the global financial crisis. Additionally, there are broader concerns with the debt and dysfunction of many democratic governments, with some commentators predicting that political decay will lead to disorder of a scale that will lead to unstable, destitute and fractured societies.⁶ Democracy is in decline.⁷

The impact on Australia

Australia, as a liberal democratic middle power, is not immune from these global trends and threats. Indeed, the events described above are directly affecting Australia. As a middle power, Australia is heavily reliant on the free market global economy and the security arrangements that

support prosperity and stability. There is real concern that Australia's period of relative affluence and stability is about to end and that more difficult economic and security times are ahead. The rise of China and the relative decline of the US have also led some commentators to predict that Australia will eventually face a dilemma of choice between its closest security partner, the US, and its largest trading partner, China.⁸

The international order that has overseen great stability and prosperity in much of the world since 1948 now stands at a turning point. Many nation-states are weakened, the global economic system is fragile and liberal democracy is in need of overhaul.⁹ Australia, as a middle power in this international system, is both strong and vulnerable. Global economic and military power is shifting from the Atlantic to the Pacific, and Australia needs to adjust.

An Australian 'grand strategy'

This article argues that Australia, as a middle power, needs a revised and formal 'grand strategy' to ensure that it navigates the current and future domestic and international environment using all the elements of national power in a sustainable and cogent way to achieve its desired 'ends'.

This grand strategy must strive to build national power in a way that will allow Australia to positively influence the regional and global environment, consistent with Australia's national interests. While it must be proactive, it needs to set realistic goals for a 'middle power' and be flexible enough to deal with the unexpected. Importantly, it must clearly prioritise what is most important to Australia so that scarce and valuable resources can be applied skilfully and not squandered.

'Grand strategy' is defined by Colin Gray as the 'purposeful employment of all instruments of national power'.¹⁰ Such a strategy is important for a nation as it states a clear goal and aligns resources to achieve that goal. The discipline of

devising and articulating a grand strategy requires our leaders to think about the big picture, the long-term, and obstacles in the way of achievement. A grand strategy should also provide the context and logic that justifies difficult decisions and ensures a coordinated approach and, most crucially, its integrated implementation.¹¹ Grand strategy is not a military formulation; it is the responsibility of statesmen and -women.

In 2012, the then Australian Prime Minister released the *Australia in the Asian century White Paper*.¹² This White Paper was a 'plan to build on our strengths and shape our future'.¹³ Its stated aim was to 'secure Australia as a more prosperous and resilient nation that is fully part of our region and open to the world'.¹⁴ The paper, however, was criticised for its lofty rhetoric, apparent inconsistencies and lack of resources.¹⁵ Its focus was also almost exclusively internal, making no statement of the type of region or world that Australia seeks. With the election of the Abbott Government in 2013, the *Australia in the Asian century White Paper* was 'consigned to history' and has not been replaced.¹⁶

More generally, some commentators have assessed that Australia has been pursuing a 'hedging' strategy, albeit unstated, since the end of the Cold War.¹⁷ Certainly, Australia has actively pursued and supported an open and integrated global and regional political order through bilateral and multilateral forums such as the UN, APEC, ASEAN Regional Forum, the East Asia Summit and the G20. Australia has also sought to strengthen the Australia-US alliance and upgrade its strategic links with Japan and South Korea.¹⁸

Concurrently, Australia has also been very supportive of China's involvement in regional structures. Australia has also pursued much-needed upgrades to its military forces, particularly air and naval capabilities. Collectively, it can be argued that these efforts constitute a 'hedging' strategy.¹⁹ That is, Australia is 'hedging' against increasing strategic uncertainty in the region by 'soft balancing'—seeking to have the US and China as active participants in regional and global institutions—while at the same time

‘external balancing’, by improving its alliance relationship with the US and other allies and partners in the region, and ‘internal balancing’ by improving domestic military capabilities in the event of conflict.

While such a strategy may well have been effective for Australia until now, this article contends that the pace of change in the global economic and security environment, and the current and potential future difficulties being faced by governments world-wide, including Australia, means that this traditional approach needs to be reviewed. A more formal and publicly-endorsed grand strategy is needed.

The first step is engagement with the people of Australia. There must be a public narrative that informs the Australian people of the complexity, fragility and potential threats evident in the current international system. Much of the Australian public is aware of the various crises and developments occurring around the world but they may not be cognisant of their combined direct and indirect impact on Australia. Additionally, they may not have made the link between the fragile external environment and the need for domestic reform to ensure that Australia, as a nation, is best prepared for both opportunity and uncertainty.

Broadening the level of public debate is essential so that the government can take the necessary actions to navigate these uncertain times with transparency and understanding. The best way to do this would be via a White Paper, articulating Australia’s grand strategy to address the current domestic, regional and international environment. The desired end-state would be public support, commitment and legitimacy.

At the heart of the White Paper would be a clear statement of what Australia seeks which, by definition, must be proactive, not reactive. The aim should be ‘for Australia to be domestically strong and seek and support a stable international system, based on the rule of law and an open and free economic trading system’. This would be achieved by a three-pronged strategy: ‘to build, bridge and balance’.

Build capacity and capacity to build

Australia must first focus on its domestic capacity. This involves building and improving Australia’s political, economic and social solvency. Without these three fundamental capabilities, Australia will not have the national power or ‘means’ to shape the regional and international environment in pursuit of its interests or ‘ends’.

The first priority must be political cooperation. Governments must be able to govern. But increasingly in Australia, entrenched partisan positions are preventing the government-of-the-day from pursuing its agenda. In the words of Paul Kelly, ‘Australia risks heading to a new status as a stupid country—a nation unable to solve its public policy problems and, even worse, a nation incapable of even conducting a public debate about them’.²⁰

Fault lies on all sides. But it is salutary to be reminded that many of the important economic reforms of the 1980s occurred with bipartisan support.²¹ Prime Minister Abbott has stated that he intends to become a more inclusive and more consultative leader, and the Labor Party has mostly offered bipartisan support for a number of recent national security measures.²² Debate on reform should continue but it should focus on what type of reform—and not reform *per se*.²³

The second is ongoing economic growth and reform. The Australia economy is in need of reform if it is to maintain the prosperity that Australians have enjoyed over the past two decades.²⁴ Structural change in the Australian economy is required to rein in the deficit and make industry more competitive in a challenging international environment. This requires bipartisan support for the budget and an open approach to the reform needed in areas such as the federation, tax, health, education and the pension age.

The third is social cohesion. Australia’s multicultural society and immigration policies have been a very effective social construct and have delivered economic growth and development. But Australia must not expect that

multiculturalism will automatically lead to social cohesion without community effort and understanding. The radicalisation of Australian Muslims is a real threat.²⁵ Concerted and targeted policy must address this issue. English, education and employment are the start but specific policies need to be developed and implemented that reach out to young Muslims and counter any sense of alienation.²⁶

Australia needs political progression, economic reform and social cohesion to ensure that it can maximise its national power and take steps to shape its external environment. The first step in achieving a grand strategy for Australia is to ensure that it is governed well, economically strong and socially cohesive.

Bridge the divide and cross the bridge

The complexity of the developing geostrategic environment means that strategic choices will not be binary or exclusive. Australian policy makers will be presented with decisions on relationships with and among states that encompass cooperation, competition, independence and interdependence.²⁷ 'Bridging' can be defined as reaching out to other regional and like-minded nations to pursue common interests.

Bridging aims to address strategic uncertainty and the competition between nations through promoting confidence-building measures, interdependence, partnerships and collective responses to areas of mutual opportunity or concern. The aim of the bridging aspect of Australia's grand strategy is to promote cooperation between nations and prevent competition from becoming conflict.²⁸ Australia's focus should be regional—but not neglect global forums—and should highlight diplomatic and economic means.

Australia has very well established diplomatic and economic links in the region and they need to be strengthened with key countries and multilateral bodies. Most importantly, Australia's relationship with Indonesia needs to be improved. Indonesia's transformation to a vibrant democracy has been

truly impressive. It is a middle power on a growth trajectory to great power status. However, Australian-Indonesian business links have been weak and mutual public perceptions have at times been poor. The economic, security and strategic potential of a close relationship between the two countries is considerable, and Australia should seek the opportunity to elevate its relationship to a fully-fledged strategic partnership as soon as possible.²⁹

Australia should also seek to strengthen and broaden its ties with China. As Australia's largest trading partner, Australia's economic well-being is directly linked to further growth in the Chinese economy.³⁰ Australia's relationship with China is already dominated by these economic links with much mutual benefit. Other aspects of the relationship could be strengthened further. This deeper relationship could also serve to 'reassure' Australia of China's intent to pursue 'peaceful development' and commitment to the core principles of the current world order.³¹ That is not to say that as power shifts, the world order does not need to change. But the key tenets of the current world order do not necessarily have to change as the world order takes on an Asian view.³²

The region is already well served with multilateral bodies. The ASEAN Regional Forum, APEC, the East Asia Summit and associated bodies all address issues of shared interest. There does not need to be additional forums. However, increasing the capacity of the Department of Foreign Affairs and Trade to support them would strengthen Australia's efforts and increase influence. Many of these regional bodies have been criticised for producing little in the way of concrete outcomes.³³ However, as more global power increasingly shifts to the region, Australia should be prepared to offer whatever assistance is needed to increase the capacity of these organisations to resolve what will likely be increasingly complex issues.

The close connections between security and economics must be leveraged in the current environment.³⁴ Bilateral and multilateral trade agreements need to continue to be pursued both

regionally and globally to stimulate economic growth and improve security. The Trans-Pacific Partnership—a pluri-lateral trade agreement involving the US, Japan and ten other countries, including Australia, that together account for a third of world trade—could become one of the world’s most expansive trade agreements.³⁵ Not only would arrangements such as this accelerate trade, when globally it is in decline, but also enhance the security outlook as countries increase their interdependence.³⁶

Australia should also act to support and improve confidence-building measures further afield. While Australia’s closest neighbours and the countries of the Indo-Pacific are of great importance to it, developments outside this region will also influence Australia’s interests. Developments in the Americas, Europe and Africa have always had an effect on Australia, hence Australia should be prepared to constructively engage in global forums that shape international actions in these areas.

The most effective means to achieve this is to engage creatively and expansively with those nations and multilateral forums that have shared interests with Australia. In this way, proactive attempts can be made to shape an international system that is based on the rule of law, is stable and has an open and free economic trading system.³⁷

Balance the scale

‘Balancing’ can be defined as the preparations that Australia will make, and actions that it may take, as a *status quo* middle power, to support the maintenance of the key attributes of the current world order. Whereas ‘bridging’ is about cooperative pursuit of common interests, ‘balancing’ is about the capabilities, preparations and actions that may be needed if the key attributes of the current order are not being adhered to or are being ignored, and the scale of Australia’s national interests demands action.

It is reasonable to expect that rising powers will legitimately attempt to influence the

international system in their interest. It is also to be expected that other powers may resist this attempt to re-distribute power. As power recedes in some areas, other actors may seek to fill that void and, while this may not be of key importance to all, it may be to Australia. Any such interplay could see competition tip into conflict—and not necessarily between great powers. Balancing, both internally and externally, is designed to deter conflict or, if necessary, defeat an adversary.

Australia has a broad range of security capabilities that can be employed to defend Australian territory and its national interests. Over the past decade and a half, successive Australian governments have invested in enhanced military, police and intelligence capabilities. As a country with a small population, Australia seeks to have a technological edge over most other militaries in the region. However, Australia will need to keep regularly investing to maintain this capability edge.³⁸ Australia has deployed the ADF and police into its immediate region a number of times of the past 15 years to stabilise and build order to good effect. Consequently, Australia’s immediate region is more stable than many. However, as Peter Jennings has reiterated, instability can emanate far from one’s own shores.³⁹

Australia has been deepening its relationship with its major security partner, the US, and also other allies of the US.⁴⁰ Intelligence arrangements, an emphasis on interoperability, exercises and operational deployments in the Middle East, as well as basing arrangements under the US ‘pivot’, all ensure a close relationship and contribute to US engagement in the region. As asserted by Andrew Shearer, Australia’s close relationship with the US advances Australian strategic interests and balances against growing strategic uncertainty.⁴¹

Of course, China has legitimate and growing interests in the Indo-Pacific region. These interests and expanding engagement do not mean that China wishes to fundamentally change the current tenets of the world order. Indeed, China has been at pains to declare its aim of

peaceful development, which is reassuring. Moreover, this question may not even be relevant if China's growth plateaus and the US economy picks up, as is currently forecast. And while there is strategic competition between the US and China, there is also much cooperation and a high degree of economic interdependence. Australia is managing its relationship with each of them well and must continue to do so.

In summary, this grand strategy seeks to ensure that the fundamental principles of the current world order—rules-based, stable and an open market—endure as power shifts towards Asia in the international system. It would achieve this by building domestic capacity, strengthening regional and broader relationships and, lastly, preparing to act directly when key Australian national interests are impacted or threatened.

Setting the course

The world is at an inflection point. China is rising, Russia is re-asserting itself, and the schism between Sunni and Shiite is widening. The future of the US is uncertain as it emerges from multiple crises. The balance of power in the existing world order is shifting. At the same time, the world economy is struggling and democracies are experiencing difficult governance circumstances. However, it is not yet clear how far the balance is shifting and what the consequences will be for the current rules-based, stable and open free trade order. In the words of President Obama:

The central question of the global age is whether nations [have] moved forward in a spirit of mutual interest of respect, or descended into the destructive rivalries of the past.⁴²

This article has argued that this period of 'radical uncertainty', as termed by Daniel Drezner,⁴³ calls for a formal Australian grand strategy. It has argued that Australia, as a middle power, needs a new strategy to navigate the current and future domestic and international environment. Such a grand strategy must harness all the elements of national power, the 'means', in a sustainable and cogent 'way' to achieve its desired 'ends'. The

current reactive and hedging approach will not adequately prepare Australia for the coming challenges.

The key tenet of the proposed grand strategy is 'for Australia to be domestically strong and to seek and support a stable international system based on the rule of law and an open and free economic trading system', based on a three-pronged strategy 'to build, bridge and balance'.

It has argued that the government must engage the people of Australia with a convincing narrative detailing the complex, fragile and uncertain global environment. The narrative needs to include the rationale for a revised national approach and what it means for all Australians, detailing the challenges, the tools and the way forward, to ensure that Australia navigates these changing circumstances as effectively as possible.

To build national capacity, the Federal Parliament must find ways to better cooperate and improve governance. There is a desperate need for economic reform to address the structural deficit and increase productivity. Social cohesion must be supported by targeted policies to prevent the further alienation and radicalisation of young Australians.

Australia must also 'bridge' with like-minded countries to mutual benefit. Collective effort, either on a bilateral or multilateral basis, must be sustained or strengthened to address common issues. The Department of Foreign Affairs and Trade should be better resourced to facilitate the best use of diplomatic and economic power. A strategic partnership with Indonesia should be pursued quickly to the benefit of both countries. Australia must also support free trade and economic arrangements that will stimulate economic growth and improve security. While these 'bridging' actions should primarily be focused on the region, Australia should also continue to proactively support global forums and multilateral initiatives which complement Australia's national interests.

Finally, the article has argued that Australia must be able to 'balance' when the key tenets of the current international system are threatened. It is crucial that the Australian Government continues to invest in military, police and intelligence capabilities—and is prepared to use them as the national interest requires. Australia's relationship with the US must be maintained and its relationship with China strengthened.

The future is more uncertain than it has been for a generation. Australia needs to realise that the current tenets of the world order may not endure and that the alternative may be inimical to Australia's interests. Australia must chart a careful course through these changing times. A formal grand strategy in the form of a White Paper will provide the plan needed to navigate this course. In this way, Australia can adjust to the changing domestic and geostrategic circumstances, support the maintenance of the key attributes of the current world order, and be secure and prosperous into the future.

Management (University of Canberra) and has met the requirements for a Masters of Politics and Policy (Deakin University). He attended the Defence and Strategic Studies Course at the Centre for Defence and Strategic Studies at the Australian Defence College in 2014, and (at the time of writing) was Deputy Chief of Staff in Army Headquarters.

Colonel Wade Stothart joined the Australian Army in 1987 and, after attending ADFA, graduated from the Royal Military College, Duntroon. His postings have included regimental service in 3rd Battalion, The Royal Australian Regiment (3 RAR), Adjutant of the Melbourne University Regiment, a Divisional Officer at ADFA, instructor at the Royal Military College, and Staff Officer to CDF. He commanded 3 RAR in 2008-09. His operational service has included deployments to Bosnia in 1996 on Operation OSIER, and East Timor in 2000 on Operation TANAGER and again in 2008 on Operation ASTUTE. In 2013, he deployed to Afghanistan as Commander Combined Team-Uruzgan on Operation SLIPPER.

Colonel Stothart is a graduate of the Australian Command and Staff College, and has a Bachelor of Arts (UNSW), a Masters of Arts in International Relations (Deakin University), a Masters of

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The future of the ADF¹

Wing Commander Andrew Hoffmann, CSC, Royal Australian Air Force

Introduction

As decade-long operations in Afghanistan and the Middle East scale down, the ADF must pause, take stock and plan a way ahead—just as it did in the aftermath of previous conflicts, including the Second World War and at the end of the Cold War. But this time is different. Australia is more closely aligned to the US than ever before; US global hegemony is being challenged by a rising China; and the globe is edging its way back to multipolarity. For the first time since the Second World War in the Pacific, the multipolar actors are performing on the stage that is Australia's front-yard.

In creating a way ahead for the ADF for the next 15 years, it is important to acknowledge that the ADF does not exist for its own sake—it cannot design its way ahead in isolation. Three critical factors will shape the ADF's future: the environment that the ADF expects to operate in; the tasks that the Australian government expects the ADF to undertake; and the ADF capabilities needed to achieve those tasks.

This article aims to examine these critical factors, distilling the broad characteristics required of ADF capabilities over the next 15 years. It does not attempt to divine the likely operations that the ADF will need to conduct, nor does it delve into the detail of the specific force design required to conduct those operations. It argues that the ADF needs to be an intelligence-driven, balanced, mobile and culturally-smart force that can adapt, innovate and scale-down to the

requirements of expeditionary operations conducted within the Indo-Pacific region.

It also asserts that the ADF needs to be designed for the defence of Australia, interoperable with the US for high-end warfighting, and integrated with other arms of government. It needs to proactively engage with the region and be willing to participate in and learn from minor operations. The force needs to be deliberately small and focused on core capabilities but technologically advanced and able to expand to meet the needs of larger conflicts given sufficient warning time. Of all these characteristics, 'flexibility' is the key to ADF success in the next 15 years.

The most fundamental lesson that we need to learn from military history is that we need to be careful learning lessons from military history. As Michael Howard acknowledges, 'events or personalities from other epochs may be illuminating, but equally they mislead.... [W]hat is valid in one situation may, because of entirely altered circumstances, be quite untenable the next time'.² This warning is echoed by General David Petraeus, who cautions that 'misapplied lessons of history may be more dangerous than ignorance of the past'.³

Richards Heuer, former head of the methodology unit within the Directorate of Intelligence of the Central Intelligence Agency, cautions that utilising historical analogies tends to cause policy makers to become backward looking and solve the mistakes of the previous generation.⁴ In seeking to avoid these pitfalls, this article takes note of Heuer's advice that 'the greater the number of potential analogues an analyst has at his or her disposal, the greater the likelihood of selecting an appropriate one'.⁵

Consequently, this article—while including lessons from the Second World War and the Cold War—also draws on lessons from other periods to inform the way ahead for the ADF as it prepares for the next 15 years.

The future environment

The future environment will have a significant impact on the way ahead for the ADF. The environment determines the areas in which the ADF will be required to operate, the potential adversaries that the ADF may be required to fight, and the types of operations the ADF may need to conduct. In examining the future environment, it is important to acknowledge three significant factors. Firstly, the Indo-Pacific region is evolving. Secondly, if we want to operate successfully within the Indo-Pacific environment, we need to understand it. Thirdly, any attempt to predict the future is difficult.

The Indo-Pacific region is evolving into the new global epicentre. As current national strategic guidance stresses, 'the most significant factor for our national security is the impact of shifts in the global balance of power',⁶ with the rise of China and India 'shaping the emergence of the Indo-Pacific as a single strategic arc'.⁷ The projected growth in the Indo-Pacific region triggered the 'US pivot' or 'rebalance to Asia', which aims 'to support a peaceful region where sovereign states can enjoy continued security and prosperity'.⁸

The relationship between the US and China is the most critical relationship to the future of the region.⁹ In many ways, the rise of China to compete with—and possibly ultimately replace—the US as the dominant global power is a natural evolutionary process that mirrors the transition of power that occurred between Britain and the US earlier last century. In that instance, the transition of power occurred peacefully. It is in Australia's national interest to ensure that any future transition is just as peaceful.

The context of a new global power emerging at the end of lengthy combat operations parallels the challenge that faced the US and its allies at the end of the Second World War. US experience highlighted that the newly-formed US Air Force was probably the most proactive of the services in adapting to the post-war environment.¹⁰ General Carl Spaatz, its first Chief of Air Staff, was sceptical of the new 'peace' and likely effectiveness of the recently-formed UN,

integrating lessons from the strategic bombing campaign against Germany to massively reorganise the US Air Force to meet his expectation of an emerging Soviet threat.

The US Air Force's ability to proactively focus on the future rather than remain anchored in the past is reminiscent of the US Marine Corps in the inter-war period. The Marines, under threat of becoming a marginalised or even disbanded force, were proactive in seeking out a new and relevant role.¹¹ They established an amphibious doctrine for the Pacific, based on lessons learned from the failed Gallipoli campaign from the First World War, and were forthright in planning for Japan as the future enemy.¹²

As the ADF contemplates a possible period of peace, these historical examples offer clear lessons. The ADF needs to focus on learning from, but not anchor to, the expeditionary counterinsurgency operations that have concluded. The counterinsurgency experience needs to be integrated into an ADF that is repositioned for future security challenges focused on the Indo-Pacific region. This should include planning for operations against a technologically-advanced and numerically-superior potential adversary.

We need to understand the Indo-Pacific region if we are to successfully operate in it. The ADF has a predominantly white, Anglo-Saxon heritage and is at risk of being culturally ignorant when conducting operations within the Indo-Pacific arc.¹³ The Vietnam War highlighted the inability of the US to adapt to the cultural nuances of its adversary. It was only in 1968—four years after the commencement of offensive operations against Vietnam—that the US appeared to broadly acknowledge and counter the cultural nuance of the North Vietnamese strategy.¹⁴

The Vietnam experience underpins the RAND Corporation's assertion that we need to develop a deep understanding of the governing system of an adversary.¹⁵ Australian operations in the Indo-Pacific require a similarly strong regional understanding. The Australian Government is already committed to establishing key

relationships with South Korea, Japan, Indonesia, India and China, as essential components of our national strategy, providing ‘a community that is able to discuss political, economic and security issues, and act cooperatively to address them’.¹⁶

Importantly, for the ADF, these relationships also provide a framework through which an understanding of the region and its many cultures can be developed. This is as important to working with future coalition partners as it is to defeating future adversaries. The ADF needs to invest in regional engagement and it needs to understand its potential future adversaries within the Indo-Pacific arc.

The most significant factor in analysing the future environment, however, is that it is difficult to predict. Forecasting the future environment for the ADF is one of the tasks assigned to defence intelligence personnel. Yet Phillip Tetlock, for example, asserts that ‘although we often talk ourselves into believing we live in a predictable world, we delude ourselves’.¹⁷ Nobel Prize-winning psychologist Daniel Kahneman similarly contends that ‘everything makes sense in hindsight.... The illusion that we understand the past fosters overconfidence in our ability to predict the future’.¹⁸

Twentieth century military history seems to support the notion that prediction is difficult. After the Second World War, the US failed to predict North Korea’s surprise invasion of South Korea in 1950, and General MacArthur failed to predict the entry of China into the war.¹⁹ Great Britain failed to predict Argentina’s invasion of the Falkland Islands in 1982, and Argentina failed to predict the British resolve and speed of response.²⁰ The US failed to predict the collapse of the Soviet Union and, after its collapse, failed to predict the Iraqi invasion of Kuwait—just as Iraq failed to predict the resolve and cohesion of the coalition to restore Kuwait’s sovereignty.²¹

In every war, it would seem, at least one of the belligerents fails in their prediction. The lesson to take from history is that any strategic intelligence forecast 15 years into the future should be treated with a degree of scepticism.²²

Consequently, the currently-vogue theme of the ‘rise of China’ is useful in terms of ADF capability and contingency planning. But it should not become the sole focus. The ADF needs to remain flexible and adaptable—and it needs to be ready at shorter notice to successfully conduct a wider breadth of lower-intensity operations within the region.

Government expectations

The Australian government’s expectations of the ADF will play a large part in shaping the way ahead for the next 15 years. Modern democracies are built around the Clausewitzian concept that wars, and therefore militaries, are an extension of politics. Any discussion of a future ADF must therefore take into account the likely plans and requirements of the government-of-the-day.

The first responsibility of government is to defend Australia and its interests from direct attack. While the current National Security Strategy asserts that ‘the likelihood of a conventional armed attack on our territory is remote’, it notes that ‘the consequence of such an attack could be devastating’.²³ The requirement to defend Australia through the interdiction of forces in the ‘air-sea gap’ is, therefore, as valid today as it was when the term was coined in the post-Vietnam era, which ushered in the strategy of deterrence and self-reliance.²⁴

This defence of the ‘air-sea gap’ implies a maritime strategy: mobile forces—primarily naval and air—capable of conducting operations across the breadth of the continent and its waters to the north. The primacy of the defence of Australia mission must continue to drive force structures: long-range, mobile forces must continue to provide the backbone of a balanced ADF force, adaptable to missions other than the defence of Australia. For the future ADF, this means that the role of intelligence, surveillance and reconnaissance (ISR) of the northern approaches and the use of small but highly-mobile forces in intelligence-led interdiction operations will remain key capabilities and tasks.

The Australian Government's second expectation of the ADF is that it can protect national interests in the region and around the globe. However, the definition of 'national interests' increasingly includes the requirement to protect economic interests, particularly in a global environment where the number of small, market-sensitive economies that are vulnerable to economic coercion has increased.²⁵

In the increasingly globalised Indo-Pacific region, and with an increasingly export-oriented Australian economy, it is easy to envisage economic diplomacy and coercion playing a greater role over the next 15 years. For example, James Goldrick has argued that 'the ADF may need to protect vital energy shipments ... [or as part of a coalition] provide for the wider protection of trade and essential materials in their movement by sea'.²⁶ The protection of sea lines of communication (SLOCs) will therefore be an important task for the ADF in the next 15 years, again requiring small, highly-mobile capabilities conducting intelligence-led operations as part of a wider maritime strategy.

The US alliance

A key implied national interest is serving Australia's alliance with the US. While some critics of Australia's relationship with the US believe 'it is time we begin to cut ourselves off America's coat-tails',²⁷ successive governments from both sides of politics have continued to support strengthening engagement with the US. The 2013 Defence White Paper describes the Australia-US alliance as the 'most important defence relationship ... [which is] a pillar of Australia's strategic and security arrangements'.²⁸ So it is unlikely that the fundamentals of Australia's relationship with the US will change over the next 15 years, even if there is an unexpected period of relative peace.

An essential underpinning of the alliance is for the ADF to remain interoperable with the US military. To do this, the ADF must continue to invest in high technology and interoperable military equipment, as well as continuing to align with US tactics and procedures, and being proactive in

seeking opportunities for engagement. Such engagement may include assisting in smaller campaigns and operations where the primary benefit to Australia is in aligning our military capability and tactics to contemporary operations, rather than necessarily achieving a specific national interest.

Operating with other arms of government

Operating well with other arms of government is a further challenge. In 2009, then US Secretary of State Hillary Clinton introduced the term 'smart power' to describe the intelligent use of the full spectrum of national power as 'picking the right tool, or combination of tools, for each situation'.²⁹ The need for applying both 'soft power' and 'hard power' has long been recognised but probably not with the level of integration that 'smart power' implies.

The impetus for 'smart power' came from the limited objective wars that followed the Second World War, with the Vietnam War an obvious example. Not only did that war have limited objectives, which required a combined approach between allies, but it also required the integration of disparate, civilian arms of government. However, according to Daniel Marston, the so-called 'Pacification' program in South Vietnam was initially the epitome of disunity—and that it was not until a single organisation was established to focus specifically on pacification that a coordinated and sustained effort began to take hold.³⁰

The ADF needs to learn how to harness and coordinate the energies of different arms of government. To do this, it needs to be proactive in seeking opportunities for engagement, such as leading or participating in whole-of-government exercises aimed at practising a coordinated national approach. Conducting such exercises and operations would expose a new generation, both military warfighters and civilian decision-makers, to the planning and conduct of complex operations and campaigns.

Military capabilities

Military capabilities provide the means with which the government can achieve its goals and requirements within the operational environment. It follows that any planning for the future of the ADF must examine aspects of these capabilities. Firstly, it must be acknowledged that when a new conflict arises, the ADF must adapt the force-in-being to the requirements of the conflict. Secondly, ADF capabilities will always be constrained by Australia's limited population. Thirdly, capabilities will always be constrained by the available budget.

Given the lengthy procurement timeframes for complex military equipment, the ADF over the next 15 years will largely be utilising capabilities already in service, or capabilities that are in the process of being acquired.³¹ The need to adapt and utilise the force-in-being is well illustrated by the British experience in the Falklands in 1982, where the Royal Navy carrier force was required to sail just three days after the invasion of the Falklands, enabling Britain to regain the strategic initiative.³² The challenge for the ADF over the next 15 years is to ensure that it is adequately balanced, equipped, informed and ready to meet a range of limited-warning and limited-objective contingencies akin to the Falklands.

Lengthy procurement timeframes also impact the ability to rapidly 'scale-up'. After the collapse of the Soviet Union and demise of the bipolar global system of the Cold War, allied forces no longer faced a short-warning threat of a Soviet large-scale offensive.³³ This, along with the trend towards urban warfare after the Cold War, led allied forces to prepare for high-end warfighting, on the assumption that a 'scaled-down' strategy could be used for lower-end operations.³⁴

As technologically-advanced equipment is increasingly brought into service over the next 15 years, the challenge for the ADF will be to innovate, scale-down and adapt the use of this equipment to achieve a limited-objective mission within a likely lower-technology war.

The availability of people

ADF capabilities will always be constrained by the availability of people. As a country with a relatively small population, Australia will only ever be able to field a relatively-small armed force in conflict—particularly in comparison to a number of the military forces emerging in the Indo-Pacific arc. Limitations on size further emphasise the need to compensate through superior training and technology.

This approach has been successful in past conflicts, such as the Korean War and the first Gulf War, both of which were military if not political victories. The challenge for the ADF over the next 15 years will be to find a balance between the size of the force and equipping and training the force adequately with advanced technologies. Too large a force wastes scarce human capital during peacetime and dilutes the availability of equipment, while too small a force undermines the credibility of the ADF to deter would-be attackers.

With the drawdown in Afghanistan, there is a risk that the ADF will lose experience and expertise—and may be under pressure to reduce its overall size. While any such reduction in force size is generally resisted by military forces, it could deliver some efficiencies. A smaller force has less organisational inertia and so is more likely to be able to adapt its training and capabilities to meet an evolving operating environment. A good example was the US Marine Corp's agility in adapting to the requirements of amphibious warfare in the Pacific theatre of the Second World War, much more effectively than the significantly larger US Army.³⁵

For the contemporary ADF, a small force would minimise the capital investment in modern, ICT-dependent capabilities, which are often outdated by the time the capability is operational. Furthermore, personnel costs could be redirected towards ensuring that a smaller force receives superior equipment and training, while 'maintaining credible high-end capabilities ... to act decisively when required, and deter would-be adversaries'.³⁶ Similarly, the force size needs to

be sufficiently credible to be of value to the US alliance, with bilateral talks in November 2012 reportedly suggesting that Australia 'is already at the margin of defence-spending viability'.³⁷

Any plan to reduce the size of the ADF post-Afghanistan therefore needs to be carefully considered, planned and balanced against other priorities. Any force reduction should be concentrated in areas that are relatively easy to train (such as infantry), rather than areas that are difficult or costly to train (such as a submarine force). Any plan to reduce force size also requires a corresponding plan to mobilise forces should it become necessary, including an investment in collection and analysis of indicators and warnings to ensure that emerging crises are detected with sufficient warning time to mobilise an appropriately-sized force.

The budget

Perhaps the most significant impact on capability is a constrained Australian budget. The 2014 budget confirmed that the Government is committed to a 'properly resourced' defence force and to an increased defence budget that equates to 2 per cent of GDP.³⁸ However, the planned increase to defence expenditure must be taken in the context of the Government's broader priority to return the national budget to surplus by 2024-25, in an environment of falling revenue.³⁹

While Australian defence spending is already relatively low compared to other regional partners,⁴⁰ history suggests two trends that significantly impact defence spending. Firstly, Australian defence spending tends to fall in poor economic environments, such as the late 1930s, the late 1980s and since the 2008 global financial crisis. Secondly, 'Australia spends more on defence during time of war'.⁴¹

Given the context of a slowing economy and Afghanistan draw-down, it would be prudent to conclude that ADF spending will be constrained for the foreseeable future.⁴² From a 'grand strategic' perspective, this may not be a bad thing. The strategic advantage that wealthy,

liberal-democratic, maritime-trading nations have typically enjoyed over their adversaries has been in being able to mobilise economic capacity in times of war.⁴³ The most striking historical example of this can be found in the Second World War:

[Where Japan] vastly underestimated the productive capacity of the United States. Japan started the war numerically superior in practically every category of military equipment... But once the great US industrial machine geared up, the Japanese found themselves inferior in all the various machines of war'.⁴⁴

The Cold War further reinforced this idea but within a different paradigm. Both the US and Soviet Union were forced to adopt massive military budgets—but to finance a strategy of protracted deterrence rather than a short surge into warfare. According to Jonathon Kirshner, the Soviet Union lost the Cold War 'not because of military weakness but because ... its defense burden became onerous, it fell further behind technologically, and was unable to produce economic growth'.⁴⁵

The strategy for the ADF for the next 15 years should centre on minimising force size for the greater strategic good of the Australian economy—but only to the extent that credible core capabilities can be maintained. Such capabilities need to be maintained in order to deter would-be aggressors, make a meaningful contribution to the US alliance, respond to limited warning crises, and provide a solid baseline force from which mobilisation can be enabled if required.

Conclusion

This article has argued that the ADF needs to be careful when applying lessons from history to inform its future planning. It has selectively drawn lessons from history to highlight the characteristics required of the ADF for the next 15 years. These characteristics are shaped by the environment that the ADF can expect to operate in, the tasks the government-of-the-day expects the ADF to undertake, and the capabilities that are required to undertake these tasks.

The ADF needs to learn from, but not be anchored by, its experience from Afghanistan, and apply it within the context of the Indo-Pacific arc. It needs to understand and engage with future regional partners and adversaries, as well as contingency plan for a worst-case scenario. The ADF must be designed for the defence of Australia and protection of SLOCs by generating mobile, long-range capabilities, enabled by ISR, to operate in the air-sea gap.

In designing its force structure for the defence of Australia and planning for high-end warfighting, the ADF needs to remain flexible, adaptable and willing to scale-down high-end warfighting capabilities to conduct broader, lower-intensity expeditionary operations within the region. The ADF must emphasise its traditional strengths of superior technology, training and interoperability to compensate for its inevitable small size—and must be willing to commit to minor operations for the learning experience rather than the fulfilment of a national interest.

Expertise must be built with other arms of government to develop a more coordinated and effective national approach to crises. With decreasing funding momentum, ADF resources are likely to come under further budgetary pressures. Minimising defence resource allocation during peace would allow the nation to focus on building economic strength, which would ultimately better enable the ADF for future contingencies.

Core capabilities need to be preserved during this process to maintain a credible deterrence effect, contribute to the US alliance, and provide a solid baseline from which to mobilise if required. Capabilities that are easy to raise and train could be reduced in size, which would decrease organisational inertia and increase agility. Finally, any reduction in force size would need an increased intelligence effort to assure sufficient warning time to achieve mobilisation in the event of a crisis.

Perhaps the most pertinent lesson from history for the ADF over the next 15 years is the requirement to remain flexible. A flexible ADF is

central to compensating for the vagaries of prediction, and for adapting operational experience to the 'new' operating environment of the Indo-Pacific arc. Flexibility within the force will allow it to adapt to the task at hand, whether it be engaging future regional coalition partners in peacetime, conducting scaled-down expeditionary operations across the region in limited war, or participating in high-end warfighting alongside the US.

Flexibility also facilitates working effectively within a diverse coalition, as well as with other arms of government, to achieve the optimal application of 'smart power'. Finally, flexibility affords the organisation maturity to accept any reduction in funding or force size during peacetime, with the conviction to maintain core capabilities as the basis for rapid mobilisation. As Michael Howard has asserted:

[W]hatever doctrine the Armed Forces are working on, they have got it wrong.... What does matter is their capacity to get it right quickly when the moment arrives. It is the task of military science in an age of peace to prevent the doctrine from being too badly wrong.⁴⁶

Flexibility is the key to the ADF being not 'too badly wrong' over the next 15 years.

Wing Commander Andrew Hoffmann joined the RAAF in 1995. As an Intelligence Officer, he has had a range of postings at the tactical and operational level, including mission intelligence, targeting and analytic positions. He has deployed on operations in Timor Leste, the Middle East region and Pakistan. Wing Commander Hoffmann has a Bachelor of Science, and a Masters in Military and Defence Studies. He attended the Australian Command and Staff College in 2014, and at the time of writing was posted to Headquarters Joint Operations Command.

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The ADF beyond Afghanistan – four possible scenarios¹

Captain Louise Brown, Australian Army

In 2012, therefore, we look at the high probability that operational tempo will decline in the next few years and that we could relive the 'great peace' of 1972 to 1990. These changes will bring new challenges to the ADF, challenges compounded by the increasing pace of change in our neighbourhood and the budgetary constraints that we face.

General David Hurley, Chief of Defence Force, 2012²

In his address to the Lowy Institute for International Policy in May 2012, General David Hurley discussed the challenges facing the ADF. While the drawdown of Australia's commitment in Afghanistan and the cessation of operations in both the Solomon Islands and Timor marks a step-change in the tempo of ADF deployed operations, a period like the 'great peace' of 1972 to 1990 is by no means a certainty.³

This article will examine four possible scenarios that the ADF could find itself facing, using a spectrum of security challenges and a range of defence budget outcomes as the two key variable factors, as summarised in Figure 1. The analysis will focus on the strategic and budgetary conditions that form the basis of each scenario, as well as the potential impact on the ADF and the risks therein.



Figure 1: Four possible scenarios

A 'great peace'

The prospect of a 'great peace' is probably not the most likely of the scenarios. It would require a relatively benign and stable strategic environment, particularly in Australia's immediate region of interest, making it difficult for the government-of-the-day to justify increased or even current levels of defence spending. In this scenario, ADF capabilities are either very slow to be modernised or, in some cases, at risk of disappearing altogether.

Australia's immediate area of strategic interest, the Indo-Pacific, is still emerging as a geostrategic system.⁴ The nature of potential threats are difficult to predict but there are likely to be fewer wars fought to redesign the borders of nation states and more tensions arising from the protection of national interests and supply of natural resources. Transnational or non-traditional security threats are also gathering momentum, including from piracy, offensive cyber activities and illegal fishing, through to demographic shifts, water shortages, potential pandemics and the effects of climate change.⁵

In such a scenario, the role of an expeditionary force is much diminished. There is little need for regular forces trained for a broad range of missions; little requirement for transport, communications and logistic capacities; little requirement for the ancillary services, such as medical and dental support, fuel and water handling, and so on. The priority becomes the development and funding of a classic territorial defence force, designed to operate on or around its national borders. Such a force delivers substantially more 'shop window' combat capability per dollar because it is not burdened with the high overheads of deployability and military self-sufficiency.⁶ The defence budget is thus able to be reduced in real terms, as has happened before.

The end of the volatile Sukarno era in Indonesia and the emergence of a relatively benign near region after the end of the Vietnam War contributed, by the early 1970s, to a shift in Australian government policy away from regional and international force projection.⁷ In 1976, a newly-elected government issued a Defence White Paper that explained Australia's changed strategic circumstances and emphasised force projection into the 'neighbourhood' rather than 'some distant or forward theatre'.⁸

The prevalent strategic thinking was that Australia's national security should be predominantly concerned with defence of the mainland against state actors. This led to an investment in capital equipment to defend the air-sea gap but allowed a run-down of the Army, the Reserves and the national capability to deploy and sustain an armed force.

The implications of this approach were brought into stark reality when, in 1999, the ADF deployed to East Timor, ending 'the great peace'. Despite UN resolutions and eventual support from 22 nations, Australia's initial deployment had to rely on existing capability that 'proved to be just over the line' to deal with a lightly-armed militia.⁹ In the decade following that shock, Australia regenerated its military capabilities through deliberate investment.

The current National Security Strategy, like the 'defence of Australia' policies of the 1980s, assumes that there will be time to prepare for conflict against a state actor and that there will be time to put in place and train the 'expeditionary tail' required to sustain combat forces deployed away from national support service infrastructure.¹⁰

Recent experience shows that the requirement for deployments such as East Timor (or the French in Mali) arise at very short notice, meaning that the ADF will deploy with whatever it has available. The risk of assuming away the problems of the region is that Australia could find itself in a position where it simply does not have the time to regenerate its military capability before a crisis impacts Australia's national interests.

In both the 2009 and 2013 Defence White Papers, there has been a strong focus on procuring modern air and maritime equipment but much less investment in the land environment. There is a real danger that, if continued, such unbalanced priorities might see Army losing its technological edge—and all three Services losing knowledge and hard won operational skills.

Strategic risk

Rather than assuming a long period of peace, the 2013 Defence White Paper describes the increasingly contested nature of Asia-Pacific and Indo-Pacific tensions and relationships, with China rising, the US rebalancing its attention to the Asia Pacific, and Japan, India, and other middle powers seeking to redefine their defence strategies.

As one of those middle powers, Australia—in its most recent Defence White Paper—has sought to protect and promote its national interests through a combination of a close US alliance, a range of Asian and South Pacific security partners, and a relationship with China based on mutual respect.¹¹ Defence diplomacy has received a new emphasis,¹² reinforcing the idea that we 'must seek our security in the region, rather than defending ourselves from it'.¹³

However, the 2013 Defence White Paper has already been heavily criticised for its less-than-transparent approach to funding, and the ‘absence of an investment plan to execute its policy and strategy objectives’.¹⁴ A detailed analysis by the Australian Strategic Policy Institute (ASPI) in 2012 contends that since the 2009 Defence White Paper, the defence budget has been reduced by A\$10 billion, a further A\$10 billion has been deferred from the forward estimates to ‘later years’ and A\$4 billion of cost pressures has been imposed through absorbed costs and hand-backs.¹⁵ Depending on how the deferrals are treated in future budgets, Defence will have ‘lost’ between A\$14 billion and A\$24 billion over 10 years. Australia’s defence spending is now 1.56 per cent of GDP, the lowest level since the 1930s. And yet the 2013 Defence White Paper reiterates that the Government remains committed to delivering the core capabilities identified in the 2009 Defence White Paper.¹⁶

The 2013 Defence White Paper does not acknowledge that there might be a link between the two themes. Diplomacy is cheaper than military capability, so some might argue that although the ADF cannot afford all the insurance it would like in the form of ‘hard power’ defence capability, it may compensate a little by increasing use of ‘soft power’ diplomacy. After some carefully balanced and sophisticated analysis of US-China relations, the paper briefly considers how the wider strategic environment in Asia is steadily deteriorating, suggesting this may not be the best time for Australia to be under-investing in defence.

One criticism of the 2009 Defence White Paper was that it ‘spoke loudly whilst holding a small stick’, in that it annoyed China, yet did not actually fund a potent and balanced Australian defence capability.¹⁷ A senior Lowy Institute commentator has likened the 2009 Defence White Paper to a red rag but the 2013 Defence White Paper to a white flag.¹⁸

By recognising that the strategic situation, especially in the Asia-Pacific region, is unstable and uncertain—and yet not funding defence to the level required—Australia has decided to take

a strategic risk. It may be that investment in other priority areas, such as education and health, will do more to promote Australia’s national interests over the next decade than investing in defence. Or it may be that Australia may look back after the next crisis (assuming it is able to) and wish it had invested in a much better ‘insurance policy’ from defence.

What would it be like to be ‘over insured’?

To understand the dynamics at play, it is useful to examine an opposing world view. Compared to the ‘strategic risk’ scenario, the opposite end of both the strategic security and the defence budget position is a scenario where Australia benefits from a relatively benign security environment, and yet the ADF has a large defence budget.

Even the rather gloomy 2009 Defence White Paper admitted that the conventional threat to Australia is low—and will remain so for the foreseeable future. China, India, Japan, North and South Korea, and Indonesia are the only nations likely to be capable of generating enough military capability to potentially destabilise the region for the next couple of decades. But given the strength of global economic interdependence, it could be argued that there is a major disincentive for any power to resort to hostile moves against anyone, let alone Australia.

Following that logic, does Australia really need the high-end capabilities envisaged in Force 2030, and that Government remains committed to delivering in the 2013 Defence White Paper?¹⁹ Of course, there are strong counter-arguments—similar reasoning on the pacifying effect of increasing globalisation of economies applied in the run up to 1914, and yet World War 1 still happened. Secondly, given ongoing tensions and rhetoric on sovereignty claims in the South China Sea, and ongoing tensions in the Korean peninsula, is it safe to assume a ‘rationalist’ approach by all nations in the region? However unlikely, in this ‘quadrant’ the setting is a benign security situation and a well-resourced ADF.

If successive governments do find the ability to fund the requirements of Force 2030, the ADF will be well equipped, and funded to activity levels that should enable the requisite training levels to be achieved and maintained. But by 2025 or so, in this scenario, we would have a well-equipped, well-trained ADF that is lacking any real direction or challenge, and the force does not get used, other than in defence diplomacy and in seasonal humanitarian assistance and disaster relief at home or in our near abroad. Familiar problems such as irregular boat arrivals, refugees, piracy and terrorism may not diminish but the ADF would have either a limited or a highly-specialised role in all those challenges, rather than finding a new *raison d'être* there in quiet times. In this scenario, the ADF will not have had a 'proper' fight since Afghanistan.

A well-equipped, well-trained and capable but un-blooded ADF may sound like the best of all worlds to a civilian. Inside the ADF, the 'wicked problem' to be solved would all be about the inter-play between hard training, turnover, focused retention and, above all, how to maintain a hard-edged fighting spirit in such times. It may well be much better to be lean and mean, than fat and jolly.

Rising to the challenge

The fourth scenario would see a properly resourced and balanced ADF, with the requisite capabilities to respond effectively to the full spectrum of potential threats in what is acknowledged to be an increasingly complex and contested strategic environment.²⁰ The challenge is finding the right balance between resourcing and structuring the ADF such that it is capable of responding to both traditional, state-based threats and irregular conflicts.

Increasingly, any assessment of the security environment is a blur of conventional and unconventional threats, requiring a full-spectrum defensive strategy. As the 2005 US National Defense Strategy puts it:

[T]raditional inter-state conflicts, irregular conflicts, catastrophic weapons of mass destruction threats; and disruptive threats from adversaries who may possess break-through technologies are increasingly merging into a deadly cocktail.²¹

For example, the global Islamist jihadist movement emanating from the Middle East may be cellular, non-state and irregular in its methods but its fanatical ideology compels it not only to use roadside bombs but to seek to acquire catastrophic capabilities, previously only imagined as part of a traditional, state-based threat. Moreover, states such as North Korea and Iran have the military potential to present a medley of traditional, irregular and catastrophic challenges simultaneously. This was graphically illustrated as early as 1982 when, in the Iran-Iraq war, children—some as young as 12—were used as human minesweepers sent in advance of Iran's other military forces to clear the fields, desert scrubland and marshes.²²

While most Defence capabilities have utility in either circumstance, the most expensive are typically more tailored to high-end, state-based threat contingencies. The currently-envisaged structure, as set out in Force 2030, would be dominated by four major cost programs: 12 long range conventional submarines, 100 Joint Strike Fighters, two LHD amphibious assault ships and Army's Plan Beersheba (including Project Land 400). Whether this is a perfect structure or one perhaps that is heavily weighted towards the high end of conflict is debatable.

To achieve this scale of modernised capabilities, the defence budget would need to be made robustly affordable in terms of both the forward estimates and the longer term. While there is no fixed 'magic ratio' between the costs of capital investment, manpower and operating costs, most allied militaries divide their costs roughly between the three. The Australian defence budget has become unbalanced by a shortfall in capital investment,²³ and it is this component which would need to be restored to generate the envisaged Force 2030 capabilities. A broad order of magnitude of the required investment to achieve Force 2030 would be to increase defence spending, immediately, to around 2 per cent of

GDP, which could generate Force 2030 by the roughly envisaged timescale.²⁴

Conclusion

This article has assessed four potential scenarios for the future, differentiated by the strategic security situation and Australia's investment in the ADF. It would be hard to imagine a realistic scenario in which the defence budget envelope is significantly enhanced; equally difficult to envisage is a scenario where the strategic environment is so benign as to be described as a 'great peace'.

Arguably the remaining scenario, strategic risk, is both the most realistic and most dangerous course of action—a defence force operating in an unstable security environment within the constraints of a tightly-controlled budget envelope.

In acknowledging this fact, perhaps it is time to reassess the envisaged future force structure to better reflect the likely requirement. Most importantly, in considering the nature of warfare and the shape of the ADF after Afghanistan, every attempt should be made to avoid the assumption that because of trending shifts in political, strategic or budget assumptions, our past experiences have little relevance. Most of Australia's recent military operations have involved deployed forces, with significant land components, seeking to engage, influence and protect communities from a spectrum of threats from non-state actors, including in Somalia, East Timor, the Solomon Islands and Afghanistan.²⁵

Captain Brown graduated from Sandhurst in 1998. She served with the ACE Mobile Force in Norway and Turkey; a REME Battalion in Germany; in a Training Regiment; operations officer in HQ Northern Ireland; battery operations officer in Cyprus; officer-in-charge of an Armoured Infantry Battalion workshop; and then Adjutant of a REME Battalion.

Promoted Major, she served as SO2 Psychological Operations in the Coalition HQ in Basra, then completed the UK Intermediate Command & Staff Course. After 3 years in the City of London with Barclays Wealth and Bank of America Merrill Lynch, she emigrated to Australia in 2012. As a lateral transfer to RAEME, she was serving in 7 CSSB in Brisbane at the time of writing. She has a Masters of Engineering from Cambridge University, and is a UK and Australian Chartered Professional Engineer.

Notes

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Securing space: Australia's urgent security policy challenge for the 21st century¹

Air Commodore Chris Westwood,
Royal Australian Air Force

Introduction

In 1963, there was one geosynchronous satellite in space, being used to examine the feasibility of establishing a worldwide communications network. Today, there are over 800, controlled by dozens of public and private operators in more than 50 countries,² all contributing to the estimated US\$123bn worth of satellite industry annual revenues.³

Australia, along with most developed nations, is becoming increasingly dependent on a range of space-based systems, a dependence which has evolved on the assumption that space is a secure domain. In reality, space is an incredibly fragile and insecure environment. The US, Russia and China all have the demonstrated capability to destroy space vehicles using ground-launched anti-satellite missiles (ASATs).⁴ Also, in February 2009, the first major collision between satellites occurred when a Russian communications satellite accidentally collided with a US-owned satellite, causing a debris cloud of over 1800 trackable fragments, which joined the 14,000 or so satellites, discarded rocket parts, and detectable debris and space matter already littering space.⁵

While there has been very little effort in Australia to ensure that its space interests are secure, many other nations have acknowledged this vulnerability and are now investigating options to secure space.⁶ This is a very complex challenge. There is no global consensus regarding how to secure space, with various nations considering options such as treaties, codes of conduct and even weaponising space. This paper proposes a national-level policy to establish a foundation for securing Australia's future space activities.

'Space security' defined

James Clay Moltz defines space security as 'the ability to place and operate assets outside the Earth's atmosphere without external interference, damage or destruction'.⁷ During the Cold War, when the US and Soviet Union were the only significant players in the space domain, a series of agreements and treaties were initiated that formed what is often referred to as 'the rules of the road' for space activities.⁸ As these nations developed their individual capabilities, they also developed a realisation that there were substantial mutual benefits in a stable and secure space environment.⁹

Even though these rules have become less relevant over the past decade, partially as a result of reduced Russian influence and an increase in new players, space has remained a relatively secure domain. While there is no doubt the US will remain the most advanced and influential space nation for the foreseeable future—in terms of assets in space, technological status and overall investment¹⁰—there is some significant risk that the overall security of space is changing as newcomers with different national interests and technical abilities develop rudimentary space capabilities, without necessarily the same 'rules of the road' to govern their activities and behaviour.

On 11 January 2007, China destroyed one of its inactive weather satellites using a conventional ballistic missile modified to perform an ASAT function. This was China's first successful ASAT space engagement. It left a dangerous debris cloud of more than 35,000 individual particles, large enough to cause damage to other space assets, much of which NASA expects to remain in space for at least two decades—and 10 per cent of it for up to 100 years.¹¹ Russia and the US had conducted similar ASAT events in the past¹² but, due to the mutual concern to keep space clear of debris, both countries showed restraint when it came to conducting counter-space tests and operations.¹³

There is growing international concern that the unrestrained development and transfer of ASAT technology, primarily from China, could see ASATs being developed in the Middle East, specifically in Iran, and in Pakistan.¹⁴ This may prompt nations such as India and Israel to initiate their own space warfare programs.¹⁵ It is likely also that over the next decade or so, several other nations may develop the capability to undertake rudimentary kinetic space warfare.¹⁶

Australia's space dependency

Australia, like most first-world nations, has become increasingly dependent on space to support a range of national functions. This is particularly evident in the defence domain, where over 50 per cent of the projects listed in the Defence Capability Plan (DCP) in the period to 2016 rely on space.¹⁷ Increasingly, the ADF's weapons systems, communications, intelligence and situational awareness tools are dependent on space-based systems.

Australia's dependence on space is not limited to Defence. Space-based technology 'underpins transport, precision agriculture, mining, precise timing for telecommunications [and] e-commerce'.¹⁸ The routine use of space is set to increase rapidly over the next decade as more and more national functions become critically reliant on space, with little or no provision for effective terrestrial redundancy for the space-based function. As Australia's dependence on

space increases, the consequences of losing the freedom to operate in the space domain will increase commensurately.

Moreover, while first-world nations are more reliant on space than emerging nations, the dependency gap is likely to increase over the next decade as first-world nations accelerate their use of space.¹⁹ Emerging nations are becoming mindful of the strategic consequences of such dependency. Attacking an advanced nation's space-based functions may present an attractive asymmetric war fighting option for nations with relatively low space dependency.²⁰

So, while Australia's dependency on space continues to increase, the development and spread of ASAT and other offensive space technology is also increasing,²¹ as is the potential for accidents resulting from congestion and increased debris in space. The longstanding secure space environment is rapidly becoming insecure as new players enter the space domain. Hence, assuring the security of space represents a key security challenge for Australia and, indeed, for the world over the next decade.

Australia's space security policy history

In 2005, Senator Grant Chapman (Liberal, SA) convened an informal expert group known as the Space Policy Advisory Group, which prepared a report later forwarded to the Prime Minister. The report noted that Australia had:

[N]o effective whole-of-government mechanism for addressing the wide-ranging implications for our national security of the fast-moving developments in space-related strategic policy, international relations or technology—issues which most other comparable economies have long since taken up as a matter of national priority.²²

The report concluded with two key 'essential and urgent objectives'. Firstly, that the Australian government develop and promulgate a broad and far-sighted whole-of-government space policy and, secondly, that a 10-year action plan to address Australia's space shortcomings be

developed.²³ Little has changed as a result of that report. Australia remains devoid of a national space policy, its space dependency continues to increase, and Australia still has no mechanism for addressing space security.

In 2008, the Senate's Standing Committee on Economics conducted an inquiry into Australia's space sector. Its November 2008 report, titled 'Lost in space', sought to examine Australia's role in the global space environment. It concluded with six recommendations, largely relating to the establishment of a national space organisation, deriving from the Space Policy Unit (SPU) within the Department of Industry, Innovation Science and Research.²⁴ While this suggests a degree of commitment to the development of a national space policy, there is no specific remit for this unit to address space security.

There was also no mention of space or space security in the first National Security Statement (NSS), delivered by then Prime Minister Rudd to the Australian Parliament on 4 December 2008,²⁵ although many of its objectives cannot be met without assured access to space.²⁶ The subsequent 2009 Defence White Paper made several references to space and specific reference to 'mission assurance'.²⁷ In this context, the White Paper acknowledges that Australia relies heavily on networked space-based systems and that technologies are emerging that could threaten this reliance.²⁸ To some extent, perhaps not surprisingly given the history of space in Australia, the White Paper infers that Defence has a leading role in space security.

Indeed, Australia's vast and isolated real estate has provided a strategically attractive, southern hemisphere location for many military space programs. In 1971, a ground station supporting the US Air Force's Defence Support Program satellites began operations at Nurrungar, near Woomera.²⁹ The Joint Defence Facility at Pine Gap began its intelligence collection operations near Alice Springs in June 1970 and has been operating there since. The interaction of operational, technical, scientific and policy staff at these installations has served Australia well, enabling it to gain expertise without the

substantial investment in infrastructure that would normally be required.³⁰

More recently, Australia has committed \$927m towards the US Wide-Band Global Satellite (WGS) system, which is 'the largest single direct investment that Australia has made in space to date'.³¹ The system will provide the backbone of ADF communications until about 2025. More broadly, the Government announced in its 2009 budget the allocation of \$8.6m for the development of the SPU in the Department of Industry, Innovation Science and Research to provide whole-of-government advice on space and industry development. The complementary Australian Space Research Program, with funding of \$40m, will similarly support space research, innovation and skills development in areas of 'national significance'.³²

Australia's key space policy influences

There are several key influences that will drive the development of a space security policy for Australia. The various approaches that Australia's allies and partners have to pursuing space security—and the nature of Australia's relationships with these partners—is obviously critical. Australia's space security policy will also be shaped by domestic influences. Indeed, domestic influences—such as supporting organisational structures and economic, industry and educational considerations—will specifically shape policy implementation and typically be more discretionary than international considerations.

International considerations

United States

The Australia/US alliance must be considered in the development of Australia's space security policy. It is inconceivable that Australia could have a space security policy that would either lead Australia in a separate direction to the US or, worst case, be directly counter to US policy. To do so and then expect to remain so closely connected to the US space program would be

folly. The Defence White paper is clear in this regard, noting that 'our alliance with the US is our most important defence relationship. Without access to US capabilities, the ADF simply could not be the advanced force it is today'.³³

US space policy has not changed fundamentally since it was first developed during the Eisenhower Administration in 1955.³⁴ At the macro-level, there have been two important constants and two important variables. The first constant is that US space exploitation—while having several other motivating factors (notably national pride and economics)—has primarily been about ensuring US national security. The second is that the US has always reserved the right to use force to protect its space capability.³⁵ The first variable has been the degree to which various Administrations have cooperated with other major space powers in mutual space pursuits. The second is that policy approaches have fluctuated between treaties, 'rules of the road' and specific weapons programs, driven by contemporary party, domestic and global considerations, and by key personalities within successive Administrations.³⁶

In 2002, the Bush Administration withdrew from the 1972 Anti-Ballistic Missile (ABM) Treaty and signalled its intention to deploy missiles to defend the US from missile attack, while also funding a series of space-based weapons projects, all of which put the US at odds with the rest of the space-faring world.³⁷ While the debate on whether to weaponise space is still active in the US, the Obama Administration has shown an inclination to be more cooperative with others.³⁸ There are also several think tanks, academics and some senior US officials espousing the value of a 'code of conduct' to govern space activities, likely reflecting the realisation that attaining 'space dominance' (a term coined under the Bush Administration), would be enormously expensive and most likely unachievable and unsustainable.³⁹

A final consideration is 'technological edge'. The US is the only nation that can conduct a 'robust' degree of global space surveillance. It is the only nation that knows the location and activity of

most space vehicles and a considerable amount of space 'junk'.⁴⁰ And, while the global space surveillance coverage of other nations is likely to increase, the US will remain the leader for the foreseeable future. For all intents and purposes, that makes the US the 'traffic controller' of space and the logical key contributor to and leader of the global space surveillance effort.⁴¹

China

China is the major space power of the Asia-Pacific region⁴² and, although technically decades behind the US,⁴³ is increasingly becoming a competitor with the US in many space areas. China has long called for space to be free of weapons. At the Conference on Disarmament in Geneva in 2002, China (along with Russia) argued for space arms control and a new 'Outer Space Treaty', to include a ban on the stationing of weapons in space and the use, or threat of use, of force against space objects (although its ASAT test in 2007 arguably undermined this position).⁴⁴

Australia's space security policy should recognise the importance of China as a rising space power. The different approaches to space security by China and the US, coupled with the underlying lack of trust between the two, creates a tension in Australian policy development. But it also creates an opportunity for Australia to use its bilateral ties with both to seek common ground in space security, which would make an important international contribution to space security.

The Asia-Pacific region⁴⁵

The creation of the Asia Pacific Multilateral Cooperation in Space Technology and Applications (AP-MCSTA), since evolved to the Asia-Pacific Space Cooperation Organisation (APSCO), which came into being when a memorandum-of-understanding was signed between China, Pakistan and Thailand in 1992, signalled China's desire to be identified as the major regional space power. Japan has coordinated a separate regional forum, known as the Asia-Pacific Regional Space Agency Forum (APRSAF) since 1993. Neither has declared a policy approach to space security and, given their

respective charters, neither is likely to in the near future.⁴⁶

APSCO was formed to bring together the substantial resources of the Asia-Pacific nations in pursuit of 'peaceful development of outer space among Asian-Pacific countries'.⁴⁷ With seven inaugural members, including China, Thailand and Pakistan, and invitations to the 'space technology powerhouses [of] Japan, Russia, Australia and the US',⁴⁸ China had high hopes the forum would become a significant contributor to space technology development and cooperation in the region. Of interest is how wide the definition of Asia-Pacific has been cast, as the forum now includes Peru, Iran, Pakistan and Turkey, as well as Indonesia.

APRSAF was formed to 'enhance the development of each country's space program and to exchange views towards future cooperation in space activities'.⁴⁹ The group has 27 participants, including the US, China, India, Japan, Australia and Indonesia, and includes a series of regional and international organisations, including ASEAN and the European Union (EU). The group tends to focus on the use of space as a vehicle for socio-economic development and differentiates itself from APSCO by both its membership and objectives, and its means of cooperation. Essentially, APSCO is seen as an organisation that promotes technology transfer, while APRSAF supports a series of specific projects, including education.⁵⁰

There are several impediments to space security cooperation in the Asia-Pacific region, notably longstanding historic mistrust and strategic competition between a number of regional states. That said, if the region could agree to a space security approach, it would become a very powerful international voice. And this is not unrealistic, as the region has shown itself to be pragmatic over recent years, putting practical resolution of several key issues ahead of historic mistrust. An example is the recent agreement in principle for an East Asian free trade area, demonstrating that the major regional powers can come together where there is collective self-interest.⁵¹

This presents an opportunity for Australia to play a leadership role in the development of space security policy in the Asia-Pacific region, where Australia's leading export partners are China, Japan and South Korea.

Australia's middle-power diplomacy

Australia has a long history of shaping and influencing opinion on particular global issues. The Chemical and Biological Weapons Conventions and the protection of the Antarctic under the Antarctic Treaty are two good examples. Both suggest Australia could play a similar role in global space security issues. Indeed, as a close ally of the US, a key trading partner and increasingly a friend to China, an important member of the Asia-Pacific region and a respected 'middle power' in global diplomacy, Australia is ideally positioned to take an active role in progressing space security policy.

The European Union

The primary motivation in examining the EU's approach to space security is the maturity of its current policy and its leadership in calling for a rules-based code of conduct for space security. In 2008, the EU adopted a 'Code of Conduct for Outer Space Activities',⁵² taking the opportunity to play a leading role in global strategic affairs—immediately after the Chinese ASAT incident—when space security was high on the international security agenda. The EU code is less restraining than the treaty proposed by China and Russia at the Conference for Disarmament in 2002 (and again in 2008), as it is not legally binding and relies on voluntary adherence.⁵³ An extract is as follows:

The purpose of the present code is to enhance the safety, security and predictability of outer space activities for all, recognising that a comprehensive approach to safety and security in outer space should be guided by the following principles:

- (i) freedom of access to space for all for peaceful purposes,

- (ii) preservation of the security and integrity of space objects in orbit, and
- (iii) due consideration for the legitimate defence interests of states.⁵⁴

There are several examples where similar codes have been successful, including the 1972 Code of Conduct in the High Seas.⁵⁵ Over the years, Australia has shown a willingness to participate actively in the development and honouring of such codes, as well as some latent interest in a 'rules-based' international community.⁵⁶ In the space domain, a code of conduct would begin the process of providing behavioural regulation in space. This may or may not lead to more formal arrangements, such as treaties. But it would codify global behavioural expectations.

Domestic considerations

The argument for a 'National Space Agency'

Australia has a decentralised approach to space, with multiple entities in the Department of Defence, the Department of Industry, Innovation, Science and Research, CSIRO, the Australian Communications and Media Authority, the Bureau of Meteorology, the Department of Climate Change and several other government departments. These tend to develop their own policy within their own 'stovepipes', with very few national-level or cross-portfolio investments. This is both inefficient and confusing for other nations and organisations trying to reach into the Australian space community. As a result, Australia is missing opportunities to engage in the global space security debate and to expand its space enterprise.

Of the six recommendations in the 'Lost in space' report, five were focused on the need to establish a national space agency.⁵⁷ The arguments revolve around efficiency, developing and maintaining a cohesive national approach to space development, and providing an informed and appropriate government-level point-of-contact for external space contacts. The Canadian Space Agency is referred to in the report because Canada is 'arguably the most similar country to

Australia'.⁵⁸ It was established in 1989 and now includes a number of facilities, 575 permanent staff and some 100 rotating positions for students.⁵⁹ It is very active in global space activities and has well-established relationships with most of the world's significant space agencies.⁶⁰

This paper agrees that Australia needs a national space agency. Under the current Australian government departmental organisation, the obvious department to provide the necessary whole-of-government vision and perspective is the Department of Prime Minister and Cabinet (PM&C). Within PM&C, there is an existing high-level National Security Adviser, with a growing span of influence over whole-of-government security issues.

This would appear to be a logical place initially to establish a body that could grow into an Australian Space Agency (ASA). The level of statutory authority, control, staffing and budgeting would need to be subject to detailed study, as would the practicalities of relocating the existing space entities from their current departments into the ASA.

Economic considerations

Investment in space security should be seen as an essential and sensible national security cost, much like maintaining maritime or air surveillance capabilities, or maintaining alliances and regional relationships. While it is relatively easy to identify costs associated with developing space security capabilities, it can be difficult to quantify potential savings, that is, how do we cost 'security'? If space security policy has the desired effect, there would be no hostile incidents in space, which would obviously be of significant economic and national security benefit.

The Canadian Space Agency is funded at approximately CA\$375m per year.⁶¹ Apart from the security outcomes that would be expected with such a level of investment, investment in space security can also return a measurable economic benefit to industry. For example, by the year 2000, '[Canadian] exports in space

technologies had become greater than government budgets each year for supporting space activities'.⁶²

Development of an Australian space industry

Australia's space industry is characterised by a series of highly-specialised companies producing technology, components and applications that generally support other nations' space activities.⁶³ These 'niche' capabilities are well-respected around the world but, in reality, even as a combined grouping they employ very few people and do not represent a significant industry sector in Australia. It is difficult to make an argument that supports Australia trying to build a space industry to compete with the established overseas producers, launchers or operators of satellites. This would require substantial Government seed investment and, in reality, it is unlikely that Australia would be able to create and then sustain a serious competitive market.

What Australian industry can do better is identify global opportunities and priorities as a sector, and focus its investment on these opportunities. With the aid of its space agency, Canadian industry has done just that and has been very successful.⁶⁴ To do similar, Australian industry needs a clear understanding of what Australia's priorities—and, perhaps more importantly, its realistic opportunities—are for space and a roadmap that identifies where Australia is likely to invest in the coming years. If space security is to be a national priority for Australia, then Australian industry should be encouraged to become involved in programs that support Australia's space security endeavours. Australian industry needs some degree of certainty before it invests in space. The development of policy should provide that certainty.

National space education

Australia has a pressing need to educate a future space workforce. Such a workforce would need to include operators, technicians, engineers, scientists and, importantly, policy makers. Australia has historically been able to train

operators, technical and scientific staff to work at sites in Woomera, Pine Gap and the various defence and scientific sites around Australia and in the US.

However, even though training and education opportunities still exist, there are little perceived career opportunities in the space industry in Australia. As a result, it is difficult to attract new students and retain graduates in Australia, particularly outside the defence area.⁶⁵ Australia needs to attract engineers, technicians and scientists into key space technology areas, such as signal processing, space-focused physics, systems engineering, and network design and management. One of the benefits of introducing an ASA is the opportunity it would provide to focus on building both a sustainable national education effort and industry opportunities that would offer interesting and rewarding employment for space graduates.

Apart from professional space training, Australian executives, managers and public officials—and the general public for that matter—are largely unaware of the dependence Australia has on space. Again, the formation of an ASA would enable a targeted and coordinated education program to be initiated across all domains and disciplines within the Australian community.

An Australian space security policy proposal

Australia must decide what it seeks to secure with regards to space, before it develops policy and implementation strategies. The following vision statement is proposed for Australia's space security policy:

Australia's space security policy seeks to ensure that Australia has assured and secure access to space-based services, irrespective of the owner or provider of those services, which support all forms of national endeavour and which operate in space free from the threat of interference, damage or destruction.⁶⁶

The vision statement is simple yet comprehensive and would be suitable for the next iteration of the National Security Statement. In implementing

that vision, it is suggested Australia should pursue its space security policy through three key strategies:

- **Strategy 1.** By increasing its investment over the short to medium term in the development of space surveillance infrastructure, technical and operational expertise, and information sharing with the US, Australia would raise its profile and contribution to the international development of a space security framework.
- **Strategy 2.** By engaging diplomatically with the US, China, the EU and our Asia-Pacific partners, Australia would investigate the applicability of a code of conduct for space activities for the Asia-Pacific region.
- **Strategy 3.** By the creation of the Australian Space Agency, Australia's would advance its interests in space, in particular in space security, and provide a single centre of space expertise in Australia, linking investment and existing programs with the national space security policy and the broader national strategic agenda.

Conclusion

Australia is increasingly dependent on space-based systems for its economic, security, environmental, cultural and social interests, and yet the space environment is becoming increasingly vulnerable. While many nations are publicly debating and championing various space security options, Australia has no space security policy and to date has shown little interest in the global debate. This should change if Australia is serious about securing its space-based national endeavours.

Australia's space policy must be developed within the US alliance framework. It must also recognise China's strategic space aspirations and, crucially, the importance of the relationship between China and the US in future space security. It should also be cognisant of the dynamics of the Asia-Pacific region and the increasing interest in that region of space and space security.

The space security policy proposed in this paper is developed around the broad approach of championing a code of conduct in the Asia-Pacific region and bringing together the US and China in space security policy. It provides investment, predominantly in the space surveillance area, and seeks ultimately to bring together Australia's national space endeavours under a single policy and a single statutory authority—the Australian Space Agency.

Air Commodore Chris Westwood joined the RAAF in 1982 and, following air defence controller training, was posted to various operational and instructional posts. His executive posts include CO 1RSU (1994), CO 3CRU (2001-03) and OC 41WG (2004-08). His staff appointments include Operations Manager AEW&C acquisition project (Project Wedgetail) 1997-2001.

He has participated in a number of homeland defence operations, including providing security for the Melbourne Commonwealth Games. During 2007/08, he deployed three times to Afghanistan, heading air worthiness accreditation teams. He commenced as Director General Joint Capability Coordination in January 2010. He has a Graduate Diploma in Management Studies, a Masters of Arts (strategic studies) and an MBA. In 1997, he published 'The future is not what it used to be', as part of a Chief of Air Force fellowship.

Notes

- ¹ This article was published in Issue No. 183 of the *Australian Defence Force Journal* in 2010.
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- ³ Richard H. Bueneky, 'Protection of critical infrastructure', presentation to the UN Institute of Disarmament Research Conference on 'Space security 2009: moving towards a safer space environment', Geneva, Switzerland, 16 June 2009.
- ⁴ Johnson-Freese, *Heavenly ambitions*, p. 16.
- ⁵ *Space Daily*, 'Satellite collision not to delay China's space programme', *Space Daily* [website], 14 February 2009, available at <http://www.spacedaily.com/reports/Satellite_Collision_Not_To_Delay_China_Space_Program_999.html> accessed 13 March 2017.
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- ⁷ James Clay Moltz, *The politics of space security – strategic restraint and the pursuit of national interests*, Stanford Security Studies: California, 2008, p. 11.
- ⁸ These are described in Johnson-Freese, *Heavenly ambitions*, pp. 37-9.
- ⁹ Brett Biddington, *Skin in the game: realising Australia's national interests in space to 2025*, Kokoda Foundation: Canberra, 2008, p. 47.
- ¹⁰ Johnson-Freese, *Heavenly ambitions*, pp. 1-7.
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- ¹² David Steele, 'The weaponisation of space: next arms race?', Centre for Defence and Strategic Studies, Australian Defence College: Canberra, 2007, p. 6.
- ¹³ Johnson-Freese, *Heavenly ambitions*, p. 39.
- ¹⁴ Desmond Ball, 'Assessing China's ASAT program', Austral Special Report 07-14S, RMIT University: Melbourne, 14 June 2007, pp. 6-7.
- ¹⁵ Ball, 'Assessing China's ASAT program', pp. 1-3.
- ¹⁶ T. Allard, 'Battle lines in the final frontier', *Sydney Morning Herald*, 25 April 2008, p. 31 as referenced in the Senate Standing Committee on Economics, 'Lost in space: setting a new direction for Australia's space science and industry sector', Commonwealth of Australia: Canberra, 2008, p.19. In addition to ASATs, which currently target specific space vehicles, non-specific attacks by crude weapons have the potential to deny orbits in space for a very long time by creating chain reactions of debris clouds.
- ¹⁷ Department of Defence, 'Submission to Senate Standing Committee on Economics Inquiry into "the Current State of Australia's Space Science and Industry"', Department of Defence: Canberra, 2008, p. 2.
- ¹⁸ Graeme Hooper as quoted in 'Lost in space', p. 13.
- ¹⁹ A good example of this can be found in the Defence Capability Plan. More and more equipment is being introduced into service with the ADF that is dependent on space capabilities.
- ²⁰ Wade L. Huntley, 'Smaller state perspective on the future of space governance,' *Astropolitics*, Vol. 5, No. 3, September 2007, p. 253; and Ball, 'Assessing China's ASAT program', p. 6.
- ²¹ There are several other methods of attacking in space, including lasers and RF weapons. Discussion of these is beyond the scope of this paper but are well covered in several references, including Ball, 'Assessing China's ASAT program', pp. 2-3.
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- ³⁴ For coverage of US space policy history, see Moltz, *The politics of space security*.
- ³⁵ Johnson-Freese, *Heavenly ambitions*, pp. 1-3.
- ³⁶ Moltz, *The politics of space security*, pp. 86-301.
- ³⁷ James Clay Moltz, 'The past, present, and future of space security', *Brown Journal of World Affairs*, 2007, Vol. 14, No. 1. p. 191.
- ³⁸ During his election campaign, President Obama suggested a code of conduct for space activities: see 'Presidential candidates respond to seven key national security questions', Council for a Liveable World, 16 August 2007, as cited in Nardon, 'Space security', p. 9.
- ³⁹ Johnson-Freese, *Heavenly ambitions*, pp. 32-3 and Moltz, 'The past, present and future of space security', p. 193.
- ⁴⁰ Johnson-Freese, *Heavenly ambitions*, p. 10.
- ⁴¹ Since this article was written, the US has issued a revised National Space Policy that includes a change of focus in the US position, particularly around developing international 'rules of the road' (especially from an arms control perspective, but also regarding debris mitigation), the commitment by the US to maintaining a leadership position in all respects (rules, technology, industry etc) and its emphasis on international cooperation: see <www.whitehouse.gov/sites/default/files/national_space_policy_6-28-10.pdf> accessed 10 September 2010.
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- ⁵⁵ Nardon, 'Space security', pp 10-2.



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- ⁵⁶ Australian Government, *Defending Australia in the Asia Pacific century*, pp. 43-4.
- ⁵⁷ Senate Standing Committee on Economics, 'Lost in space', pp. 66-7.
- ⁵⁸ Senate Standing Committee on Economics, 'Lost in space', p. 68.
- ⁵⁹ See
<http://en.wikipedia.org/wiki/Canadian_Space_Agency
> accessed 13 November 2009.
- ⁶⁰ Huntley, 'Smaller state perspective on the future of space governance', pp. 245-52.
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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 Yanukovich, 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.⁴

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.⁵ 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'.⁶ 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.⁷ 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.⁸

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’.⁹ 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.¹⁰

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).

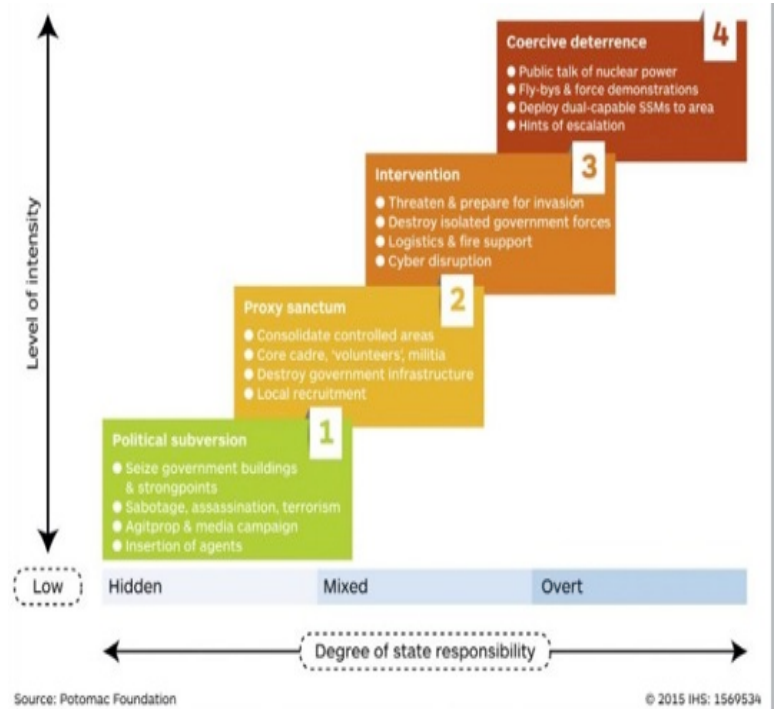


Figure 1: A model of hybrid warfare¹¹

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.¹²

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.¹³ 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 Yanukovich.¹⁴

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.¹⁵ 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.¹⁶

Following the establishment of a credible political alternative, Russia used direct coercion of Ukrainian military forces stationed in Crimea 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.¹⁷ 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.¹⁸ 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.¹⁹

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.²⁰

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.²¹ 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.²²

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).

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.²⁴

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.²⁵ Equally, Russia’s denial of involvement in Crimea made it difficult to reach an international consensus regarding a response.²⁶ While some stakeholders desired a full-scale response, others remained concerned about escalating the situation.²⁷

It was Western debate and disagreement that allowed Russia to install a political alternative and gather political legitimacy.²⁸ Russia achieved this effect through a focus on two temporal considerations: ‘timing’ and ‘time’. ‘Timing’

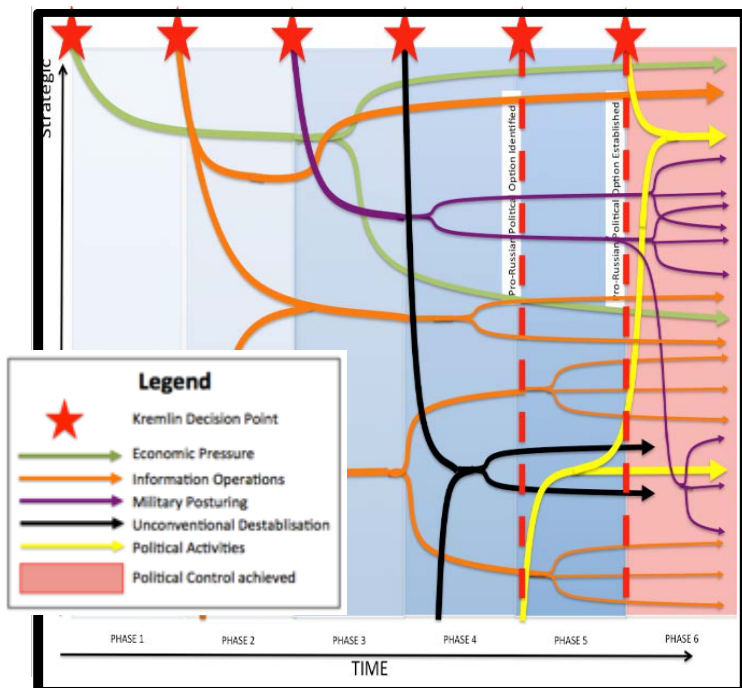


Figure 2: Russia’s hybrid warfare model ²³

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.²⁹ 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.³⁰ 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.³¹ 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.

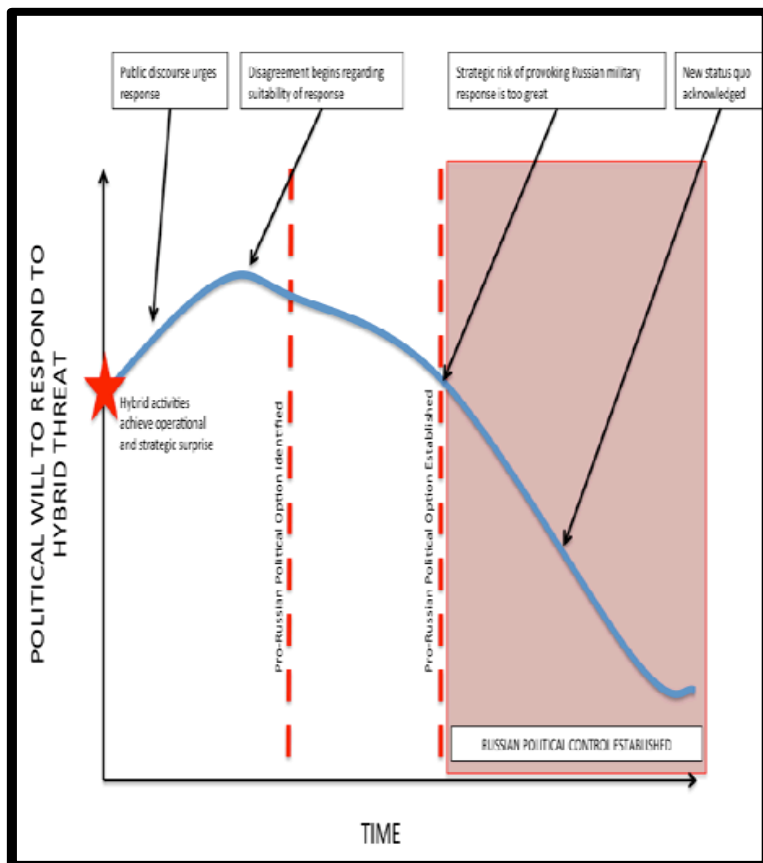


Figure 3: The effect of hybrid warfare on political will to respond³²

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.³³ 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.³⁴

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.³⁵ 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.³⁶ 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.³⁷ 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.³⁸ Self-imposed risk aversion has centralised responsibility for important decisions, meaning that higher headquarters are usually required to evaluate complex circumstances.³⁹ 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.⁴⁰ 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.⁴¹ 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.⁴² 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.⁴³ Australian departments and agencies should war game hybrid-warfare scenarios 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.⁴⁴

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'.⁴⁵ 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'.⁴⁶ 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 to avoid damaging national objectives. Against a hybrid threat, the strategic corporal may be the ADF's most powerful weapon.⁴⁷

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.⁴⁸ 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.⁴⁹

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’.⁵⁰ 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.⁵¹ 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 to direct intelligence staff to key areas of interest.⁵² 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 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.⁵³

This concept is not unfamiliar to the ADF—indeed, it already espouses the theory of ‘mission command’.⁵⁴ 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.⁵⁵

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.⁵⁶ 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 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.

At the time of writing, Captain Nicholas Barber was 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.

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The future of war debate in Australia. Why has there not been one? Has the need for one now arrived? ¹

Dr Albert Palazzo, Department of Defence

Introduction

Over the past several years, members of the US military and defence communities have participated in a robust, vibrant, sometimes painful but ultimately healthy debate over the changing character of war and the organisation, equipment and doctrine that the US Army requires to meet the challenges of future conflict. This has not been the first time that the US has shaped the future of its military in public view. The debates on the 'revolution in military affairs' in the 1990s and the implementation of rotary wing aviation in the 1950s provide other ready examples.² Yet, as the US Army wrestles diligently with fundamental questions about how it should prepare to fight wars of the future, the primary response to these same questions from within the Australian Army has been one of silence.

The lack of debate within the Australian Army is odd and worrying. After all, self-examination is one of the hallmarks of military professionalism and reflection is a key enabler when interpreting recent operations and predicting future

requirements. The Australian Army is not without recent operational experience to draw from as a starting point for such a debate. The opposite is true; the last decade has been among the force's busiest. The Australian Army has been a witness—if not accessory—to the US triumphs and tragedies in Iraq and Afghanistan, while operations in Timor Leste and elsewhere in the region add a further layer of experience. As is the case for their US counterparts, there is no doubt that members of the Australian Army have the operational experience needed to underpin a reflection on the art of war and to think on its future course.³

This article will explore the reasons for the lack of debate within the Australian Army on the future character of war. In doing so it will summarise the scope of the US debate to contrast it with the absence of a robust and open deliberation of this subject within this country. It will speculate on what cultural, bureaucratic and operational factors inhibit debate by the members of the Australian Army and suggest how these impediments might be overcome. Lastly, this article will highlight why such a debate is urgently needed by the Australian Army as its members adjust to a post-Afghanistan role, while facing emerging challenges to the nation's strategic and operational environments.

While the article's focus is on the Army, its conclusions could apply equally to the RAN and RAAF, and to the ADF as a whole. It appears that the entire Australian Defence organisation suffers from a deep-seated fear of allowing its members to engage in debate on the critical issues that affect the ADF's future and the nation's security. This is a policy which in the end is foolhardy, counterproductive and fiscally wasteful—and which should be changed. It is the opposite of what needs to be done; it was by openly encouraging debate, for example, that after its defeat in the First World War the German Army correctly identified and responded to the

changing character of war.⁴ It is hoped that this article will spur the Australian Defence organisation to accept the necessity for debate in the US style and, in doing so, commit itself to facilitating the free and open sharing of ideas and opinions by its members.

The US future of war debate

The most recent future of war debate in the US was held in public view, beyond the Pentagon's control, and was representative of the best traditions of that nation's belief in free speech and the exchange of ideas. It was conducted unchecked by senior officers and took place in widely available publications, including the online *Small Wars Journal*, the *Armed Forces Journal*, and the National Defense University's *Joint Forces Quarterly*, as well as in academic journals and books, and in other outlets such as online forums. In 2010, the US Army's Strategic Studies Institute held a public conference on the theme of 'war in the 21st century'. Its director described the issue as the most pressing question facing the international defence community.⁵ The debate has involved serving and retired officers, usually with recent operational experience, as well as academics, security thinkers and defence bureaucrats. No-one has been afraid to challenge existing orthodoxies. Of additional significance has been that the debate has not been top-down driven. Rather, many of its participants have been mid-career officers whose positions of institutional influence still lay in their future.⁶

The debate has coalesced around the personalities of two individuals, Lieutenant Colonel John A. Nagl (Retd) and Colonel Gian P. Gentile. Both are smart, experienced combat veterans who have found themselves on the opposite sides of the issue. They are well educated and have PhDs from important universities. Nagl's is from Oxford and his thesis was published as *Learning to eat soup with a knife: counterinsurgency lessons from Malaya and Vietnam*.⁷ He was part of the writing team for the US Army/US Marine Corps' counterinsurgency manual (FM3-24), for which he wrote the foreword.⁸ Gentile's PhD is from Stanford

University and he too has had his thesis published.⁹ The two have also held professorships at the US Military Academy.

Nagl and Gentile have squared off in the pages of *Joint Forces Quarterly* on more than one occasion and have been supported by allies or challenged by opponents elsewhere.¹⁰ For example, *Small Wars Journal* hosted a 'point-counterpoint' discussion in response to Nagl and Gentile having published articles of opposing view in *Joint Forces Quarterly*.¹¹ This spawned a lengthy and frank debate on the *Small Wars Journal* website.¹² At its height, neither side showed any sign of shrinking away from the argument and at times hard feelings must have resulted, even if temporary. As one commentator noted, both men deserved great credit for their role in helping to shape the future of the US military.¹³

In brief, Nagl advocated that the future character of war would be asymmetric, with modern Western military organisations having to separate insurgents from the population, in complex terrain, in full view of the international media. He foresaw the future role of the US Army to be one of stabilisation and state building, with a strong element of social engineering. Implicit in Nagl's argument was a commitment to a vast military enterprise lasting decades, during which the US would remake targeted countries into a form in which the international forces of destabilisation would find little refuge.

Gentile, by contrast, feared that the US Army was at risk of becoming a constabulary force that knew how to build nations in the US image but possessed little capacity for conventional warfighting. Gentile was also unconvinced of Nagl's ability to forecast the future, and held serious concerns over force specialisation in a world in which there was a not insignificant risk of conflict resuming on the Korean Peninsula, the use of force to settle the 'Taiwan problem' or a clash occurring between the US and Iran. Emerging national security risks associated with the rise of China was another eventuality for which a counterinsurgency-focused force would have little utility. Gentile insisted that a single concept army would not prove to be the best

choice for the future.¹⁴ Andrew J. Bacevich divided those participating in the debate into two camps: 'crusaders' (Nagl) and 'conservatives' (Gentile).¹⁵ 'Crusaders' seek to use the US defence force to remake the world, whereas 'conservatives' see a more limited role for its military power.

The intensity of the US debate on a counterinsurgency versus conventional future of war has begun to ebb, although a compelling case has been made for it to continue.¹⁶ At times, Nagl's 'crusader' camp seemed to be ahead on points but, more recently, it has appeared that the 'conservatives' have come to the fore. The move by General David Petraeus, a counterinsurgency guru, to the Central intelligence Agency may be suggestive of an institutional decision for a more conventional war future. Reinforcing this outcome would be the US Government's pledge to refocus its security primacy on the Asia-Pacific and to meet the challenge of a rising China.

Perhaps a 'conservative' victory would always have been the debate's outcome. As Colin Gray has pointed out, a long-term shift in the US Army's capabilities from regular to irregular war would have required the organisation to overcome deep cultural preferences.¹⁷ Such a fundamental change may not have been possible, at least not without concerted pressure from both the defence and political hierarchies.

That the debate did not result in significant change—or at least it appears not to have so far—in the US Army's posture is immaterial to this discussion. It is the organisation's willingness to engage in honest self-reflection that is important. The Nagl-Gentile debate enabled the organisation to make sense of a decade of war and to reflect on which aspects of that experience were relevant for the future and which were not. The debate also encouraged the organisation to examine its experiences from the perspective of future requirements and to address issues of core values. War is not a static enterprise. It is only by bringing its study into the open that a military organisation can begin to understand its changing character.

Why has there not been a future character of war debate in Australia?

There may be a temptation to dismiss the lack of a future character of war debate in Australia as a consequence of the Army's small size, especially relative to that of the US Army. It is worth asking if a middle power such as Australia can realistically discern and shape the future character of war on the international stage, especially when a great power struggles with this task. However, size should never be a prohibition on intellectual curiosity. The world is a potentially hostile place for all nations, and a country's relative size does not exempt the members of its defence force from treating their profession with the intellectual seriousness it deserves.

There is a related argument that the Australian Army's small size relative to that of the US Army means that everyone knows everyone, so a formal debate on emerging issues is not needed. This too is not a satisfying excuse. Heated discussions around a barbecue are a good way for thinking officers to blow off steam at the difficulties they face in challenging the force's orthodoxies but have no enduring value if such ideas do not reach a forum in which they can be challenged and scrutinised by others, including outsiders. Organisational inculcation of new ideas will not occur without dissemination throughout the organisation and beyond.¹⁸

A second tempting explanation for the failure of Australian Army members to challenge the existing orthodoxy is that the US debate was concerned with more than just the future character of war. There is an element of truth in this as the US debate does contain a parochial subtext on the utility of military power in the achievement of national aims. In advocating for or objecting to its transformation into a primarily counterinsurgency force, those debating the US Army's future were also questioning the nature of US grand strategy—the 'hows' and 'whys' of American behaviour on the world stage.¹⁹ Stripped of its military terminology, a strong

element of the Nagl-Gentile debate was actually about the purpose of the US in the world.²⁰

Yet the underlying scope of the US-based debate does not lessen the importance of holding an Australian-based one—one that defines a future concept of war within an Australian context. Undoubtedly there will be overlap between the two. But only Australian military professionals and their civilian counterparts can debate the institution's own future and decide how it integrates into the nation's particular strategic situation, as well as the broader sweep of the evolving art of war. Thus debate on the future character of war must occur in Australia. But the question remains: why has it not? There are several reasons for this state of affairs and they can be characterised as cultural, bureaucratic and operational impediments. It is to their explanation that this analysis will now turn.

Cultural impediments

One of the predictors of the richness of any debate is the intellectual capacity of its participants. As noted before, Nagl and Gentile both hold PhDs from prestigious universities. To this list could be added Petraeus, who has a PhD from Princeton University. Officers with such backgrounds have the credibility and training to weather the sometimes brutal thrust and parry of a challenging and robust debate. They also have the knowledge and confidence to comment outside their Service cultures and to engage with thinkers from the broader defence and academic communities.

Yet it is all too easy to be dazzled by such credentials, and it should be recognised that most US officers do not have such high-level degrees, nor need they. Moreover, soldier scholars are not unknown in the Australian Army. One could point to a number of serving and former soldiers who have been awarded a PhD and some of these have gone on to distinguished careers in academia. A number of Australian officers have excelled at the US Army School of Advanced Military Studies and the US Marine Corps School of Advanced Warfighting, while the Army has allowed a couple of senior officers to attend the

Johns Hopkins School of Advanced International Studies in Washington DC. Thus the force does possess a cadre of thinking soldiers.

Such opportunities as these do allow their recipients to think deeply about the profession of arms in a challenging intellectual environment. The point is that the existence of officers in possession of higher degrees is not what enables a debate to take place. An educated, intelligent and curious officer corps is important but such personnel must work within a welcoming cultural framework that creates a conducive environment for the development of challenging ideas and their frank debate. Unfortunately, such an environment does not currently exist in the Department of Defence. Admittedly, this state of affairs is not limited to Army or the ADF. Rather, it is a manifestation of the sense of anti-intellectualism that pervades the broader Australian society.

Australians tend to favour the 'happy larrikin' over the deep thinker. Within the defence realm this takes the form of a preference for 'doers' over 'thinkers' or, as one officer observed, the Army has a cultural fixation on delivering outputs rather than achieving outcomes.²¹ Planning is a forte of military organisations but all too often the plan is seen as the end-point. What is really important is the context in which the plan sits and the goals it hopes to achieve. Being a 'thinker' requires a different intellectual skill-set, a breadth of knowledge, the ability to see nuances and shades of grey, and a willingness to challenge. The ADF is by no means unique in this weakness. For example, Huba Wass de Czege has commented that the US Army spends far too little time trying to understand a problem before trying to solve it, usually with unfortunate results.²²

Periodically, the Army has launched initiatives for the promotion of study but all of these have quickly fallen away, unable to find a fertile patch in the force's culture in which to flourish. For example, towards the end of his tenure as Chief of the General Staff (the Chief of Army in today's parlance) Lieutenant General John Coates established an essay-writing program in military history, the discipline most vital in the education

of a military professional.²³ Within weeks of his retirement, another general made sure the idea met a swift death. For this other general, 'intellectuals' and 'book learning' were terms of contempt.²⁴

Intellectualism is an undervalued trait in the Australian Army, despite the presence of a small cadre of serving and retired 'soldier scholars'. It should be pointed out that the very existence of these soldier scholars was a result of their own efforts; they are not the product of institutional want and the Army does not have a program to support high-level research outside of military schools. At best, it is an ad hoc approach, with little institutional support beyond that of happenstance. This was also the case for the two senior officers who attended Johns Hopkins, as mentioned earlier.

Unfortunately, more recent efforts by other officers to secure support for participation in this program have failed; it appears that the Army's interest has proven all too brief. The organisation responsible for shaping the career of intellectually minded officers is the Directorate of Career Management (DoCM). This agency is in an unenviable position. In the absence of institutional direction—and funding—expediency wins out, with priority given to putting the best officers into billets with immediate needs, rather than looking to the long-term benefit of a better-educated individual. DoCM, which would be well-placed to drive an advanced education program, must respond to institutional priorities which continue to favour doers over thinkers and the practical over the conceptual.

The ability to perform a task is certainly an important part of being a soldier. But getting on with the job should not take second place to being able to put the job within the context of, for example, why it is being done, how it will contribute to the goal and what might be the second-order consequences. One approach to accomplishing the Army's mission leads to task-focused work, the other to thinking-focused work. The Australian Army needs to empower the latter so that it is as valued as the former. If the Army is to become an organisation which

facilitates the debating of ideas, it will need to attach greater importance to conceptual thinking and reallocate resources accordingly.²⁵ It will need to become more than an output-driven organisation.

Bureaucratic impediments

If culture serves as one form of impediment to debate, institutional barriers provide another. The Department of Defence has set in place policies that discourage access to forums in which personnel could participate in or hold debates. In fact, the institutional preference is to have full control of ideas and messages, particularly if they are unorthodox ones. This is accomplished through a number of internal protocols that serve to limit the exchange of ideas. For example, members of the Defence community are required to seek the approval of their chain of command prior to any public comment or the release of any images or information to organisations outside of the Department.²⁶ Control is appropriate in matters of national security but the Department of Defence's limitations on external contact go much further.

In an era when access to the internet and social media are taken for granted, and as information increasingly resides on the web, the Department of Defence continues to struggle with the idea of unfettered internet access for its members. Web-based applications that cannot be monitored, or where there is the ability to download information or participate in forums, remain prohibited.²⁷ Strangely enough, Defence even disables links to university databases from within the organisation because of difficulty in monitoring the sites that employees may investigate. Thus, ready access to the repositories of the nation's knowledge is considered too risky by those who determine or enforce the Department's information management protocols.²⁸

Officers who have dared to publish memoirs of their operational service have encountered lengthy delays in obtaining Defence approval. Colonel Marcus Fielding, for example, served in a Coalition headquarters in Iraq and later recorded

his experiences in *Red zone Baghdad*.²⁹ After waiting for nearly 15 months for the Department to make a decision on the book's fate, Fielding was told that Defence would not allow him to publish it while he was a serving officer, a determination that made no reference to any security issues that the work may have contained. Another senior officer, Major General Jim Molan, also experienced considerable delay in obtaining permission to publish his memoir, *Running the War in Iraq*.³⁰

It is unlikely that there was malicious intent in the prolonged struggle for approval that these officers experienced from Defence. Rather, it is more likely that the need to consider such approvals comes up so rarely that the Department does not have an established process for clearing publications authored by serving officers. This absence of process is a further indictment of the force's sense of anti-intellectualism but it also raises an additional concern. The knowledge and experience that officers such as Molan and Fielding obtained while on operations should be quickly, widely and openly disseminated throughout the ADF and elsewhere, if the organisation is to learn from its operations. Otherwise, such knowledge—obtained at such cost—will be squandered. In fact, not only should officers be encouraged—and even given time—to write about their experiences but Defence should implement procedures to expedite their publication and debate.

No individual or entity appears exempt from attempts by the Department to control the thoughts of its members. The *Australian Army Journal*, the Army's flagship publication whose mandate is to promote understanding of land warfare, has periodically been forced to fend off attempts by Defence mandarins to impose censorship controls. This is despite a clear statement in every issue that the views expressed are those of the authors alone. Senior personnel are not exempt from the bureaucracy's drive to manage external expression. Past Chiefs of Army have even been asked to submit their public speeches for review, admittedly a requirement that never

lasted for long, but one that the organisation deemed itself entitled to make nonetheless.

Instead of the situation getting better, it appears to be getting worse. Directions emanating from the office of the Minister of Defence have imposed stringent message alignment requirements on all staff, including the senior-most levels. It is hard to pin down exactly what the requirements are but the pervading sense is that comment that goes 'off-message' is to be avoided. The media appears to be aware of the engagement constraints under which defence thinkers labour. For example, journalist Ian McPhedran has stated that Defence now operates under a policy of censorship and its public messages are deliberately 'sugar coated'.³¹

Working in such an environment, it is unlikely that a serving member of the Australian Department of Defence would have the courage to write an article similar in tone to that of the US Army's Lieutenant Colonel Paul Yingling. In 2007, the *Armed Forces Journal* published his damning evaluation of the US political and military leadership in the lead-up to and during the waging of the 2003 Iraq War.³² Although he took the US defence organisation to task, the US Department of Defense accepted that Yingling's motivation was not out of a wish to cause embarrassment or institutional harm.

Rather, what drove Yingling was his belief that something had gone seriously wrong in how the US planned and ran the Iraq war, and that these deficiencies needed to be exposed to scrutiny so that they would not happen again. His goal was to help make US national security stronger and more effective. Yingling spoke out from a desire to improve the security of his nation, a driving force that his superiors recognised and accepted. Of course, Yingling has not been alone in delivering his message but the point for the Australian Department of Defence to understand is that an insider can deliver an unpleasant message but one which the organisation can use to create a more effective defence force. Those who are the most knowledgeable of Defence are its insiders; they are also the very people who have the most at stake in making a better ADF. The US defence

organisation may not have liked what Yingling wrote, and there would have been institutional pushback, but no one would have prevented him from speaking out.

In imposing the tight constraints that it does, Defence makes it unnecessarily hard for insiders to engage with external subject matter experts in academia and industry. The risk in limiting debate is that it fosters a narrow and blinkered perspective, while denying Defence members access to some of the country's best minds. In challenging fiscal times, the ability to exploit external expertise could prove a force multiplier and it is one that should not be missed.

Still, it should be admitted that there are good reasons for these controls—the danger of compromising national security or the protection of the integrity of defence systems, for example. However, there is also a suggestion of mistrust, that the senior hierarchy does not expect Defence members to do the right thing or that some personnel might be tempted to go off-message, resulting in the most troubling of eventualities: media inquiry. What the organisation's leaders miss, however, is that officially promulgated concepts can just as easily be strengthened by being tested in an open debate than weakened by criticism. Besides, if debate reveals a concept as flawed it would be better—and cheaper—to discover this sooner rather than having it inevitably revealed at a later date.

Debates are time sensitive and move at a pace that does not easily fit within the timeline demanded by the need to obtain approval from the chain of command. They are fostered best in a climate that encourages the free engagement of ideas, not one that seeks to control, direct or monitor interaction and engagement. The current requirements for external comment support a policy that was not designed to promote curiosity and responsible thinking by the members of the defence community but it is one that would certainly find favour in Beijing.

Department of Defence policy has also hindered the development of Service-sponsored online forums and blogs similar to those that have

proliferated overseas. By comparison, members of the US Army are relatively free to exploit such opportunities. Twitter, too, remains an 'out of hours' activity despite its growing utility in other sectors. Nor does Australia have a publication such as the US-based *Small Wars Journal*. As an online publication, *Small Wars Journal* provides a ready platform for debate and allows a rapid turnaround in the exchange of ideas through its articles, editorials and forums. The *Australian Army Journal* does provide a venue for contributors to air their views. But it is published only three times a year—frequently enough to highlight topics of emerging concern but not to sustain a debate on its own.

The Directorate of Army Research and Analysis (DARA) (formed from the merger of Future Land Warfare-Strategy and the Land Warfare Studies Centre) established an online publication called *Shortcasts* in 2010, which offers short concept pieces. Unfortunately, access remains limited to insiders. DARA also sponsors an online forum called 'FLW2G', which is available beyond the Defence firewall to select participants, a feature which should be encouraged and allowed to spread.

To attract commentators, FLW2G is unattributed, currently a necessity to ease contributor concerns over organisational push-back. Hopefully, one day *Shortcasts* will evolve into an Australian version of *Small Wars Journal*—but to do so it would need to re-establish itself outside of Department of Defence's control. This would be a useful step. But what is really needed to foster intellectual interaction within and beyond the defence community is not more internal outlets but rather unfettered access to the plethora of existing media that flourish outside of the Department's purview.

Despite the significant impediments to external engagement outlined above, such barriers remain a partial explanation for the failure of the Army's intellectually-minded members to debate the changing character of war. Being bureaucratic mandates they could all quite easily be removed, simply by the organisation's leaders deciding to do so. After all, a number of senior officers have

found roles as defence commentators in retirement. Perhaps if these officers had begun to speak out while still members of the Army it would have demonstrated that officers can be trusted to engage with an external audience in an appropriate manner. The difficulties inherent in changing Defence's attitude towards external engagement should not be minimised but what has been done to create impediments can be undone to remove them. Hopefully, such a shift in policy will be forthcoming.

Operational impediments

There is one further rationale that helps to explain the absence of an Australian-based debate on the future character of war. All organisations contain preferences—or ways of war—that permeate all aspects of their operations. For example, the US Army prefers to fight conventional state-based opponents against whom they can bring to bear overwhelming firepower; it likes to fight against a force that looks like itself. A critical reason why the Australian Army has not held a debate on the future character of war is internal to the organisation, not a function of external factors. More specifically, the force's leadership, and its intellectually-minded members who would take the lead in such a debate, do not—at least as yet—see sufficient value to the organisation in conducting it; the Australian way of war does not require it. This is not a result of a lack of capacity or facilitation for debate, although these are factors; rather it is a product of the Army's vision of itself.

Since its origins in 1901, the nation's ultimate security has rested on the guarantee of a great power ally. At first this was the UK, while for the past 60 years it has been the US. Throughout its history, the Australian Army has never needed, nor realistically had the ability, to wage war on its own. Instead, it has always fought in a coalition, invariably as a junior partner. As a consequence, the Army's focus has tended to be on the lower end of the art of war, primarily the tactical, at which the force has a well-deserved reputation for excellence. By contrast, its submission to the requirements of the coalition senior partner has

meant that the Australian Army has had little opportunity, or necessity, to shape or influence the art of war at the operational or strategic level. This has not been an irresponsible defence policy. Instead, it has been a clever one that has allowed the nation to leverage a much greater defence capability than it would have been able to do on its own or, at least, not without a massively increased defence budget.

In fulfilling the role of a junior coalition partner, the Army has ceded a range of responsibilities. This has been a necessity as the force has never possessed the full range of capabilities and manpower needed to operate as an independent force. In recent years, this trend has become even more marked and it is now unlikely that the Army (or the ADF) could wage war on its own against a credible opponent, even if the government so desired.³³ Today, it has become common to describe the Army as a 'niche provider'. This has not necessarily been a negative development, rather it has brought considerable benefits to the Army while on operations, allowing Australia to maximise the strategic effect of its relatively modest manpower contribution to a coalition operation, such as was the case in the war in Iraq. However, one of the areas of military professionalism that is compromised by being a niche player is the necessity to interpret the changing character of war.

Thus, if the Australian Army wants to participate in or lead a debate on the emerging trends in the art of war, it will first have to change its perception of itself. Out of necessity, it may need to remain a niche provider of a limited range of capabilities but it will also have to endeavour to think more broadly beyond the range of just tactics.

This will require the force to excel on two levels. It must continue to strive for excellence in the tactical battlespace, as this will remain the force's primary focus for as long as it remains a junior coalition partner. Moreover, the organisation will also have to expand its intellectual remit to include the higher levels of the art of war. It will have to become comfortable with the idea of thinking broadly, even if it only acts narrowly. This

needs to happen because changes in the art of war that are now taking place and shifts in the strategic balance that are now emerging in the Indo-Pacific region will demand an army that can master the entire range of the art of war, even as it remains a small force. It is to why the Australian Army must develop the skills to engage in a future of war debate to which this article will now turn.

Why a 'future of war' debate is needed

The Army needs a debate on the future character of war so that it is able to prepare itself for the changes in the operational and strategic environment that are now becoming apparent. These are the requirements to define an army for the post-Afghanistan era, including adapting the force to a maritime strategy; reinterpreting the strategic environment because of the rise of China; and understanding the potential of climate change to act as a threat to national security. This will also have to happen in a period that will be dominated by a need for austerity, itself a reason for considered introspection as the Army strives to balance capability and government requirements within a constrained budget.

The Australian Government has already announced that it will end its commitment to Afghanistan, while the Army's lengthy deployments to Timor Leste and the Solomon Islands are also in their terminal phases.³⁴ After more than a decade of having to manage a high tempo of operations, the Army may be able to enjoy a period of rest, reconstitution and, perhaps most importantly, reflection. Lieutenant General David Morrison, the Chief of Army, has highlighted this opportunity in his recent speeches. He makes the point that the nation needs an Army that is focused on the future, not the past. Morrison rightly believes that the Army became complacent after the end of the Vietnam War and became too comfortable resting on its accomplishments, instead of discerning the lessons that were of importance for the next campaign.³⁵

The Army's reshaping in the post-Afghanistan era is already underway. 'Plan Beersheba' will address problems in the Army's force-generation cycle that placed the organisation under considerable strain during the wars in Iraq and Afghanistan. Morrison has also stated that he believes that future wars in which Australia may be involved are most likely to be of a hybrid character. The widespread availability of advanced technology weapons has meant that highly lethal and effective ordnance is now within the reach of hostile irregular forces. One result of this trend is that the distinction between regular and irregular forces has blurred and has rendered the difference between conventional and guerrilla war almost meaningless.³⁶ Israel's war with Hezbollah in South Lebanon demonstrates just how tough and dangerous a fight with a contemporary non-state actor can be.³⁷

It is hard to fault Morrison's conclusion—and he is not alone in this judgment. Numerous commentators have dispatched state-on-state war to 'history's dustbin', although it must be recognised that the possibility remains; the ongoing potential for conflict on the Korean Peninsula, for example.³⁸ However, endorsing 'hybrid' as the probable form of war is not the end-point. Hybrid war comes in many forms, as do potential opponents in Australia's primary operational environment.

Moreover, the Australian Army will have to counter a possible hybrid threat within the limits of its means; great power assistance may not be available because such a conflict will not represent an existential danger to Australia. Thus, the Army must consider what it means by hybrid and how it will respond. Many of the questions that this requirement will generate can rightly be addressed through the concept and doctrine development processes. However, why limit the force's access to expertise? Why not manage the security issue but still open the process of examination more widely and allow members of the Army to engage with each other in a way that will also allow the organisation to draw upon external thinkers?

The rise of China represents another major security challenge for Australia, as well as the other countries of the Asia-Pacific basin.³⁹ It is not possible to predict the end-state of China's rise or even if it will continue unabated.⁴⁰ But it is clear that the current strategic balance in the Western Pacific is under tension—a tension that will grow with China's expanding economy and modernising military, and as it gains the capability to challenge US dominance.⁴¹

Recently, China has demonstrated a willingness to employ its growing clout to gain its own way. For example, Chinese companies spontaneously decided to cease the export of rare earth elements to Japan after a diplomatic row occurred when a Chinese fishing boat collided with a Japanese vessel in disputed waters. Similarly, China has reiterated its claim to islands in the South China Sea. It has also sought to extend its influence into regions further afield. Recently, China defined itself as a 'near-Arctic state' with the intent of gaining permanent observer status on the Arctic Council. Australia has not been exempt from such assertive behaviour. During Foreign Minister Bob Carr's first official visit to China, his counterpart suggested that Australia could not indefinitely juggle its relationship with China and the US. The implication was that Australia would have to pick a side.⁴²

It is by no means certain that conflict will be the necessary result of China's rise, despite the expectations of some. Certainly, comments in the US that attempt to paint China as a new 'Cold War' opponent are unwise and premature, unless of course one has a vested interest in the industrial-military complex.⁴³ Similarly, calls within Australia for the ADF to gain the ability to "rip an arm off" any major Asian power' are as unhelpful as they are fanciful.⁴⁴ At this point in the strategic transition in the Pacific, more restrained language is what is required, paired with cautious observation and quiet planning.

Australia is not presently under any threat from China—and how its rise will shape the strategic environment of the Asia Pacific is not fully known. This is precisely why the Australian Army needs to

begin a debate on the subject and why it should do so now, rather than waiting. The Army needs to ponder what the Asian Century means for itself and the country. In the US, the debate has already begun and the 'air-sea battle' concept is receiving considerable examination as the replacement for the 'air-land battle' concept.⁴⁵

Yet it would be a serious mistake for the Australian Army to again sit on the sidelines, as it did during the Nagl-Gentile debate, and wait for the US to reach a conclusion. While the US is Australia's great power protector it does not mean that the interests of the two countries are identical, particularly when China is our largest trading partner and the source of much of the nation's wealth. Australia is in the unenviable position of having to negotiate a course between its protector and its banker, and in the process try to balance its national and economic security. Surely, this requires a specifically Australian debate, one in which the Army has an important part to play.

Commentators all too often consider climate change from the perspective of an environmental or natural disaster or human security issue. This is a far too limited perspective, as it also has serious implications for national security. There is little doubt that climate events have been a factor in the rise and fall of civilisations, destroying some polities while offering others the opportunity for expansion.⁴⁶ The effects of climate change are not uniform, as the evidence of the past suggests. Instead, it produces both winners and losers.⁴⁷ For Australian military professionals, climate change may be of even greater concern because some analysts believe that our primary operating environment will be among the worst affected.⁴⁸

Researchers generally do not view climate change as a direct cause of war.⁴⁹ Rather, they see it as creating a situation in which societies will use war as a means to secure their requirements in order to survive. The primary threat to societies is that climate change reduces the carrying capacity of a country's resource base below the requirements of its population. In an era of globalisation, a country that is unable to meet its people's minimum requirements can enter the global

market and obtain what it needs there. However, with the advent of global climate change, countries may prove unwilling to sell resources at any price, as did Russia when it closed its borders to grain exports due to a poor harvest in 2010.⁵⁰ Under globalisation, trade practices have worked well as a pressure valve because spare capacity exists in the system. If spare capacity was to be no longer available, it is likely that autarkical national tendencies will re-emerge.

Under the influence of climate change, countries whose resource bases are unable to meet their citizens' needs will face stark choices. Food availability provides a useful example. If people are no longer able to obtain food either locally or from the global market, they have limited options. Hopefully, their country has enough reserves to carry through to the next harvest, assuming it is a good one. However, as a country's stockpile of food is exhausted, the people will have to choose between starving in place and seeking the resources they need elsewhere. War will be the likely outcome. It may be comforting to continue to think of climate change in environmental terms but, for all states, there is a 'threshold below which survival interests can be asserted only by force'.⁵¹

For the Australian Army, therefore, climate change will represent a major future call on its resources. As the strain of climate change takes hold and the potential for states to collapse increases, the Australian Government will call on the Army to stabilise or deter. How the Army accomplishes this needs to be examined, preferably through open debate including free engagement with external experts.

Conclusion

Australia and its Army are at a turning point. The winding-up of the war in Afghanistan may represent the end of a commitment but it is the developing changes in the nation's strategic environment that are the real game changers for the future. Over the course of its history, the nation has participated in wars both near and far. Most recently, the centres of world conflict have

been at a distance, principally in the Middle East and Southwest Asia. This is now shifting and the focal point of international tension is returning to Australia's part of the world.

In the past, the Army has been able to concentrate its study of war at the tactical level. No-one disputes that this has paid dividends in the high regard the force is held by coalition partners. However, as risks emerge in Australia's primary operational environment, it will be advantageous for the Army to extend its intellectual curiosity to include the full extent of the art of war. To achieve the full benefit of such inquiry, the force's thinkers will need ready access to external forums and experts—and the organisation will have to subject its ideas and concepts to robust and possibly painful examination. The Army and the wider Department of Defence need to embrace a culture of openness that has heretofore not been available to the organisation's members. The preference for 'making do' will need to be replaced by one that values thinking before acting. The force will need to become a true learning organisation in which 'intellectual' is no longer a term of derision.

There are risks and perhaps even embarrassments in such a course of action. But as the free-spirited willingness to debate in the US has shown, such concerns are greatly outweighed by the benefits. The time has come for those who lead the Department of Defence, the ADF and the Army to absorb a lesson from Australia's great power protector—that the free exchange of ideas is a force multiplier whose value, though hard to quantify, will strengthen the effectiveness of the entire organisation.

At the time of writing, Dr Albert Palazzo was a senior research fellow with the Land Warfare Studies Centre, a part of the Directorate of Army Research and Analysis in Canberra. He has published widely on the Australian Army and contemporary military issues. His research at the time was on Australian strategic policy and the war in Iraq.

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Abuse of power and institutional violence in the ADF: a culture transformed? ¹

Anne Goyne, Department of Defence

Contributing authors

Lieutenant Colonel William Coates,
Australian Army

Lieutenant Guy Forsyth, Royal Australian
Navy

Commander Lara Fowler, Royal Australian
Navy

Lieutenant Colonel Phillip Gibbons,
Australian Army

Warrant Officer Kevin Woods, CSC, OAM
(retd)

Jamie Cullens, Department of Defence

Introduction

It is vaguely ironic that the two social institutions with the highest reliance on authority are prisons and the military. Both use a uniquely punitive form of authority to enforce conformity to desired norms of behaviour but for starkly different reasons. In a prison, the need for strict discipline reflects a fear that prisoners are dangerous and need to be closely controlled at all times.² The fact they are being ‘punished’ also forms part of the rationale for how they are treated.

By contrast, military discipline is part of an indoctrination process that instils adherence to a

new way of life and military code of behaviour; a process that reflects the unique extremes of the profession of arms, namely the requirement to face life-threatening danger and to apply violence in the service of the state.

Military training is expected to be physically and emotionally challenging to prepare trainees for the crucible of combat. Given the need to ensure all members will adhere to an order that might result in their own death, it was—and probably still is—believed that new recruits need to be more afraid of not adhering to the order than following it. Hence, military discipline is swift, reinforces personal responsibility (that is, to make the miscreant feel ashamed of failing and letting down the team) and is certainly punitive. This approach to military training and discipline continues to exist for one reason—it works.

From enlistment, new recruits learn their place in a military hierarchy where those with rank have authority over the minutiae of their lives. As volunteers, most enlistees cooperatively relinquish their personal freedoms during the process of training, suggesting they trust and acknowledge the centrality of military authority to the institution they have joined. While a few new joiners rebel against or even reject outright their lowly place in the military hierarchy, they either learn to ‘toe the line’ and conform or eventually they leave—but only after every attempt to instil conformity has failed.

In an institution as reliant on the exercise of authority as the military, it is not surprising for those lower down the rank chain to interpret this power as abusive. The difficulty is determining whether the use of authority is legitimate or represents an abuse. In the ADF, this issue is moot because official complaints against the abuse of power in the ‘here and now’, as opposed to the past, are relatively rare.³ Partly, this reflects a culture where complaint can be construed as weakness or, worse, disloyalty. But more recently, it may be a sign that cultural tolerance

for institutional violence and abuse of power has shifted in the modern ADF.

Abuse of power and institutional violence are not synonymous. Abuse of power in a legal sense is the 'improper use of authority by someone who has that authority because he or she holds a public [that is, legitimate authority] office'.⁴ In the ADF, this definition would refer to anyone who has a rank above Private (or its equivalent in the Navy or Air Force).⁵

Such behaviour does not always—or even often—have to include violence. Indeed, abuse of power is most likely to involve non-violent unfairness to demonstrate the relative powerlessness of a person more junior in rank. However, in more extreme cases, authority is used to intimidate by emotionally, physically or sexually abusing someone who lacks the power or status to defend him- or herself. By contrast, while institutional violence can involve abuse of power, it also relates to a pattern of 'systemic' violence inflicted by an individual or group towards one or more individuals of the same rank.⁶

While the ADF has avoided the catastrophic public relations disasters that have followed atrocities committed by deployed foreign troops against civilian or enemy forces in recent times, institutional violence and the abuse of power within the ADF itself has become an increasingly-sensitive issue for the Australian public. As a consequence of a series of highly-publicised 'scandals', human rights investigations and formal inquiries, the Australian public has developed an intolerance to unfairness within the ADF, especially where this results in harm to members and a lack of accountability by command.

The first tangible sign of this shift was in 1996, after a multiple Blackhawk helicopter crash resulted in the deaths of 18 service personnel. When the then Chief of Army publicly stated that the fault for the accident ultimately lay with the commander on the ground (in this case a Major), the backlash against the Chief of Army was sudden, extreme and almost certainly

unexpected. Despite touting a line well used within his organisation, the Chief of Army quickly found himself under intense public criticism. No longer could senior ADF commanders avoid public opinion or confine an issue within the institution. An expectation now existed, both within the military and in the community, that senior leaders would assume accountability for whatever occurred under their watch.

This pressure for greater accountability in the ADF became even more insistent when the victims of abuse or mistreatment were women. By the late 1980s and early 90s, women's rights had become a clarion call in the broader Australian society. So when the mistreatment of women by senior cadets at ADFA became a national scandal in the late 1990s, the general public was quick to respond. The Government commissioned an independent inquiry and, when it was found that among other things women were being pressured for sex by male cadets with authority over them, the reaction of the public was severe. The response to the Grey Review resulted in a root-and-branch overhaul of ADFA, including the permanent loss of the cadet hierarchy.⁷ This remains a peculiar feature of ADFA as an officer training institution to this day.

The perception that people of any rank could abuse their power in this way created a troubling challenge for the ADF, and certainly the 'new' generation of accountable senior leaders. Attempts were made to promote better behaviour and make changes but, as the scandals continued, public outrage grew louder and more damaging to the reputation of the ADF. When the scandal involving HMAS *Success* in 2009—which again involved the abuse of women—was followed by the 'Skype' sex scandal at ADFA in 2011, public opinion reached a crescendo.⁸ The Skype scandal touched a nerve among serving and previous-serving ADF members, both male and female, who appeared to identify with the story. Suddenly an unprecedented number of allegations about historical abuse were sent to the then Defence Minister, who realised there was a need to do something about institutional violence and abuse of power in the ADF.

The ADF as a whole may not have lost its moral compass but pockets within the institution appeared to be resistant to change. This was further demonstrated by the 'Jedi Council' scandal involving over 100 male Army officers and non-commissioned officers, who used social media and Defence's email system to share private sexual images of female friends and colleagues without consent. The then Chief of Army showed unconcealed wrath in his now famous 'Change or get out' speech.⁹

Prior to the speech, the Chief of Army had met female victims of abuse in the Army and the experience brought home the impact this abuse had on those who suffered it. This speech, more than any previous comment from an ADF leader, indicated senior leaders in the ADF were as outraged by abuse perpetrated by those under their command as the Australian public. There is no question the vehement and well-publicised reaction of the Chief of Army circumvented further negative public opinion and a possible erosion in confidence of the ADF.

In 2012, the Defence Minister commissioned an investigation by legal firm DLA Piper to review the scope of initial complaints of abuse in the ADF. As a result of this investigation, the Defence Abuse Response Taskforce (DART) was commissioned to investigate historical incidents of abuse in the ADF.¹⁰ These investigations resulted in the ADF being forced to address literally thousands of cases of abuse from serving and ex-serving ADF personnel (both as victims and perpetrators) dating back 60 years. The genie of institutional violence and abuse of power was now well and truly out of the bottle and this time it was not just women who were the victims, and not just men who were the only perpetrators.

The results of DART revealed a previously-hidden truth about this long and shameful history of violence. Young men (many just boys) were frequent victims of institutional violence at the hands of their male peers and men in authority over them. There was also a significant number of women who had been victimised by women during their training. The suffering of these young men and women was ignored by every layer of

command; they were disbelieved, scape-goated and ultimately forced to watch in silence as perpetrators were rewarded with positions of authority and power in the system. Most of those who revealed their stories to DART, both male and female, had continued to suffer post-traumatic like symptoms for many years following the abuse.

Before the DART team published their results, the then Chief of the Defence Force sponsored two major cultural change documents, 'Beyond compliance' and 'Pathway to change', an ambitious five-year plan to evolve the culture of the ADF towards a more inclusive and accountable organisation.¹¹ In a similar vein, the Navy had already commenced its own 'New generation Navy' program, which also focused on addressing cultural change, as did the Air Force's 'New horizon' program.¹² All three programs are impressive in their ideals and scope, and all seem to have had a more than grudging acceptance among service personnel.

While 'Pathway to change', 'New generation Navy' and 'New horizon' suffered the inevitable problem of tarring everyone in uniform, particularly men, with the same brush, the publication of the DART report and two companion reports into institutional violence at HMAS *Leeuwin* and ADFA seemed to silence the most vocal critics. The shocking stories of sexual assault, physical violence, bullying, bastardisation and victimisation of so many young male and female members of the ADF simply defied belief. For those who have read the DART reports, the results are extremely sobering.

What are the root causes of institutional violence and abuse of power in the ADF?

Anyone reading these reports would have to ask themselves how and why such behaviour evolved and remained undetected for so long. For such widespread abuse to continue, leaders had to be complicit in the behaviour to varying degrees, whether by turning a blind eye or giving tacit approval. Indeed, it is doubtful much of this

behaviour was even identified as ‘wrong’ at the time. The attitude most frequently reported in the early 1980s was that those targeted somehow deserved what they got because of perceived weakness or unsuitability.¹³

Jokes were regularly made about ‘blanket-bashing’ (wrapping a person in a blanket and beating them) and ‘scrubbing’ (scrubbing a person who purportedly did not wash with a hard brush). However, the implication seemed to be that there was nothing particularly harmful about the behaviour and, despite the fairly ubiquitous nature of this kind of discussion, rarely if ever did someone in authority openly state that the behaviour was unacceptable. Indeed, more senior people seemed to be ‘in’ on the joke.

In the absence of any clear, unequivocal statement about the ‘wrongness’ of institutional violence and abuse of power, it is easy to envisage how such behaviour could become ‘normative’. While it has long been argued that human beings are programmed for obedience to authority and conformity, it is no longer accepted that people blindly follow orders they disagree with.¹⁴ Indeed, the evidence seems quite to the contrary; people obey orders, even orders that result in ‘evil’ outcomes, because they believe in what they are doing.

To emphasise this point, when Stanley Milgram first ran his obedience experiments in the 1960s, the reason most frequently given for continuing to follow orders by participants themselves—and to give what appeared to be life-threatening shocks to suffering people—was a belief the experiment was legitimate and that it advanced the cause of science.¹⁵ In other words, their decision to continue was not driven by pressure to conform to authority but reflected that they were cooperating because they agreed with the process.

Piero Bocchiaro and Philip Zimbardo reached a similar conclusion when they conducted a modern version of the Milgram obedience study in 2010.¹⁶ In contrast to Milgram, Bocchiaro and Zimbardo found that 70 per cent of the participants (all naïve to the original Milgram

study) did not conform to the request to continue with an experimental procedure that appeared to harm another person. The most common reasons given for ending the experiment was they believed that stopping it was what most people would do and that it felt like ‘the right thing to do’. Bocchiaro and Zimbardo concluded that individuals do not blindly conform to authority but actually consider the rightness and wrongness of their actions and broader social norms.

The sad truth is that while the victims of violence and abuse in the ADF before the mid-1980s were predominantly male trainees, recognition that anything was ‘wrong’ simply eluded most people. Victims were categorised as slackers, odd-balls, no-hopers or similar, resulting in such effective depersonalisation that their mistreatment could be seen as consistent with the overarching intent of military training.

Of course, a victim did not have to be a particularly poor recruit, they just had to be singled out by an instructor or a peer as ‘a poor performer’ or ‘different’, which could be the green light for abuse and mistreatment. The use of communal punishments, where a group was punished for the poor performance of an individual, only fuelled this flame. The very fact that one was a ‘victim’ made one personally responsible for what was happening. Consequently, identifying oneself as a victim by complaining to the chain of command only cemented one’s status as deserving of abuse. As acknowledged by then Chief of Navy in 2014:

What happened at *Leeuwin* came about largely because of a culture that excluded rather than included. Where diversity was not tolerated, those that did not ‘fit in’ paid the price.¹⁷

The justification most commonly used to explain institutional violence during military training is the perception that survival may one day depend on the person serving beside you. As this is a scenario traditionally reserved for men, it is fair to argue that such men had a right to feel confident about the men who became soldiers, sailors and airmen. This is precisely why leaders may have turned a blind eye to unacceptable

behaviour. If a man was not accepted by his peers then he was a threat to the survival of the group. It was the group who graduated from military training, not individuals. It was group cohesion, not individual identity, that drove success in combat. This mindset would have made it difficult to come out in strong support of victims, while at the same time enforcing standards within the group. In this scenario, the escalation of abuse was almost inevitable.

Of course, this story, like all smokescreens, seems so plausible it could even today be used to justify the ongoing mistreatment of trainees. Its plausibility acted most effectively on the very group of people who may have been able to stop the abuse, or at least investigate it; people with good intentions who believed in the values of the ADF and upheld those values throughout their careers—in other words, the vast majority of ADF personnel. While most people who joined the ADF were neither victims of abuse nor perpetrators of this behaviour, all would have heard the stories about institutional violence and many might have believed incidents of abuse were even normal or appropriate within the military.

To explain this point, Michel Larivière—reporting on research investigating the attitudes of correctional officers—noted that contrary to the stereotype, most correctional officers reported a personal concern about the rehabilitation and welfare of the prisoners under their watch.¹⁸ However, when asked to report on the attitudes of correctional officers generally, correctional officers themselves over-estimated the cynicism and punitiveness of their colleagues.

In this scenario, empathic correctional officers were more likely to overlook the punitive behaviour of their peers, while punitive officers felt their behaviour was normative within the group. Accordingly, it is not hard to envisage how a stereotype of punitive and abusive recruit instructors could create the impression that all military instructors were punitive and abusive, even though just a few adopted this type of behaviour. Nevertheless, instructors with a tendency to abuse trainees were unlikely to be

identified as aberrant because their behaviour matched an accepted stereotype.

However, more than anything else, it is the nature of the abuse reported to DART that gives away the lie about the role played by institutional violence in the ADF. While 50 per cent of people responding to the DART reported instances of physical violence in the ADF that may seem consistent with a rough form of barracks-room discipline (for example, ‘bed-bashings’, ‘contact counselling’, ‘scrubbing’ and similar), 38 per cent (834 out of 2224 cases) of the allegations reported to DART related to sadistic, homoerotic, sexual abuse that had nothing to do with military life or training.¹⁹

‘Woofing’ (using a vacuum cleaner on a young man’s penis), ‘turkey slapping’ (holding someone down and repeatedly slapping them with a penis), ‘nuggeting’ (smearing a young man’s testicles with boot polish or toothpaste), anal penetration of young boys in their sleep with a wooden dildo, male pack rape, female rape and sexual abuse, and any number of other sexually-deviant behaviours, are not normal in any institution—and they are not consistent with military ideals, training or bonding.

The particular consistency of some of the behaviours aimed at young men remained unchanged over generations of trainees, suggesting they were systematically passed down by perpetrators from one group to the next. They were never reported by the men who suffered them, because they implied weakness, homosexuality or both. Being involved in homosexual behaviour, even as a completely-unwilling victim, was unmentionable in the ADF and broader Australian society at the time. These men literally had nowhere to go to complain and they held on to the shame of these secrets all their lives.

Violence and abuse of power as cultural artefacts

While the abusive treatment of women in the ADF provided the initial catalyst for cultural change, the one-sided nature of this argument

has dramatically missed the point about institutional violence and abuse of power. Every time violence against women is identified as wrong, the subtle subtext appears to be that violence against men is 'not wrong', and that where sexual violence towards men is concerned, it does not happen. The results of DART provide unequivocal evidence that men have been frequent victims of institutional violence, including sexual violence, in the ADF for generations.

Other than the one investigation into bastardisation at the Royal Military College in 1969, during all this time there was no outpouring of outrage from the Australian public or from the Defence leadership of the day.²⁰ Even now, men comprise 75 per cent of all victims of non-sexual violence in Australian society, and are arguably still likely to be the victims of abuse of power and violence in the ADF. Yet this has never raised significant comment. Men cannot be blamed for cynicism each time society and their leaders pour scorn on the perpetrators of abuse against women, when abuse against men is tacitly condoned by silence.

While bystanders can be roped into institutional violence, the majority of men in the ADF, or anywhere else, do not behave this way and it would be an insult to men to imply the behaviour is, in fact, normative. However, in the absence of an unequivocal leadership statement about the treatment of men in the ADF (or anywhere in Australian society), there has been a grey area, where the sexual mistreatment and physical abuse of men has remained invisible.

There is no evidence available anywhere in the world showing that victims or perpetrators of abuse and violence are 'improved' in any way by the experience, and yet this seems to be a hard fact for military members at all levels to accept. The belief that aggressive or violent people make the best warriors or that to be a 'good soldier one doesn't have to be a good human being' are perceptions that seem hard to shift among some elements of the military. That some of these 'hard' people were/are sexual predators of men as well as women has not been part of the

discussion at all.

The way ahead

Herein rests the challenge for the ADF and, indeed, society at large in identifying and eradicating institutional violence and the abuse of power against men, as well as women. This issue gets to the murky core of precisely what constitutes an abuse of power towards men in an environment where aggression and combat-related violence are rewarded and highly valued.

In the past, perpetrators of abuse have been mistakenly cast as better warriors because they showed a willingness to use violence against other men. However, the evidence is now clear that this attitude gave a sub-class of these men an opportunity to physically and sexually abuse generations of young men and boys without any fear of exposure, due to a culture that failed to identify that such abuse against men was wrong. Not only did the abusers maintain their place in the ADF but the culture of silence made cowards of those who stood by and accepted their tyranny and did nothing. In this scenario, the ADF had no heroes.

More than at any time in our past our defence forces have become an exemplar of our society. The ADF is not just called upon to fight but also to protect and serve our society. Humanitarian aid, rescue, disaster relief, protective and peacekeeping support are now commonplace roles for ADF personnel. Australians view such activities as reflective of a good and moral society and our nation is projected through these actions, consequently, it is increasingly incumbent upon ADF members to act appropriately. Even junior ADF members are being called on to assume leadership in a way that would have seemed a heresy in the old ADF, and they are rising to this challenge. The Australian public has also acknowledged and rewarded this new ADF by rating the military as the most trusted public institution in Australia for the past decade.²¹

Criticisms of the 'old order' of the ADF are not intended to imply the institution was 'rotten' or 'morally corrupt', because it was not. However,

outmoded and destructive training practices and mistreatment have no place in the modern military and must now be firmly, and forever, relegated to our past.

Anne Goyne and the contributing authors are from the Centre for Defence Leadership and Ethics (CDLE), which was established at the Australian Defence College's Weston Creek campus in January 2002. Its mission is to provide corporate-level military leadership and ethics research and doctrine development to shape expertise in these areas across Defence. CDLE's vision is to be the centre of expertise for the development of command, management, leadership and military ethics in Defence:

<<http://www.defence.gov.au/ADC/CDSS/CDLE.asp>>

Notes

- ¹ This article was published in Issue No. 198 of the *Australian Defence Force Journal* in 2015.
- ² Michel Larivière, 'Antecedents and outcomes of correctional officers' attitudes towards Federal inmates: an exploration of person-organizational fit', doctoral thesis, Carlton University: Ottawa, 2001, available at <http://www.csc-scc.gc.ca/research/forum/e141/141e_e.pdf> accessed 6 October 2015.
- ³ L. Roberts-Smith, *Report on abuse in Defence*, Defence Abuse Response Taskforce (DART) Report, Commonwealth of Australia: Canberra, 2014. The DART report noted there was significant under-reporting of abuse by serving members within the ADF. There was a perception that the abuse was tacitly or directly condoned by command and therefore unlikely to be taken seriously or investigated.
- ⁴ *West's Encyclopedia of American law*, Vol. 2, Gale Group: Farmington Hills, 2008.
- ⁵ This does not include 'technical authority' which can apply to members without rank.
- ⁶ By 'systemic', the authors are referring to a pattern of violence rather than a random act of aggression. Systemic violence as practised in the military has a particular identity; it usually has a name (for example, 'scrubbing'); it follows a similar pattern; and it can be committed by different groups over generations.
- ⁷ Bronwyn Grey, *Australian Defence Force: report of the review into policies and practices to deal with sexual harassment and sexual offences at the Australian Defence Force Academy*, Director Publishing and Visual Communications: Canberra, 1998.
- ⁸ In early 2012, a young female Officer Cadet from ADFA went to the media after she became aware that two of her 1st year colleagues had filmed her in consensual sex act without her knowledge and streamed the footage to a group of young men in her year group in an adjacent room. The young woman did not believe the ACT police were intending to charge the two men who set up the camera, so she decided to demand action be taken on national television, thus prompting a nation/international scandal.
- ⁹ See, for example, ABC News, 'Chief of Army David Morrison tells troops to respect women or "get out"', *ABC News* [website], 14 June 2013, available at <<http://www.abc.net.au/news/2013-06-14/chief-of-army-fires-broadside-at-army-over-email-allegations/4753208>> accessed 6 October 2015.
- ¹⁰ Roberts-Smith, *Report on abuse in Defence*; L. Roberts-Smith, *Report on abuse at the Australian Defence Academy*, Defence Abuse Response Taskforce (DART) Report, Commonwealth of Australia: Canberra, 2014; and L. Roberts-Smith, *Report of abuse at HMAS Leeuwin*, DART Report, Commonwealth of Australia: Canberra, 2014.
- ¹¹ C.W. Orme, *Beyond compliance: professionalism, trust and capability in the Australian profession of arms*, Commonwealth of Australia: Canberra, 2011; and Department of Defence, *Pathway to change: evolving Defence culture*, Commonwealth of Australia: Canberra, 2012.
- ¹² See, 'Next generation Navy', *Navy* [website], available at <<https://www.navy.gov.au/navy-today/new-generation-navy>> accessed 6 October 2015; and 'Air Force values', *Royal Australian Air Force* [website], available at <<http://www.airforce.gov.au/About-us/About-the-RAAF/Air-Force-Values/?RAAF-P1m6QSkD2B/teTTYHuezoElikbosHGEX>> accessed 6 October 2015.
- ¹³ These reports are not formally documented but reflect informal, casual conversations between Service personnel and the authors.
- ¹⁴ S. Haslam and S.D. Reicher, 'Contesting the "nature" of conformity: what Milgram and Zimbardo's studies really show', *PLOS Biology* [website], 20 November 2012, available at <<http://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.1001426>> accessed 6 October 2015; P. Bocciaro and P.G. Zimbardo, 'Defying unjust authority: an explanatory study', *Current Psychology*, Issue 29, No. 2, 2 May 2010, pp. 155-70, abstract available at <<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2866362/>> accessed 6 October 2015.
- ¹⁵ S. Milgram, 'Behavioral study of obedience', *Journal of Abnormal and Social Psychology*, Issue 67, No. 4, 1963, pp. 371-8. In a now famous series of experiments, Milgram found that up to 65 per cent of participants in an obedience study would give 'fatal' electric shocks to a confederate completing a learning task, because they were told to keep going by an experimenter in a white coat. As a result of their apparent 'obedience' to authority, Milgram concluded that almost anyone could be induced to conform to an authority figure asking them to do evil things, leading to the now much-disputed 'banality of evil' hypothesis.
- ¹⁶ Bocciaro and Zimbardo, 'Defying unjust authority'.
- ¹⁷ Official response to the DART report into HMAS *Leeuwin*.

¹⁸ Larivière, 'Antecedents and outcomes of correctional officers' attitudes towards Federal inmates'.

¹⁹ Roberts-Smith, *Report on abuse in Defence*, p. 94.

²⁰ Gerald Walsh, an academic at the Royal Military College Duntroon in the 1960s, reported on the issue of hazing at the College to the Commandant, setting off a public scandal about bastardisation.

²¹ A 2004 study found that 91 per cent of Australians surveyed reported a high level of confidence in the ADF:

C. Bean, 'Is there a crisis of trust in Australia?', in Shaun Wilson *et al* (eds.), *Australian social attitudes: the first report*, University of NSW Press: Sydney, 2005, pp. 122-40, available at <http://eprints.qut.edu.au/5624/1/5624.pdf> accessed 6 October 2015.

Thoughts on joint professional military education ¹

Rear Admiral James Goldrick, AM,
CSC, Royal Australian Navy

Introduction

Just what is ‘professional military education’ (PME) and, more specifically, what is ‘joint professional military education’ (JPME)?

Elsewhere in Issue No. 181 of the *Australian Defence Force Journal* are offered draft definitions of PME and JPME. These drafts have been developed in the wake of work over 2009-10 by Joint Education, Training and Warfare Command (JETWC), in concert with the Services, to achieve a better understanding of our PME and JPME requirements and what these mean for the career development continuum of ADF personnel.

What I would assert is that the product of successful PME and JPME comes not only in formal skills and knowledge but in possession of the right outlook and that these parallel requirements exist at every stage of the continuum and must be provided for. PME and JPME in their full sense encompass a host of activities—the achievement of all the skill sets for their people that modern defence organisations require.

Even confined to specifically military issues, the subject is a very broad one. In this article, I want to provide my own perspective as Commander JETWC and Commander of the Australian Defence

College (ADC) and to highlight a few key principles which need to underpin any PME programs, as well as some associated challenges for the ADF. My thoughts on PME and the language which I use are not those of a professional educator but of a practitioner.

My focus relates principally to personal development in areas specifically related to the military profession, rather than those which are applicable elsewhere. The difference is that many of the latter skill sets can most effectively be acquired either from outside authorities or in close cooperation with them. My key effort as Commander JETWC must lie in understanding where we need to go in those areas in which the military profession is unique or where it has very particular requirements.

My emphasis, in an attempt to achieve simplicity in a complicated subject, is on the classical aspects of ‘jointery’, that is, between and amongst the Services, rather than on international or inter-agency factors. The truth is, however, that the right approach to resolving inter-Service issues readily extends to the wider stage and this wider stage will occupy more and more of our time in the years ahead.

The reality behind joint success

The first principle of PME that I will declare is derived from the basic reality of successful joint operations—they are successful because of what each Service and each specialisation within that Service brings to the joint environment. Jointery depends upon professional mastery within each Service—and international and inter-agency successes depend in their turn upon professional mastery within the ADF as a whole.

In creating a continuum of education and training, it is axiomatic **that joint things cannot come at the expense of the single Service foundation but instead must build upon that base**. This is reflected in the organisation of the Australian Defence Force Academy (ADFA)

military training programs where every midshipmen and officer cadet at the Academy not only undertakes the full ADFA military education and training (AMET) program but also completes the full general service officer initial training of their own Service that those who have not entered through the Academy undertake.

The real aim of ADFA in this aspect does not in fact relate to the additional skills and knowledge that the AMET program provides for the Academy's graduates, however desirable they may be, but to the goal—nicely defined by a former Commander ADC—of creating 'joint mates'. In other words, it is the lifelong friendships and bonds of trust that the graduates will have with each other across the Services that will really benefit the ADF. From the time of the East Timor operation, some ten years after the first graduates left the Academy, the dividends of those friendships and that trust have been obvious in the contribution that they have made to more effective co-operation between the Services.

We cannot realistically give the three year-long ADFA experience to all our junior officers in the ADF and the creation of artificial mechanisms to do so would not be a practical solution. Academy graduates represent approximately one-third of the officer corps and what we need is for these officers, through the joint outlook that they have developed, to act as a catalyst to encourage trust and cooperation amongst others. In fact, there are now officers undertaking the Defence and Strategic Studies Course (DSSC) who are graduates both of ADFA and the Australian Command and Staff Course (ACSC). And, yes, time flies!

I am confident that they have been agents for greater cooperation between the Services from the time they graduated but it is also probably true that the relationships which have been developed between other individuals of different Services on operations during the high tempo of the last decade have also been of critical importance—they are certainly apparent amongst the course members of both the ACSC (at O4 and O5 ranks) and the DSSC (at O6). If, for

any reason, the level of operational inter-action were to be reduced, then the ADF would need to consider very carefully the form and scale of its joint exercise and training programs to ensure that the impetus is maintained.

What we do need to get right is the provision of the skills and knowledge that junior officers must have when they are moved from their Service into a joint environment, particularly a joint headquarters in which they will be involved in preparing and executing joint plans. This was the responsibility of the Australian Defence Force Warfare Centre (ADFWC), which has now passed on its disestablishment to the Joint Warfare Doctrine and Training Centre (JWTDC). The courses which are offered tend to be short and relatively compressed but they do appear, in general, to provide not only the basic skills but in their own right help with the development of the personal relationships which are so important.

They are also probably offered at the right time—just before officers move into the joint environment. For timeliness is a critical factor in ensuring credibility and readiness to accept new concepts and skills. It is quite possible for officers to spend a decade or more wholly within a single Service environment, even when on operations. The challenge in getting the balance right for junior officers is best reflected in the issue of the joint military appreciation process (JMAP). Understanding of the JMAP and the ability to conduct it are central to the utility of a staff officer in a joint headquarters.

The truth is, however, that both the Navy and the Air Force have at the tactical level other planning processes developed for and more suited to the problems that have to be solved there than the JMAP. The latter can appear somewhat arcane if it is presented in the wrong way and both its theory and practice of doubtful utility to the warfare officer in the operations room or to the pilot or air combat officer aloft. JMAP training for junior ranks therefore works best as 'pre-joining training' before a joint appointment.

There is an additional tension in the ADF situation, one that relates to our relatively small

size and the consequent need for our people to possess generalist skills earlier than is the case for our larger partners, particularly the US. The latter can much more easily maintain career structures to high rank for many deep specialists in a way that the ADF simply cannot. This means that all the Australian services have to place a high premium on the development of professional ‘operator/specialist’ skills and standards from the outset and as quickly as possible. It also means that our junior officers have to squeeze every ounce out of the professional experience that they gain on exercises and operations and seek every opportunity to extend their understanding and their expertise—and any additional joint education and training have to be aligned with that requirement.

I am not convinced, however, that we provide our junior personnel with enough grounding in the basic structures, equipment and capabilities of the ADF as a whole. If we make the effort to provide this too early, it runs the risk of not only interfering with the needs of the single Service but also of going right over the heads of the intended recipients. If it is provided too late, then there will be key deficiencies in the understanding of our people.

We need to look at new ways of providing such grounding to more than a selected few and this is one of the areas that the new JWDC will be examining as it maps out its path for the future. Some of the work being done within the ADF on e-learning packages for the new amphibious capability suggests that there is real promise in these areas. I should add, however, as I have already implied, that the most important thing is to encourage curiosity and a burning desire to extend their own professional horizons amongst our junior personnel. A generation brought up on surfing the web does possess the skills to seek out and understand without too much external guidance—once they have the right grounding.

Meeting all needs within a JPME construct

Another principle is that *one size does not fit all*. This is true within the Services and between the Services. This principle is associated with the fact that you cannot have everything in a continuum of training and education, although the subject is sometimes debated in such a way as to suggest that many believe that you can. Indeed, it is fair to say that everyone in the ADF has an opinion about how they were trained and educated and on how other people should be trained and educated. The satirist John Winton once had one of his characters remark that half the people in the Royal Navy spent their time training and the other half criticising training and this is probably just as true for the ADF.

PME and JPME include much more than preparing officers to command forces in conflict, however much this requirement is central—or even unique—to their purpose. And even with the equivalent of the ‘arms corps’ within each Service, the development requirements are not the same for each individual and it is not necessarily easy to align a cohort. For example, it has been estimated for the US Navy that it takes approximately two years longer to produce a major surface combatant captain than the Army does a battalion commander.

The fact that the Army Technical Officers Staff Course (ATSOC), a long standing and very successful program of the Army, has now been renamed the Capability and Technology Management College (CTMC) as a joint organisation and placed under the command of the ADC within the ACSC is a significant recognition of the fact that there must be significant diversity in our understanding of just what the PME and JPME needs really are for the ADF (and Defence) as a whole. We must factor in the requirements of our specialists, whether in logistics, technical services or in other areas such as medicine and law.

Focus on what is unique

The third principle is that ***a defence force or a service needs to focus on providing with its own resources what is unique within the PME requirement and use external capabilities for what is not unique, particularly when these achieve economies of scale.***

We have become much better at recognising the training and education activities which can be conducted on a joint basis with shared administration and facilities and it is likely that the ADF will move further down this path in future. Similarly, we should not hesitate to use academic institutions and other providers when what we want is the same as the civilian world.

My own view is that the potential for 'distance learning' that is being opened up by rapidly developing information and communications technology will accelerate this trend because it will become progressively easier to access the centres of excellence in any particular area of expertise, no matter where the students are located. I have been particularly encouraged by the success of video lectures for the Defence and Strategic Studies Course (our senior program), as a way in which the world's leading experts on particular topics can be tapped for their expertise without having to make the expensive and time consuming journey to Australia on every occasion that we need them.

One of the associated issues is how much we should attempt to achieve external accreditation for our training and education efforts. This is not a simple question because, if we apply the principle that the ADF should focus on what is unique to the military profession, it follows that what is being taught and learned does not have exact equivalents in the civilian sphere. In reality, there is a cross-over of significant elements, no matter how 'military' the course, but lines do need to be drawn.

There is some evidence from overseas, for example, that efforts to make staff courses fully accredited and complete postgraduate degree

programs in their own right have sometimes had the effect of skewing the priorities away from the military requirement. The ACSC currently has some accredited elements which go a significant way towards the achievement of a postgraduate degree but not completely. Officers can do something in their own time to gain formal academic and external professional qualifications if they want them. The numbers currently undertaking part-time or external studies are such that it is clear that they are willing to do so.

JPME in the future

Do I see difficulties ahead? The greatest danger is that the apparent capabilities of distance and part-time education and training and the increasing cost of the time of our best personnel could combine to reduce or even end the practice of removing our officers for up to a year to undertake staff or higher defence courses—or allowing them time for full-time civil schooling. Learning is not a linear process and people do not necessarily gain all that they can or should within a high-pressure environment in which they are forced to husband inadequate time to meet only the most pressing priorities. Space for reflection and debate is vital to intellectual growth.

Henry Kissinger once commented that a person does not actually become wiser while doing a highly responsible, demanding and complex job. Wisdom comes, he suggested, only during an inter-regnum, in which one can consider and build upon one's experiences to develop a more complete and better judged picture of the world and an understanding of what still needs to be done. And then go out again. It may indeed be that the nature of warfare has changed in ways that make this kind of personal 'operational pause' even more important in ensuring that people do not burn out permanently. There will be a place for both part-time and full-time endeavours but we need to get the balance right.

Nevertheless, we can utilise distance processes to offer PME opportunities to a wider range of people and this possibility is currently being examined by the ACSC, which already runs very

successful distance programs for the Naval and Army Reserves. It may be that a good part of the ACSC opportunity can be extended to a larger audience—a way not only of providing more staff trained officers to the ADF but of developing in more officers the skills and attributes that they will require in higher ranks.

Another danger would be either erosion of or a failure to further develop the ADF's capacity to educate and train in the unique elements of the military profession. This relates not only to the higher command and planning levels but also in the basics of our profession, what the British Admiral Richard Kempenfelt described more than 200 years ago as the primary and secondary elements. As I have already noted, the pressure on the Australian career continuum is such that we have to keep the maintenance of very high training standards in developing our junior personnel as an absolute priority.

In this context, I do believe that the ADF will need to further integrate warfare training between the Services. This has been a gradual process for many years but it will have to go further. Apart from the unprecedented amphibious capabilities that the new landing ships and their associated assets will bring to the ADF, the networked nature of our ships, aircraft and, increasingly, land based assets means that we are not speaking of the five environments of space, air, sea, land and cyberspace but, in some respects, of one. The skills which will be required of an air combat officer in an aerial early warning and control (AEW&C) aircraft are very largely the same as those of an air warfare officer in an air warfare destroyer (AWD). Indeed, the former may well end up giving the order to fire for the weapons carried in the AWD, albeit from 60 nautical miles away and from 30,000 feet above sea level! How we do this will be one of the key training challenges of the next decade.

We will certainly need to continue to develop our efforts in training and educating for higher command. There has been significant change within the DSSC program over the last few years and it now includes not only a comprehensive higher command module but also classified and

unclassified electives which allow potential operational commanders to examine campaigning and higher command issues in depth. The Centre for Defence and Strategic Studies will continue to evolve this aspect of the course.

We will also need to continue to extend our leadership programs and, as an integral part of them, our ethics education. The Centre for Defence Leadership and Ethics (CDLE) is not only working closely with the three Services but also conducting its own courses and research to support our personnel at all levels in the increasingly complex, even chaotic, environments in which they must operate.

Finally, we need to work on developing JPME for our non-commissioned personnel. I have not dwelt on this aspect of PME but it is clear that there is a hunger for such activities and not only at the warrant officer and senior NCO levels. The participation by warrant officers of all services in key elements of the ACSC program and the annual NCO Forum represent an excellent start in this direction and they will be something, subject to the availability of resources, which the ADC will seek to build upon.

Conclusion

This article is intended to provoke comment and debate on what is—and always will be—a 'work in progress'. I welcome any response, either in the pages of the *ADF Journal* or to me personally via the Australian Defence College.

James Goldrick joined the RAN in 1974. A Principal Warfare Officer and anti-submarine warfare specialist, he twice commanded the frigate HMAS Sydney and later served as the inaugural Commander Australian Surface Task Group. During this posting, he commanded the Australian task group deployed to the Persian Gulf in early 2002 and also served as commander of the multinational naval forces enforcing UN sanctions on Iraq. He commanded ADFA from 2003 to 2006.

He was promoted Rear Admiral in May 2006 and appointed Commander Border Protection Command. In May 2008, he assumed duty as Commander Joint Education, Training and Warfare Command. He has a Bachelor of Arts from the University of NSW and a Master of Letters from the University of New England. He is a graduate of the Advanced Management Program of Harvard Business School. He was awarded the degree of Doctor of Letters honoris causa by the University of NSW in 2006 and is a Professorial Fellow of the Australian National Centre for Ocean Resources and Security. Admiral Goldrick retired from full-time service in 2012. He was awarded Officer of the Order of Australia in 2013.

Notes

- ¹ This article was published in Issue No. 181 of the *Australian Defence Force Journal* in 2010.

Creating strategic corporals? Preparing soldiers for future conflict ¹

Professor David W. Lovell, UNSW
Canberra at the Australian Defence
Force Academy

Introduction

The wars and other armed conflicts over the past century—since the time of the ‘Great War for Civilisation’ (which has become known as the First World War)—have seen substantial changes in many key areas of military science and technique.² Wars of position have been replaced by battles of manoeuvre and, largely as a consequence, massed battles have been supplanted by the actions of small (or smaller) units; battlefields are now unlikely to be remote from larger towns and cities, and civilian casualties (sometimes deliberate, sometimes unintentional) continue to rise; technology has made weapons more lethal and more accurate, communications instantaneous, and killing often more remote and clinical.

By contrast, the fundamental causes of war, at least as Thucydides presented them 2500 years ago—fear, honour and interest—have not changed. Nor has the fact that taking lives and fighting for your life is traumatic for combatants themselves; and nor has the likelihood that we will continue to wage war against each other into the foreseeable future at almost any cost to our material, social and psychological wellbeing. The only limit we have so far recognised, with two

terrible exceptions, is with the indiscriminate nature of, and potential for human extinction embodied in, nuclear weapons; and on this self-imposed limitation there is no absolute guarantee into the future.

In these changes over the past century, what has been asked of the soldiers—and sailors and aircrew—has also changed. In armed conflicts, we expect soldiers of all ranks to be able to operate more autonomously, to exercise considerable judgment in (and take responsibility for) their actions, to be technically proficient, and to understand the larger picture of which their efforts are merely a part. No longer are soldiers ‘cannon fodder’. In front-line forces, there are fewer of them and their actions count more than in the past; they are highly trained and extensively equipped and supported; and the loss of their lives is felt—particularly in modern democracies—as a national and political tragedy.

This emphasis on individual soldiers, their physical safety in the field and their physical, emotional and psychological well-being after the conflict, is matched by the increasing surveillance over their actions, especially in the field, by the established media as well as by the electronic communications technologies that have expanded into almost every aspect of our lives in recent years. But soldiers are increasingly asked to do much more than fight in armed conflicts, especially over the last three or four decades. They act as peacekeepers, often in volatile situations. They act as emergency responders in natural disasters. And they act in constabulary roles in a variety of challenging areas, including drug and people smuggling.

Nations now look to their armed forces for professional, thoughtful and effectual but restrained behaviours that do credit to their flag. The devolution of considerable authority to soldiers at the point of action, the sometimes conflicting demands the mission makes of them, the provocations they often face, and the scrutiny

that they are consistently under, all demand a degree of education and training of soldiers, and of a more general preparedness, that is the subject of this article.

Charles Krulak's notion of the 'strategic corporal' drew attention to a number of the challenges facing soldiers in recent conflicts.³ These include the complexity of the modern battlefield and the range of tasks that need to be prioritised and addressed; the role of the more junior ranks in making important decisions within their field of operation (whether by the incapacity of officers, the inability to receive communications, or an increasingly small-group approach to many operations); and the ever-present scrutiny of their actions and thus potentially mission-crippling nature of their errors being broadcast to the world. Yet the initiative, sense of responsibility and preparedness expected by Krulak of the corporal are best extended to all soldiers.

This article begins with some reflections about the future of conflict: the challenges, in other words, that soldiers will need to confront in the near- to medium-future. Krulak's notion of the 'three-block war' encapsulates some of these issues but my purpose here is to canvass the breadth of the matters of which soldiers should have some understanding. Arguing that technology will play an ever-larger role in future conflict, I stress that the challenges confronting human beings are not thereby diminished and, in some ways, demand even more attention.

The third substantive section outlines some of the ways in which an appropriate level of preparedness among soldiers can be developed. My central theme is that precisely because of the difficulties of predicting the future of conflict in any but a coarse-grained sense, preparing our soldiers for the unexpected challenges that will inevitably arise needs to be given as much attention as the acquisition of weapons platforms (over which nations agonise deeply and spend extravagantly).

The future of conflict

It seems to be a Danish proverb, sometimes attributed to the physicist Niels Bohr, that '[p]rediction is very difficult, especially if it's about the future'. But in writing of 'the future', I want to limit my horizon to the next 30 years. That, broadly speaking, is the career span of an officer cadet or midshipman entering the ADF today. If we look to the next 30 years, what can we expect with reasonable certainty?

To sharpen our focus further, think of the 30 years since 1984. It was not quite the year that George Orwell had predicted in his dystopian vision, though some of its themes rang true, especially about the corruption and control of language. And Orwell's warnings about pervasive surveillance of our everyday lives are increasingly and deeply worrisome.

In 1984, the Cold War was in full swing.⁴ The first Macintosh personal computer came onto the market, changing the face of personal computing forever with its use of a graphic interface.⁵ Three years later, China's 'reform and open' policy was launched by Deng Xiaoping, which has led to the spectacular economic and strategic rise of China. The Soviet Eastern bloc collapsed in 1989 and the Soviet Union itself followed in 1991. Al-Qaeda launched its boldest attack against the US in 2001, and US forces subsequently invaded Afghanistan and then—on the same anti-terrorist pretext—invaded Iraq in 2003 and overthrew the regime of Saddam Hussein.

This has opened an era of sectarian violence in the Middle East that threatens to last for generations. In the Arab world since 2010, a large number of previously-secure rulers have been unseated and civil wars and other conflicts continue to destabilise the region. Though democracy was the great hope of this 'Arab Spring', the reality has proved more diverse and more troubling. So there have been enormous political changes, most of them unpredicted.

The Internet, an electronic networking system conceived in the early 1960s as a way to provide a robust, distributed communication system for

US defence purposes, was increasingly deployed by academia in the 1980s, and began to be commercialised in the 1990s.⁶ This technology has shaped modern communications, with the development of mobile telephony and so-called 'smart phones' becoming available from the mid-1990s, and exploding in 2007 with the release of the first iPhone.

So there have been enormous technological changes, particularly in communications. Weaponry has incorporated and sometimes led these changes, including the introduction of precision-guided weapons that first saw wide use in the Gulf War in 1990-91. The threat of nuclear weapons has receded from view but, at the same time, the lethality of conventional weapons has increased many-fold.

In international relations, we had hopes (and some misgivings) for a 'new world order'; for an 'end to history'; and for the triumph of democracy. In other words, we anticipated—for 'one brief, shining moment', to coin a musical phrase—a harmonious world. What we have seen since the late 1990s but especially since '9-11', instead is a world where democracy appears increasingly unattractive; where some unfree states, notably China, seem to have cracked the code of wealth-creation, creating an attractive model for developing states; and where the abolition of the distinction between Church and state, in a new Islamic caliphate, has become a cause to which thousands are prepared to take up arms, even and especially against their co-religionists. These models are now in active, and sometimes bloody, competition against each other.

The unsurprising lesson of such an overview of 30 years is that change will continue—and will continue to surprise us. And, independent of such changes, though often linked to them, we also know that conflict will continue. Conflict is an inescapable element of the human story. Many of our human institutions are creative responses to conflict, channeling competitive energies into politics, law, markets, diplomacy and so on. But force remains the ultimate arbiter of human disputes.

What sort of wars will we fight in the next 30 years? It has been observed that wars between states themselves have declined since the end of the Second World War, and that wars of a new type—wars within states, over issues of identity, fought in unconventional ways and with unconventional financing—will predominate. Mary Kaldor is rightly prominent among a number of analysts who have made such points, and I will not gainsay them.⁷

Yet we should not be complacent that interstate wars are now impossible, especially on the basis of our impressive material achievements. We certainly have a lot to lose. But European states at the height of their material and cultural civilisation went to a disastrous war in 1914, and large modern cities—Coventry, London, Tokyo, Dresden, not to mention Hiroshima and Nagasaki—have in subsequent wars been devastated by aerial bombing and associated firestorms. We should not limit our thinking, or our preparation, by denying some futures as 'unthinkable'.

If we ought to acknowledge that interstate wars are not impossible, we should also be alive to the changes and challenges in guerrilla warfare. Fighting insurgents in remote environments in Afghanistan and Iraq, as we have been doing for more than a decade, does not constitute the 'textbook'. David Kilcullen rightly reminds us that the key megatrends—rapid population growth, urbanisation, littoralisation and global networked connectivity—will confront us with diverse operating environments for which we need different types of capabilities and preparation. He summarises his point by anticipating an age of the 'urban guerrilla'.⁸

What we should acknowledge at the very least is that the conflict scenarios of the future are unpredictable within a wide arc, and will be complex.

Another point arises from the experience of the last 30 years (and of the history of conflict more generally) which is crucial but I think often overlooked or discounted in these sorts of discussions. Wars of all sorts are terrible but they

are rarely decisive. They do not, on the whole, solve problems. As Thomas Hobbes put it in the 17th century, there is no better 'hope to mend an ill game, as by causing a new shuffle'.⁹ We must know that even if we are obliged or choose to fight a war, the application of force is unlikely to solve the problems that led to it.

Indeed, open conflict merely indicates that one equilibrium has broken down. That equilibrium may have been precarious, or unjust, or in other ways undesirable but its destruction may unleash a Pandora's box of troubles, giving succour to the discontented, the opportunists and the spoilers. Wars do not promise ready or clean solutions. That is, in addition, because wars themselves often create new points of disagreement or injustice.

We need to have clear and realistic views about what wars can achieve when we embark upon them. In his 1827 letter to Major Carl von Roeder, where he famously pointed out that war 'is the continuation of politics by different means', Clausewitz went on to state the consequence of this view that 'there can be no question of a *purely military* evaluation of a great strategic issue, nor of a purely military scheme to solve it'.¹⁰

In irregular war—much more than in regular war (where battles tend to be decisive)—the political dimension is key. Lawrence Freedman noted that we should not be too despondent about our capacity to deal with irregular warfare as a military problem, contending that:

The key point however is that the military strategy must be integrated with a political strategy. If the side we are supporting is weak it is probably because it lacks a strong political base and is prone to division.... The side with the strongest political foundations should prevail militarily.¹¹

General Wesley K. Clark has argued that the US intervention into Iraq in 2003 was 'a perfect example of dominating an enemy force but failing to secure the victory'.¹² And especially if we *choose* to go to war, we must also be aware of the role of chance. Winston Churchill in 1930 advised that:

[Any] statesman who yields to war fever must realize that once the signal is given, he is no longer the master of policy but the slave of unforeseeable and uncontrollable events. Antiquated War Offices, weak, incompetent or arrogant commanders, untrustworthy allies, hostile neutrals, malignant fortune, ugly surprises, awful miscalculations—all take their seat at the council board on the morrow of a declaration of war.¹³

So wars of the future will be, as they have been in the past, unpredictable, complex and inherently limited in their ability to provide solutions.

One further point I will hazard with a reasonable degree of confidence is that it is unlikely that in the next 30 years Australia will fight a war for its existence as a sovereign state. Therefore, the conflicts in which Australian soldiers will take part will be wars of choice, and will almost certainly be in coalition with our allies, and will be at some remove from our shores.

All these predictions have ramifications for equipment and capability but they do not change the human factors of dealing with the experience of battle. In some respects, they deepen the complications. The ADF will, consequently, continue to be a professional and not a conscript defence force. That means that we not only *need* to think but we can *act* to prepare ADF soldiers to the best of our ability.

Technology and organisation

Technology has become the handmaiden of the imagination. And we can expect continuing, significant and rapid technological change over the next 30 years. But how will it affect warfare? I begin my answer with a cautionary point. The impressive military technologies of today give the very misleading impression—to both politicians and citizens alike—that modern wars can be won by technology and no longer need involve large inputs of human power or loss of life. And the reliance on technology does not absolve the decision makers 'from hard questions of strategy and policy' (which Russell Weigley argued was a dangerous American tendency);¹⁴ and nor should it lower the policy threshold of the use of force as a last resort.

This point having been made, let me cover some of the principal areas where our military technologies will further assist our ability to wage war. In no particular order of priority, we may expect:

- An increased ability to cut through the ‘fog of war’—those issues of situational battlefield awareness that Clausewitz drew to our attention, and that Tolstoy communicated so well in the battle scenes of *War and peace*;
- An increased ability to be more effectively and precisely lethal in the application of force;
- A better ability to do ‘more with less’; in the face of increasing challenges to national budgets, to get more lethality, more mobility and more firepower from a smaller number of weapons platforms;
- An ability to be more nimble in both getting to the battlefield, moving around it, and extracting oneself and one’s wounded comrades from it if necessary; and
- Finally, an ability to be better protected and better able to survive what previously would have been considered fatal wounds.

These ‘clusters’ of abilities will be variously addressed and implemented by new and developing technologies. All of them will continue to develop as they have developed across the history of organised warfare for centuries. What is different, perhaps, is the attention, seriousness and (consequently) funding they will receive, and the likely rapidity with which they will advance. The best technical and theoretical minds applied themselves to advances in warfare in the 20th century, in Bletchley Park, Los Alamos and elsewhere, and this will doubtless continue.

While this organised human activity is fascinating, I confess that I don’t find the technologies all that interesting in themselves. Identifying problems and devising fixes are what humans have become extraordinarily good at over the past two or three hundred years. Max Weber called it *Zweckrationalität*—instrumental or goal-oriented

rationality—and argued that it had become a dominant characteristic of modernity.¹⁵

Technology is not an unalloyed good; it has the potential for unintended consequences. The use of precision-guided weapons might degrade the barriers against using nuclear weapons, or enemies might use pernicious tactics to strike back (such as using human shields or the Iraqi burning of Kuwaiti oil fields in 1991). The technology that allows people to aim and fire weapons remotely can mean that killing is not felt to be ‘real’, diminishing restraints.

The increasing technological integration of civilian and military systems means that any ‘cyber war’ will likely impact citizens and civilian infrastructure (especially the increasingly ubiquitous machine-to-machine communications, or the so-called ‘internet of things’)¹⁶, and not just military systems. (That, indeed, might be its very purpose.)

Technology may also lower the threshold of conflict, by one party considering that certain sorts of technological interference constitute ‘aggression’. It also may lower restraints on the idea that force should be used only as a last resort. And when soldiers are provided with the ‘larger picture’ that the new IT allows, they are ‘likely to second-guess decisions made at higher levels and (in richly-connected systems) have the information required to undertake initiatives their superiors may find inappropriate’.¹⁷

Soldiers, of course, will become much more adept at using the new technologies, just as children nowadays have an almost intuitive sense of how to use smart phones and computer tablets. But soldiers will still suffer fatigue and rely on judgments, good and bad. They will be courageous and afraid; they will be daring and timid; generous and mean-spirited; and I am certain they will continue to find the taking of others’ lives repugnant, even if sometimes necessary. John Keegan has rightly stressed this human dimension:

What battles have in common is human: the behaviour of men struggling to reconcile their instinct for self-preservation, their sense of honour and the achievement

of some aim over which other men are ready to kill them. The study of battle is therefore always a study of fear and usually of courage; always of leadership, usually of obedience; always of compulsion, sometimes of insubordination; always of anxiety, sometimes of elation or catharsis; always of uncertainty and doubt, misinformation and misapprehension, usually also of faith and sometimes of vision; always of violence, sometimes also of cruelty, self-sacrifice, compassion; above all, it is always a study of solidarity and usually also of disintegration—for it is towards the disintegration of human groups that battle is directed.¹⁸

Soldiers need to be ‘trained’ for the use of technology but they need to be ‘prepared’ more broadly for fighting wars. The human factor is the most important factor in war: in starting wars; in fighting wars; and in ending wars and rebuilding. Intrinsic to this factor is the organisation of Defence itself, on which I shall dwell for a moment.

Modern warfare is essentially industrial and bureaucratic. Ironically, the ability to engage in conflict requires the highest levels of cooperation and organisation. If hierarchy and bureaucracy (in the neutral, Weberian sense) are the best ways of getting human beings organised to pursue certain tasks, it is not surprising that militaries should be their exemplars. But bureaucracies have their drawbacks—and it is worth mentioning three in particular that can impact on our ‘prepared’ soldier’s ability to function strategically in combat.

First, bureaucracies tend to be risk-averse and obsessed with control; they feel threatened by different and challenging ideas, by open debate, by the unexpected. I know, or know of, senior leaders who are not like this. But most of their subordinates either chafe at, or quietly endure, the confines within which they must work and think; and some—through a process of socialisation—no longer see the confines at all. The soldier or official who disrupts the bureaucratic logic of control may well find himself with a short career.

I have hitherto used the masculine gender, and it relates to my second point: that the Australian military and military bureaucracy is not a diverse culture. The ADF is largely white and male (that is,

predominantly male and third-generation Australian). A recent report from within the organisation argued that ‘the language practices of Defence are mechanisms that thwart diversity and greater social inclusion’.¹⁹

A more diverse workforce would better represent the Australian people that Defence serves, allowing varied perspectives and enhanced operational capability. And as a professional service, uniformed and civilian, Defence needs to be attractive as a place for people to work, and to stem the attrition of highly-trained people. Nick Jans has described the ADF as consisting of four ‘tribes’: Navy, Army, Air Force and Australian Public Service.²⁰ Part of the preparation of soldiers must be to understand better the members of those other tribes with whom they will almost inevitably work in the conflicts to come, and to understand the broader community from which they are drawn.

The third issue is the ceaseless bureaucratic activity of Defence: the stress on process rather than outcomes, the hamster-wheel of extraordinary exertion, even and especially in times of peace, inducing fatigue and straining commitment.

Therefore, when we try to imagine (and prepare for) future conflicts, we should think less of the development of incipient and even imagined technologies of killing—however ingenious, effectual and precise—and more of the qualities and attitudes that are required for the successful prosecution of a war and the ultimate resolution of the issues that led to it. For they are essential if conflict is not simply to smoulder and subsequently reignite: if the deck is not to be reshuffled once again, to echo Hobbes. How do we develop such soldiers?

The prepared soldier

First of all, soldiers should know in general terms where they stand in the scheme of Defence, and where Defence stands in the scheme of government. They should know the risks and the limitations of war as a means of resolving conflict. They need to be convinced that the conflict in

which they put their lives at risk, and will likely take the lives of others, has a sound cause and a strong likelihood of success, and is not merely the product of grandiose personal ambitions, rivalries fanned by unthinking jingoism or desperation.

Like every citizen, they should be able to discern whether a war involves decisive action, with clear exit points, and transparent goals related to vital interests. While they might be familiar with the geographical landscape on which they operate, they should also be aware of its cultural landscape; not just to honour in some sort of token way the cultural achievements of their enemies, or even to be aware of the taboos the breaking of which can damage their relations with the local people (especially important in a counter-insurgency conflict) but to understand the conflict from the side of the enemy, the better to judge their seriousness and motivations, and the depth of their hostility, and in the final analysis why the enemy is trying to kill them.

As I have argued elsewhere, the advanced study of history, of politics, of law, and of literature are essential to the modern soldier, and not just to the circle of officers, in developing the types of understanding I have just outlined.²¹ The study of history is not about ‘learning from the mistakes of the past’; rather, it allows us to see the vast range of human responses to particular situations, to consider possibilities and boundaries. Literature stimulates the soldier to imaginatively construct the feel of the battlefield, and to understand how different—but at the same time how similar—he or she is to others, even across age, gender, ethnic, religious and cultural divides.

Politics and its sub-discipline, international relations, allow a soldier to understand the reasons for a conflict and the likelihood of a just settlement. And politics, furthermore, opens up the world of the underlying power structures of the societies in which it is operating, supplemented perhaps by social anthropology. Law reinforces the importance of sets of rules of behaviour not just in the societies in which a soldier might be operating but in the conduct of war itself. And the discipline of ethics also has something to contribute, for while technology

sometimes gives a decisive edge in battle, the human control of technology requires ethical decision-making, and the ability to hold humans to account for their actions.²²

I am not advocating the development of ‘soldier-scholars’, though there have always been some soldiers who value the cultivation of their broader intellect almost as much as their professional mastery. Rather, I am commending the ability to process the vast amounts of information with which we are confronted to create *knowledge*: ordered and connected information.

In his 19th century discussion on *The idea of a university*, Cardinal Newman described the sort of intellect I think the soldier should have: ‘one which takes a connected view of old and new, past and present, far and near, and which has an insight into the influence of all these one on another; without which there is no whole, and no centre’.²³ He called this a ‘liberal education’, by which he meant the development of *useful* and *relevant* knowledge but not directly *applied* knowledge (for which training was the appropriate avenue). The distinction between training and education is even more relevant today.

The challenges of future conflict, in so far as we can anticipate them, also and relatedly, mean that soldiers need to develop a leadership style that embraces and encourages colleagues and subordinates: a collective style that cares about and draws from the collective to make good decisions, and engages all its members. The ability to develop trust in collectives, teams, is vital to the development of this leadership style.

Leadership and hierarchy are not synonymous concepts: hierarchical authority does not necessarily equate with experience or good decisions. The ability of senior ranks to listen to their juniors is critical. Sociologically, this style emerges more readily from a democratic society, the removal of the aristocratic element from military leadership, and the modern emphasis on merit and knowledge. A genuine discussion over strategy and tactics between different ranks that was almost unthinkable in 19th-century Prussia,

for example, is nowadays taken as granted. Hierarchy has become the last refuge of the intellectually insecure.

Because of the almost universal human injunctions against killing, and what Dave Grossman has described as the ‘innate resistance to killing their fellow human beings’,²⁴ there needs also to be an educated self-consciousness of how the act of killing will be handled mentally by those who do it, and a recognition that time for group de-compression at the end of a tour of duty, and frank and intelligent responses by society at large to widespread instances of Post-Traumatic Stress Disorder from returned soldiers need to be developed.

The reality of being in a war zone one day and the safety of home in 24 or 48 hours is challenging for soldiers to process. And increasingly this aspect of what might be called ‘post-modern conflict’ and its dangers are being recognised. But soldiers must first know what to expect, much as Elisabeth Kübler-Ross analysed the five stages of grief when confronted by impending death.²⁵ I endorse Grossman’s view that:

[I]f society prepares a soldier to overcome his resistance to killing and places him in an environment in which he will kill, then that society has an obligation to deal forthrightly, intelligently, and morally with the result and its repercussions upon the soldier and the society.²⁶

Conclusion

There have been many ‘models’ of soldiers in the past, from the patrician soldier of ancient Rome, personified by the statesman Cincinnatus, who reluctantly took up public office and returned to his farm once the task was done (and to whom George Washington was often compared)²⁷, to the soldier as expendable ‘pawn’ or, in the 19th-century expression, ‘cannon-fodder’. But the sociology of armed forces has changed.

Our democratic sensibilities recommend a more cooperative hierarchy of abilities and talents, and the creation of the ‘citizen-soldier’. Aristocratic hangovers lurk harmlessly in ceremonial uniforms and Mess rituals, which have a way of reinforcing the distinction between insider and outsider. The

new technologies of war have empowered modern soldiers and reinforced meritocracy but underlined the importance of soldiers’ ability to partake in cooperative leadership. Their education must develop the skills—and the *courage*—of independent judgment; their formal education must be the start of a process of lifelong learning.

Soldiers are not simply people who go onto the battlefield and fire their weapons, or whose chief virtue is ‘obedience’. They are the spearhead of a vast organisational chain, the results of years of preparation, and they must be the very best we can manage. Their lives are better protected the better educated they are; the more informed about their mission and their enemy; the more they can participate in the leadership of their mission; and the more they can appreciate the strains of battle and how to cope with stress and death. Prepared soldiers are resilient.

The soldiers who put their lives at risk for their country today need a complex set of intellectual strengths and insights to take with them into battle along with their weapons. Where their enemies may be zealots in some religious or ideological cause, they need an appreciation that tolerance and diversity are worth fighting for. I grant that these *desiderata* represent a tall order but, without a liberal education, such an order has no chance of being filled.

One further, crucial point needs to be kept in mind. None of the emphasis in this essay on preparedness for responding to the intensified challenges of the modern battlefield reduces the importance of the overarching strategic decisions which put soldiers on that field in the first place. A prepared soldier cannot substitute for a poor strategy.

David Lovell is Professor in International and Political Studies at the University of NSW (UNSW) Canberra at the Australian Defence Force Academy (ADFA). He completed his Bachelor's and Master's degrees in Adelaide, and went to Canberra in 1981 to undertake his PhD at the Australian National University.

*He has been a member of UNSW since 1983, first at the Royal Military College Duntroon and then at ADFA. Since 1993, he has been a member of the Executive Committee of the International Society for the Study of European Ideas, and is co-editor of its journal, *The European Legacy*. He is also a member of the Council for Security Cooperation in the Asia-Pacific. He was Head of the School of Politics at UNSW at ADFA from 2001–2003, Presiding Member of the Research Committee in 2003–2004, Acting Rector in 2004, and Deputy Rector (Special Projects) in 2008.*

Notes

¹ This article was published in Issue No. 200 of the *Australian Defence Force Journal* in 2016.

² See, for example, Robert Fisk, *The great war for civilisation: the conquest of the Middle East*, Fourth Estate: London, 2005.

³ Charles C. Krulak, 'The strategic corporal: leadership in the three block war', *Marines Magazine*, January 1999, available at http://www.au.af.mil/au/awc/awcgate/usmc/strategic_corporal.htm accessed 28 June 2016.

⁴ See, for example, Richard H. Immerman and Petra Goedde (eds.), *Oxford handbook of the Cold War*, Oxford University Press: Oxford, 2013.

⁵ Steven Levy, *Insanely great: the life and times of the Macintosh, the computer that changes everything*, Viking: New York, 1994.

⁶ Critical was work done by the Defense Advanced Research Projects Agency; for a fuller and detailed account, see Barry M. Leiner, Vinton G. Cerf, David D. Clark, Robert E. Kahn, Leonard Kleinrock, Daniel C. Lynch, Jon Postel, Larry G. Roberts and Stephen Wolff, 'Brief history of the Internet', *Internet Society* [website], available at <http://www.internetsociety.org/internet/what-internet/history-internet/brief-history-internet#> accessed 21 July 2015.

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- ⁷ Mary Kaldor, *New and old wars*, 3rd Edition, Polity Press: Cambridge, 2012.
- ⁸ David Kilcullen, *Out of the mountains: the coming age of the urban guerrilla*, Hurst: London, 2013.
- ⁹ Thomas Hobbes, *Leviathan*, edited by Richard Tuck, Cambridge University Press: Cambridge, 1991, p. 71.
- ¹⁰ Cited Peter Paret, 'The genesis of *On war*', in Carl von Clausewitz, *On war*, edited and translated Michael Howard and Peter Paret, The Folio Society: London, 2011, p. xxx.
- ¹¹ Lawrence Freedman, 'Regular and irregular war', *Strategic Datalink* [website], August 2008, available at <<http://opencanada.org/reports/strategic-datalink/>> accessed 10 July 2015.
- ¹² Wesley K. Clark, *Winning modern wars: Iraq, terrorism, and the American empire*, Public Affairs: New York, 2003, p. xiv.
- ¹³ Winston S. Churchill, *My early life: a roving commission*, The Folio Society: London, 2007, p. 231.
- ¹⁴ Russell F. Weigley, *The American way of war: a history of United States military strategy and policy*, Indiana University Press: Bloomington, 1977, p. 416.
- ¹⁵ Max Weber, *Economy and society: an outline of interpretive sociology*, as edited by Guenther Roth and Claus Wittich, University of California Press: Berkeley, 1978, pp. 24-5.
- ¹⁶ For a sanguine account of M2M, see Jan Holler, Vlasios Tsiatsis, Catherine Mulligan, Stefan Avesand, Stamatis Karnouskos and David Boyle, *From machine-to-machine to the Internet of things: introduction to a new age of intelligence*, Academic Press: Amsterdam, 2014.
- ¹⁷ David S. Alberts, *The unintended consequences of information age technologies: avoiding the pitfalls, seizing the initiative*, Institute for National Strategic Studies, National Defense University: Washington DC, 1996, p. 36.
- ¹⁸ John Keegan, *The face of battle*, The Folio Society: London, 2008, p. 277.
- ¹⁹ Elizabeth A. Thomson, *Battling with words: a study of language, diversity and social inclusion in the Australian Department of Defence*, Department of Defence: Canberra, 2014, p. xi.
- ²⁰ Nick Jans (with David Schmidtchen), *The real c-cubed: culture, careers and climate, and how they affect capability*, Canberra Papers on Strategy and Defence No. 143, Australian National University: Canberra, 2002, pp. 121-38.
- ²¹ David W. Lovell, 'Educating for ethical behaviour? Preparing military leaders for ethical challenges', in David W. Lovell and Igor Primoratz (eds.), *Protecting civilians during violent conflict: theoretical and practical issues for the 21st century*, Ashgate: Farnham, 2012, pp. 141-57.
- ²² See Rebecca J. Johnson, 'Moral formation of the strategic corporal', in Paolo Tripodi and Jessica Wolfendale (eds.), *New wars and new soldiers: military ethics in the contemporary world*, Ashgate: Farnham, 2011, pp. 239-56.
- ²³ John Henry Newman, 'The idea of a university defined and illustrated, 1852', *Newman Reader* [website], available at <<http://www.newmanreader.org/works/idea/discourse6.html>> accessed 10 July 2015.
- ²⁴ Dave Grossman, *On killing: the psychological cost of learning to kill in war and society*, revised edition, Little, Brown and Company: New York, 2009, p. 13.
- ²⁵ Elisabeth Kübler-Ross, *On death and dying*, Tavistock Publications: London, 1970.
- ²⁶ Grossman, *On killing*, p. 287.
- ²⁷ See Minor Myers, *Liberty without anarchy: a history of the society of the Cincinnati*, University Press of Virginia: Charlottesville, 2004.