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Thinking About Strategic Thinking

Developing a more effective strategic thinking culture in Defence

Major General Mick Ryan



About the Series

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Acknowledgements

I wish to acknowledge the insightful and valuable contributions provided by a range of people from across the Australian Defence Force (ADF) and the Department of Defence, as well as Australian and US academics. Input and critiques have been received from ADF personnel from ranks O4–O9 of all Services and the equivalent in the Australian Public Service (APS). Further, a ‘red team’ was conducted with mid-ranking ADF and APS personnel to test the diagnosis and proposed responses in this paper. I also wish to acknowledge the significant contributions of Dr Paula Thornhill, retired Brigadier General (US Air Force), acting Director of Strategic Studies and Associate Professor of the Practice at Johns Hopkins School of Advanced International Studies.

Executive Summary

Senior leaders in the Australian Defence Force and Defence, more broadly, recognise that an improved institutional capacity for strategic thinking is required to navigate Australia's defence and security challenges, now and in the future. In addressing those concerns this paper directly responds to the challenges and opportunities raised by the 2020 Chief of Defence Force question: how do we nurture and build better strategic thinkers?

The paper identifies broad gaps in how Defence has traditionally approached strategic thinking skills in its people. These are synthesised into four specific challenges:

- defining strategic thinking and what Defence wants in its strategic thinkers
- nurturing a learning culture that values and validates strategic thinking skills and activities
- identifying and selecting talented individuals from junior to senior ranks
- developing strategic thinking capabilities across Defence over the long term to better effect.

Yet the paper demonstrates that these challenges are also opportunities. They provide a framework for considering and assessing ways forward.

A number of core skills and behaviours are suggested to help define what Defence needs in a strategic thinker. They include the capacity to understand and evaluate alternative perspectives; creative and critical thinking; curiosity and a love of learning; interpersonal and communication skills; political and social acumen; and the ability to develop, execute and evaluate problem-solving strategies.

Key to nurturing a strategic learning culture is to reward and model behaviours that encourage strategic thinking at all levels of an organisation. Hence incentive structures that inhibit long-term thinking, intellectual curiosity and self-development, while rewarding short-term priorities, narrow focus and time-consuming processes, should be identified and amended to encourage a more holistic approach to strategic thought.

Defence has the capacity to develop an explicit talent management process for identifying strategic thinkers. This can be both systematic and proactive, aiming to locate strategic thinking skills at every career stage. We should appraise strategic thinking abilities and improvements in our graduate programs, education and training activities, and annual performance reports. Strategic thinking potential can also be found through providing

experiential opportunities that expose our personnel to problems requiring strategic thinking skills.

We will develop better strategic thinkers by combining talent, education and experience. We should seek to provide our strategic thinkers with real-world experiences that challenge them; construct diverse, multidisciplinary teams that test and extend their skills; and expose them to a wide variety of educational opportunities. They should be mentored and encouraged to contribute to online communities that encourage the competition of ideas and life-long learning. And, we should provide an effective balance of career management incentives.

These are all avenues that can build better strategic thinkers in a whole-of-force and a broader whole-of-department context. By taking the opportunity to further evolve the ADF-endorsed Joint Profession Military Education curriculum these elements can be consolidated into a clear strategic-thinking development continuum: one that finds, nurtures, and builds strategic thinking capability to benefit all of Defence.

It has never been possible for one person to know everything or to make good decisions without reliance on other inputs. Not everyone knows this or accepts it. Organisations have often run on the 'great man theory' – the person at the top's awesomeness is the key risk mitigation. That has had mixed results even for the most awesome [see Napoleon]. This is why you need to make the case that the need for strategic thinkers is essential, and that more complexity = greater need. It is about understanding context and problem framing/solving – not technology or rate of change. History proves the point repeatedly. Those who deal with complexity and change best generally perform better. It is the height of arrogance to assume that 'our age' is special and somehow a fundamentally different human experience.¹

Introduction

It is more important to make correct decisions at the political and strategic level than it is at the operational or tactical level. Mistakes in operations and tactics can be corrected, but strategic mistakes live forever.²

This paper responds to the 2020 Chief of Defence Force (CDF) question: *how do we nurture and build better strategic thinkers?* It is a deceptively simple question but not a simple undertaking. Strategic thinking is a difficult skill to recognise and nurture in people because it is as much a mindset as a set of procedures. It also takes time. Yet, short-term, tactical activities in the workplace are rewarded more often than long-term vision, analysis and planning. However, strategic thinking is an essential part of large organisations. Strategic thinking provides vital insights for logical, long-term decision-making; strategic planning; aligning power with policies; interconnectivity inside and beyond institutions; and adapting to change. So, how can we in the Australian Defence Force (ADF), and wider Department of Defence (Defence), identify, develop and employ people who are capable of thinking about strategic problems and developing solutions that can be realistically implemented?

The challenge of strategic thinking transcends just the 'thinking' element. It requires an institutional discipline for a long-term approach to talent identification; professional training; education and development; incentive structures that encourage diverse, and often dangerous, ideas; and a clear organisational view of the kinds of strategic thinkers we wish to build. Strategic thinking, therefore, demands that we nurture a strategic learning (and practice) culture – our institutional ability to effectively harness the disparate and diverse intellects of our people to learn, unlearn, challenge old ideas and solve complex institutional problems in the short, medium and long-term. This culture also encompasses the capacity to build on Service and joint training, education and experience. It is an important element of building a highly professional cohort of strategically minded Defence public servants and core to developing mid-ranking and senior members of the profession of arms.

The literature review for this paper examined views outside Defence on the characteristics of strategic leaders and thinkers, but also included Australian references such as *The Chiefs: A Study of Strategic Leadership and Thoughts on Generalship*.³ This research was combined with insights from academics and other senior leaders and influencers with experience in strategy, strategic leadership or the teaching of strategy. In addition, responses were gathered via an email questionnaire sent to members of the Defence Senior Leadership Group that posed three questions. Do we in the ADF and Defence have a problem with strategic thinking? What is the diagnosis of the problem? What are some solutions?

This paper has been designed to prompt a 'challenges and opportunities' discussion among Defence's senior leadership on how we might nurture a strategic learning culture and strategic thinkers within our organisation. Improvement is inherent in the question posed by the CDF. And, while there are a wide variety of views on what the ADF and Department of Defence requires of its most senior strategic leaders, influencers and thinkers, as well as our current shortfalls, it was the view of the majority of senior military and Australian Public Service (APS) members interviewed for this paper that we can and must do better.

The paper is divided into two parts. Part I explores and provides a description of the current situation, including the views of senior Australian Defence Force (ADF) and Defence leaders interviewed for this paper. It concludes with a proposed diagnosis of the problems with strategic thinking in the ADF and the wider Department of Defence. Part II examines opportunities in the systemic development of better strategic thinkers.

Part I

Strategically Effective Military Organisations

Any notion of what is required of a strategic thinker, particularly within a strategic learning organisation, must start with a conception of a strategically *effective* organisation. One of the most significant studies of military effectiveness in recent times was that conducted by Allan Millett and Williamson Murray in the late 1980s.⁴ For them, military effectiveness is ‘the process by which armed forces convert resources into fighting power’.⁵ However, war continues to evolve and, therefore, our notions of effectiveness must also evolve. Twenty-first-century war and competition involve a refined balance of violence and influence, and require better integrated military activities in a larger, national, strategic approach. Therefore, I propose a slightly amended version of the definition. In the 21st century, military effectiveness will be the process by which armed forces convert resources into *the ability to influence and fight within an integrated whole-of-government approach for coherent effect*.

At its most basic, we might also describe an effective Department of Defence as one that is able to successfully achieve government policy objectives in defending Australia and its interests. Part of this is an institutional ability to think ahead of the curve and anticipate competitors’ strategies. But it is more complex than that, and we require additional specificity if we are to build people who are the foundation of this strategically effective organisation.

The best current framework for a strategically effective Defence organisation is provided by the *Defence Corporate Plan 2020–2024* (‘Corporate Plan’). It is one of the few documents that describe how Defence achieves strategic outcomes and how they are measured within a whole-of-government approach. The document lists multiple performance criteria, each with their own targets and measures of success. Core outcomes from the document are as follows:⁶

- conduct operations and national security tasks to achieve government-directed outcomes
- maintain future-focused strategic policy for Defence initiatives and address strategic risks
- protect and advance Australia’s interests globally to address current and future challenges
- engage industry to enhance support of sovereign capability
- maintain intelligence capability to deliver government and Defence strategic objectives
- design the future force to address strategic risks
- strategic research and development in technology for future Defence capability
- generate, train and sustain integrated capabilities, including workforce
- generate and sustain joint enabling elements at the required rate
- manage the investment, acquisition and sustainment of Defence equipment
- provide a Defence workforce with the agility, skills and culture for current and future needs.

The full list of outcomes in the Corporate Plan comprises a view of what a strategically effective Defence organisation looks like. This is important context against which we prepare our leaders at all levels.⁷ The Corporate Plan provides a robust starting point for considering our contemporary and future strategic thinkers. It describes a series of tasks and purposes that should drive an evolved view of developing strategic leaders and thinkers within the ADF and Defence.

Achieving Defence’s strategic outcomes is reliant on a range of external factors, including resources provided by government, changes driven by strategic events and the ability to recruit talented people. However, achieving such outcomes is also driven by internal factors within the ADF and the Department of Defence – most importantly, reliance on our strategic leaders to orchestrate all resources to achieve the directed (known) outcomes. This is done through formal, sequential and analytical strategic planning, augmented with discretionary decision-making that adapts to strategic disruption. There are multiple formal strategic planning mechanisms in Defence, such as white papers and force structure updates, annual budgeting and more frequent preparedness and military strategic planning processes. However, strategic planning is not enough – it needs to be complemented with strategic thinking.

Strategic Thinking Versus Strategic Planning

At this point, it is worth differentiating between strategic planning and strategic thinking. These two approaches are often confused as being the same thing – they are not. Strategic planning is an activity that is conducted within given parameters; it normally uses extant strategic direction to assist in configuring resources and organisations to realise that direction. It largely deals with variations of the present rather than reimagining the future.

Strategic thinking takes issue with the parameters used for strategic planning. As Loizos Heracleous proposes, strategic thinking is about ‘discovering and committing to novel strategies which can re-write the rules of the competitive arena and necessitates relaxing at least part of conventional wisdom’.⁸ Strategic thinking and strategic planning are distinct processes – the first is creative, the second is analytical – but both are necessary, and neither is sufficient without the other. This requires us to not only develop strategic planners and thinkers but also possess an institutional dialectical process that is analytical and creative, can diverge and then converge, and can be creative and then observe real-world implications.⁹ Such a process should be able to consider and analyse a wider than normal array of options. It should not only cope with future security conditions but also seek to shape them.

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Current Direction in Developing Our Strategic Thinkers

As a range of studies on this topic note, strategic thinking as an individual leadership ability is required at multiple levels of an organisation.¹⁰ However, there is almost no extant formal direction on what the ADF or Defence seeks from its strategic thinkers. Consultation with the Directorate of Senior Officer Management (DSOM) reveals that while there is a process for the conduct of Star Promotion Meetings, there is a lack of definition in the strategic-thinking characteristics required for our most senior leaders and our mid-ranking officers.

The endorsed Joint Professional Military Education (JPME) curriculum, however, does contain a description of behaviours and learning outcomes for strategic leaders (JPME Learning Level 5). The curriculum at this level is designed to prepare ‘officers and Defence Australian Public Service Senior Executives for key command appointments at Service, Group and Department’.¹¹ From this document, endorsed by the Chiefs of Service Committee in 2018, those at Level 5 are expected to:

- determine and evaluate strategic knowledge of joint warfare; strategy and national security; and technology and capability
- nurture robust and possibly difficult debates regarding national interests and the use of force in current and future strategic environments
- provide sound and possibly difficult advice to government that reflects analysis of a broad range of issues and influences decisions in government, other departments, other military organisations and industry
- capitalise on experience and exemplify critical-thinking behaviours to assess the strategic effect of potential scenarios to the organisation, government and Australian public
- set the strategic direction for the Defence enterprise in line with national interests, and create a shared sense of purpose across different organisations
- sustain deep professional relationships that facilitate cooperation and partnerships through which the Joint Force derives strength and unity of effort
- champion the profession of arms and research that contributes to the JPME body of knowledge¹²
- achieve results by engaging in agile resource management, looking beyond the organisation’s boundaries to achieve the optimum resourcing combination

- model high ethical and professional standards as a representative of the organisation
- display resilience and adaptability in continuously reforming and streamlining organisational structures and processes.

There is an opportunity, in response to this paper, to refine the characteristics and learning outcomes for leaders at this level to better direct our institutional capacity for strategic thinking.

Gaps in Strategic Thinking: Input from Defence Leaders

Respondents offered a variety of opinions on what the ADF and the Department of Defence consider a strategic thinker to be and where they fall short in creating them. There was a broad sense, however, that we do have a problem with strategic thinking and that the ADF and the Department need to continue improving our capacity for strategic thinking.¹³ Nine principal themes emerged: poor definition, lack of clarity, faulty assumptions, lack of strategic empathy, communication issues, lack of time, lack of curiosity, difficulty comprehending complexity and organisational culture.

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Poor definition. The skills required of our strategic thinkers have been poorly articulated. What does the ADF and Department of Defence desire from strategic thinkers? As one interviewed member of the Defence Senior Leadership Group noted, 'There's a difference between thinking strategically and strategic thinking. We do a lot of the latter, in a formal [sic], but I don't think enough people do the former, consistently enough or sufficiently well.' Additionally, this lack of definition is linked to the issue of an institutional learning culture – what is it and how might we better nurture such a culture?

Lack of clarity. Related to the lack of a definition is a lack of clarity over whether this is a staff problem or a strategic-thinking problem. Contemporary staff organisations, differences between civilian and military professional education systems, and staffing systems (e.g., processes, committees, personnel selection and approaches to strategic planning) may be equal or larger issues than challenges with strategic thinking.

Faulty assumptions. Another shortfall is that many of our senior people are unable to see all the different levels of our systems (both Defence and the broader national security

establishment) and then think and act at the appropriate level. Significantly, respondents indicated we have often conflated excellent tactical performance with the faulty assumption that this will hold true at more senior levels.

Lack of strategic empathy. An interesting challenge identified by respondents was the lack of strategic empathy in many senior leaders, in particular, not having the capacity to appreciate different viewpoints from across the Department of Defence and other agencies. More broadly, this may indicate that we do not possess a development system that exposes our nascent strategic thinkers to a sufficiently broad range of experiences and educational programs.

Communication issues. The two previous issues, faulty assumptions and lack of strategic empathy, are linked to the next challenge identified by many respondents: shortfalls in the ability to persuasively communicate with and influence others at the strategic level. Many respondents suggested that a significant number of our senior military and civilian personnel possess insufficiently developed skills in this area.

Lack of time. One significant view from respondents is that senior leaders and their staff have insufficient time to think deeply about any particular issue. The pace of change in the strategic environment is quite rapid and, in the past decade, the Canberra 'battle rhythm' has sped up. This frequently manifests as 'tunnel vision', which limits the capacity

of leaders and their staff to fully understand issues. It also bounds an individual's ability to think about a range of different solutions or see how things might be done differently. Linked to this is a lack of incentives to think strategically, given the imperative to provide a 'quick turnaround' of strategic documents and ministerial communications.

Lack of curiosity. Some respondents offered that our senior people often do not demonstrate curiosity about issues outside their immediate Service or function. There are several converging reasons for this. First, senior leaders take a long time to master their craft. Second, leading any large organisation requires a great deal of time, and this is particularly the case in military organisations because they are so bureaucratic. Finally, career incentives mostly reinforce the first two reasons. In combination, this encourages our senior leaders to 'keep their heads down' for much of their careers and focus on the immediate task at hand.¹⁴ It results in narrow thinking, limited strategic outlook, a lack of understanding of civil–military relations and limited capacity to adapt when the situation changes.

Difficulty comprehending complexity. Another challenge identified by senior leaders in the interviews was that some of our senior leaders appear to lack the capacity to appreciate complex issues that 'cross multiple lanes' and process them with sufficient speed.¹⁵ Sometimes, this was considered an issue of 'fit' – people were placed in positions for which they were unsuitable. However, it was also viewed as either a lack of aptitude for strategic thought or the inability to move beyond early career modes of tactical, or 'coalface', forms of thinking, deciding and acting.

Organisational culture. A final issue, which becomes apparent when aggregating the challenges described by respondents, is whether we have a problem with the culture in Defence. Do the ADF and the wider Department of Defence have a problem with forming and embedding the type of strategic learning culture necessary to incentivise strategic thinking that affects decision-making, and for people to invest time in developing these skills over the course of their careers? My view is that this is a macroproblem, of which lack of time, curiosity and advanced cognitive skills are subsets.

Synthesis – What Is the Problem?

From analysis of the nine themes above, I would diagnosis four major challenges: definition, culture, selection and development. The first two challenges are first-order issues, until they are addressed the latter two challenges cannot be resolved.

First, *we have a challenge of 'definition'*. There is no clear notion or shared understanding of what we – institutionally, in the ADF and Defence – believe a strategic thinker is and what we need from such an individual. Neither have we defined how strategic thinking underpins a wider learning culture nor how we might holistically build this person through training, education, experience, incentives and talent management. Additionally, we have not defined if strategic thinkers are a small group of the most senior leaders and influencers in our institution, or whether they are a broad swathe of people who contribute to the strategic planning inherent in a military organisation. There may also be an issue with how we understand the functions of normal staff process and planning, as opposed to the function of strategic thinking. This merits further examination and discussion. However, first and foremost, the ADF and Department of Defence must address this challenge of what they want in their strategic thinkers.

Second, *we have a challenge with our strategic culture*. Organisational culture is one of the factors that affects the development of strategic thinking. There are several elements of this challenge. First, our incentive structure rewards performance in short-term, tactical environments (in units or in Canberra). There are few incentives for our people to develop an understanding of organisations or topics outside their normal responsibilities or to engage deeply in long-term thinking. We also have a problem with limited time. Frequently, respondents remarked on the limited time they and their senior leadership teams have to think through problems. While we cannot create more time, we might be able to

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better 'steal' time from less important undertakings to provide our people with more capacity to engage in the quality reflection required for strategic thinking.

In addition, we have a cultural problem with curiosity. Albert Einstein once noted, 'I have no special talent; only that I am passionately curious'.¹⁶ Many of our most senior people are insufficiently curious. This often means they lack the time, inclination and incentives (or are actively disincentivised) to read, explore or analyse different ideas. Further, they lack the desire to write about them and openly contribute viewpoints to the broader organisation. There are few incentives to

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engage in these strategic behaviours but many incentives for more short-term activities.¹⁷ Ultimately, this combination adds to the problem of strategic thinking; it tends to make people good tactical or bureaucratic operators but suboptimal strategists who are poor at anticipating and adapting to different strategic problem sets.

Third, *we probably have a challenge in selection*. A good friend recently asked me, 'Would we recognise a Clausewitz today?' My sense is probably not. I say *probably* because, lacking a clear definition for what we seek in our strategic thinkers, it is difficult to assess whether our selection approach is working. But, generally, our talent management systems are not attuned to identify these kinds of people. Based on the responses of our most senior leaders, it is apparent that we may not possess an optimised system for identifying those who have the aptitude for strategic thought and who might be developed to meet our requirements. It is also not clear that demonstrated strategic-

thinking acumen and appropriate strategic education are essential requirements for selection to strategic roles and appointments. There are many ways in which extant processes could be enhanced to improve the identification and selection of future strategic thinkers (see Part II) and guide their development.

Finally, *we probably have a challenge with development*. The core of our profession, at least in the ADF, is a command and leadership pathway, around which selection, training and development are focused. We have also invested significant effort to develop specialists in complex program management, logistics and personnel. But there is no focus on any formal or informal pathway for those with strategic aptitude or the commitment to learn about this discipline. Strategic thinking demands creativity and the ability to question. It also demands a profound commitment to learning (at work and in one's own time) about the many aspects of strategy, planning, theory, assessment and systems, as well as a strong moral compass. We must, therefore, place an explicit value on identifying, developing and talent managing those who have demonstrated capacity for strategic thinking over the long term. This is not to suggest we need an entirely separate career stream or pathway. But we do need to better nurture those who are capable of being developed as intelligent, connected and ethical strategic thinkers.

Part I of this paper has been designed to examine strategic thinking and how we conceptualise a strategically effective organisation. It has covered the potential characteristics of strategic thinkers, and how they might be linked to how we view the overall strategic effectiveness of the Defence organisation. Finally, it has described key shortfalls in the strategic thinking in the ADF and wider Department of Defence. In synthesising this material, I have proposed four challenges for our organisation. The first two challenges – definition and culture – are first-order issues; they must be tackled first. Improving identification and development may then follow. The four challenges provide a proposed description of our institutional dilemma. They also provide a framework for considering and assessing different opportunities. The question we now turn to in Part II is, how do we build a better strategic thinker?

Part II

Can Strategic Thinking Be Taught and Developed?

The responses of those interviewed for this paper, as well as different perspectives in the literature, support the view that strategic leadership, influencing and thinking can, indeed, be taught. Francis Park, in his article for *Infinity Journal*, accepts that strategists can be developed and lays down a developmental pathway.¹⁸ Outside the military, writers such as Harold Henkel accept that strategic thought, as a creative art, can be taught.¹⁹ Even the late Professor Colin S. Gray, while sceptical about teaching strategy, accepts that strategy might be taught through the lens of 'ends, ways and means' while retaining 'flexibility and adaptability'.²⁰ So, strategy can be taught, but with an important caveat – the fledgling strategist must be capable and willing to learn.

Much of the literature, however, notes that not everyone is capable of thinking or operating at the strategic level. The late American strategist Andrew Marshall wrote that 'it is clear that some people seem more readily able to address the issues of strategy. They have a willingness and a self-confidence to address the larger issues than do others'.²¹ This is a theme reflected by multiple respondents to this study and reflects my own experience in working in places such as Military Strategic Commitments, the Chief of Army's office and as an embedded officer in the Joint Chiefs of Staff in the Pentagon. Therefore, while we might be able to teach and incentivise strategic thinking and behaviour, we also need to carefully select those with strategic potential for this development and accept that not all those selected will be successful. It is an endeavour that must take place over time. Seeking to improve strategic thinking when a crisis arrives will be too late.

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What Are We Doing Now?

The ADF and Department of Defence have a range of educational and developmental opportunities as part of a broader approach to talent identification and management. In particular, for those at the rank of Colonel (Equivalent) and Australian Public Service (APS) Executive Level 2, there are internal and external education courses and programs, as well as mentoring and coaching programs. Critical-thinking skills are a core prerequisite for moving towards enhancing strategic thinking. Critical thinking theory is included in many single Service and joint curricula, although it can sometimes be a process rather than a method of inquiry. That said, areas covered in extant educational programs include evaluating information sources, protecting against biases and conducting environmental scans. Service leadership development continuums and even the Joint Military Appreciation Process (JMAP) are also included in these programs.

The DSOM currently has multiple efforts that contribute to enhancing strategic thinking skills in the Senior Leadership Group. Many of the courses contain elements of strategic thinking to support their broader course objectives (management, public policy, security cooperation, business management, etc.). However, it is possible that the different processes used to manage military and APS members of the Senior Leadership Group perpetuates a divide in talent selection and consequent opportunities to learn strategic thinking.

From an ADF perspective, learning and development are primarily managed via Star Planning meetings, which are facilitated by DSOM. Service Chiefs will predominantly nominate officers to participate in one of a suite of DSOM programs, with final endorsement by CDF. On occasion, consideration is given to a member participating in a course

outside the DSOM suite, which often involves reallocating funding or finding funding elsewhere (see Annex A). Distinct from these formal learning opportunities, star ranks occasionally participate in interdepartmental secondments and industry placements.

From the APS perspective, talent identification is largely managed via the member's Group Head, with funding sought from within their group. Members of the APS Senior Executive Service (SES) have available to them a more limited range of institutionally provided formal education to hone their capabilities, with only eight courses identified (A list of some of the formal training programs that are on offer can be found in Annex A). Defence SES can also participate in interdepartmental transfers, secondments and, occasionally, industry placements. University residential placements are rare among Defence SES members. In pursuing a different approach to developing strategic thinkers, a closer alignment of ADF and APS educational programs would be of benefit to both.

A number of informal developmental mechanisms have been established by junior members of the ADF. These include blogs that publish articles on topics that range from the tactical through to the strategic. Australian blogs include *Grounded Curiosity*, *The Cove* and *The Forge*, while affiliated sites in the United States (US) include *Strategy Bridge*,

War on the Rocks and *Modern War Institute*.²² Social media is also widely used as a connector between individuals and different interest groups. The popularity of people such as Doctrine Man (Twitter: @Doctrine_Man) and Angry Staff Officer (Twitter: @pptsapper) is a testament to the reach and influence of online professional military education tools. Finally, there is a network of military entrepreneurs that has been fostered through the Defence Entrepreneurs Forum in the US, Australia, New Zealand and the United Kingdom. These informal mechanisms comprise a 21st-century ecosystem of developmental tools and approaches that are used widely by our junior officers and non-commissioned officers. Yet, they have been largely ignored or under-appreciated by senior officers in the ADF and APS.

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Unfortunately, participation is often discouraged by mid-level leaders in the ADF. The reasons for this include the perceived

lack of importance by mid-level leaders, unit and Service cultural issues with professional education, and, sometimes, the notion that those who contribute to such online forums are only doing so to 'showboat' and build a reputation. My observation is that this is almost never the case. The reality is that we have a new generation of young military leaders who possess a better understanding of the need for continuous learning and challenging old paradigms than earlier generations. Rather than suppress them, we need to encourage our best and brightest to express themselves and engage in the competition of ideas that are relevant to their profession.

What Are the Opportunities to Build Better Strategic Thinkers?

As the previous section describes, a variety of activities provide selected people with the learning and experience to hone a more strategic outlook. However, given the respondents' view that we have a challenge with strategic thinking, these are clearly insufficient either in quality or in how they are linked into a larger personnel management system. Therefore, this final section uses the framework of the 'four challenges' described in Part I to propose various opportunities that the Secretary of the Department of Defence (SEC) and CDF may consider to improve the current situation.

Challenge 1: The Opportunity for Better Definition

As described in the first part of this paper, it is not clear what the ADF or the Department of Defence wants when it seeks to develop better strategic thinkers. The overwhelming focus is instead on strategic planning, which is well defined. We must therefore better define 'strategic thinking' and why it is important; and clarify what the desirable attributes of strategic thinkers are.

The CDF and SEC should clarify why strategic thinking has become more important for Defence. As one respondent wrote, we need to ‘be clear about WHY [emphasis in original] we have to think strategically (or cultivate “strategic thinkers”)’. Similarly, another respondent said, ‘We need recognition that strategic thinking is a critical skill required across all senior levels of Defence’. There is little in ADF doctrine or other Departmental guidance to this end.²³

So, what is a strategic thinker?

As one respondent noted, there are different individuals with different experiences and aptitudes who will likely be better placed to be strategic thinkers depending upon the context. To that end, there is unlikely to be a single pathway to the nirvana of the gifted or blessed ‘strategic thinker’. Our institution requires a community of thinkers whose expertise and experience can be connected and meshed to ensure a more fulsome strategic discussion and debate on specific issues.

An important issue raised by respondents was whether it is possible to systemically develop the quality and quantity of strategic thinkers that we require to meet our expected demand. It is less of a challenge of the personnel system; rather, it is a symptom of a strategic environment that is evolving rapidly. Geopolitics and technology are evolving at an extraordinary pace. No one needs to be abreast of all the issues to be an effective strategic thinker. However, we do need people who know what they do not know, who are open to new ideas, and who can find information, process it, integrate it and communicate it. As one respondent noted, ‘We need foxes who know how to wrangle hedgehogs.’

We can and should build these high-talent individuals; however, betting on individual brilliance is a very high-risk strategy. At the same time, we must also invest in evolved ways of building strategic leadership teams that have the appropriate size, experience and intellectual diversity to appreciate the scope of the changing environment and develop an appropriate variety of potential responses. This requires examination.

At heart, however, there is an opportunity to clarify our institutional notions of effective strategic thinking and leading. This will require further work on the part of the ADF and Departmental leadership but will underpin talent identification and development efforts. If this clarity is provided, it will provide firmer direction for the selection and development of those who demonstrate potential for strategic thinking, influencing and leadership. The aim is to produce strategic thinkers who can also act as exceptionally competent staff and can ‘see and integrate’ without being told how to think by superiors.²⁴ From my research and the analysis outlined above, I propose a list of 10 core skills required by 21st-century senior leaders and strategic thinkers:

- capacity to understand and evaluate alternative perspectives from one’s own and perspectives from outside one’s institution (i.e., not have ‘tunnel vision’)
- possession of advanced cognitive skills, including critical thought, and the ability to identify interdependencies in complex issues, assess assumptions against reality, and coherently challenge extant paradigms and ways of thinking in light of changing circumstances
- possession of an insatiable curiosity and desire to undertake lifelong learning, as well as being open-minded, in both one’s professional and personal lives
- courage to defend evidence-based arguments with senior officers and to sustain a strong ethical core in the conduct of strategic thinking
- demonstrated critical-thinking and creative-thinking skills, interpersonal skills and communications skills that support the development and implementation of strategies and complex activities
- ability to network outside ones’ immediate area of expertise and to be a persuasive communicator, influencer and relationship builder
- ability to observe trends, anticipate and lead rapid adaptation and innovation

Our institution requires a community of thinkers whose expertise and experience can be connected and meshed to ensure a more fulsome strategic discussion and debate on specific issues.

Part II

- ability to develop effective, prioritised plans to execute strategy, and oversee implementation and measurement of success or failure
- strong inclination to constantly mentor and develop subordinates and peers
- ability to combine these skills to generate influence through political and social acumen.

The kind of people in whom we would seek to nurture these skills would possess questioning, eclectic minds and be able to address the broadest kinds of goals. In doing so, these strategic thinkers would be able to identify, quantify and treat strategic risk in circumstances of strategic and political ambiguity; and they would possess a high tolerance for, and ability to manage, the unexpected.²⁵ They would be able to consider the larger issues of national strategy and communicate challenges and potential solutions clearly to influence others. The ability for strategic thinkers to communicate and influence is critical. Lawrence Freedman explains why in his book *Strategy: A History*, writing that

*not only does strategy need to be put into words so that others can follow, but it works through affecting the behaviour of others. Thus, it is always about persuasion, whether convincing others to work with you or explaining to adversaries the consequences if they do not.*²⁶

Finally, we return to the challenge of defining strategic thinking. Like strategy, there is no singular definition for strategic thinking, but having a definition that suits our purposes may assist in the development of strategic thinkers. To that end, I offer an initial definition, drawn from a number of sources²⁷, which could be considered by the ADF and Defence senior leadership:

Strategic thinking is a conceptual, systems-oriented, directional and opportunistic approach to thinking that is influenced by the context in which it takes place, leads to the discovery of novel, imaginative and reliable organisational strategies that can change rules, and points to different visions of achieving institutional goals to generate coherent strategic effect.

Challenge 2: The Opportunity to Nurture A Strategic Learning Culture: Improving Institutional Capacity to Build Strategic Thinkers

Individuals think strategically, not institutions.²⁸ However, the development of strategic thinkers cannot be separated from institutional culture. The type of behaviour and performance that is rewarded is key to understanding any organisation. A systematic analysis of this is essential to understand Defence, how it operates and what it rewards. If strategic thinking is not described, understood and rewarded, it will be unlikely to develop. The Millett and Murray study of the US Navy before the Second World War describes how almost every US Navy officer wanted to be a battleship captain. Then, as elements of the Navy sought to change its battleship culture and the best staff were promoted to command aircraft carriers, everyone wanted to be an aircraft carrier captain.²⁹ Promotion pathways evolved. In the current environment, how might we evolve promotion pathways to incentivise strategic thinking?

Multiple studies note that the capacity to develop and apply strategic thinking is underpinned by a learning culture. As noted in a study by Ellen Goldman and Andrea Casey, 'work experiences can contribute to the development of an individual's strategic thinking ability. Culture can either encourage or limit those contributions'.³⁰ Goldman and Casey apply six culture-embedding mechanisms as described by Edgar H. Schein in *Organizational Culture and Leadership*.³¹ They then provide examples of leadership behaviours that nurture strategic thinking for each of Schein's culture embedding mechanisms. I have included this (see Figure 1) because it provides an excellent framework for how we might wish to reconsider the ways in which our organisation could better nurture a strategic learning culture.

Figure 1. Leadership Practices That Underpin a Culture of Strategic Thinking.³²

Schein's Primary Culture-Embedding Mechanisms	Examples of Leaders' Behaviors That Encourage Strategic Thinking
What is focused on and measured	A strategic direction to be something materially different and the tracking of outcomes against that vision The impact of that direction on society 5 to 10+ years operating and financial performance targets Continuous review and discussion of external changes that will affect the organisation 5 to 10+ years hence
The basis for resource allocations	Products, services, ideas, and approaches that will prepare the organisation for success 5 to 10+ years hence External education/assistance with issues coming 5 to 10+ years down the road Developing contingency plans before rolling out new initiatives
The basis for hiring, promotion, and firing	Asking job candidates questions to gauge their ability to think strategically Having employees who reflect a mix of those new to and those long tenured in the organization Identifying specific annual personal development plans/education to enhance strategic thinking Making clear when promotions are based on strategic thinking ability
What is modelled and coached	Behaviors related to scanning the environment and identifying patterns affecting the future Behaviors related to questioning to gain different perspectives Behaviors related to conceptualizing different possibilities Behaviors related to testing the impact of changes on performance
The basis for rewards and status	Rotating leadership of projects/activities that require strategic thinking Including an assessment of strategic thinking ability in annual performance evaluations Financially rewarding individual and team strategic thinking Publicly recognizing individual and team strategic thinking
Reactions to crises and events	Openly discussing what occurred, involving different points of view and open-ended questioning Considering how organizational policies and procedures have contributed to crises

Any evolution and improvement of strategic thinking is founded on a strategic learning culture. In Part I of this paper, several institutional challenges to a strategic learning culture and strategic thinking were outlined: rewarding short-term behaviour over strategic thinking, a lack of time and a lack of curiosity.

Incentives for short-term versus long-term thinking.

Addressing the first of these inhibitors is clearly in the realm of leadership. As such, the CDF and SEC may wish to consider the range of different incentives, promotion pathways and rewards available in our system, and whether they are overly bias towards short-term thinking. The view of many respondents was that this is currently the case. However, some form of validation activity should be undertaken to verify this and establish how it might be evolved to balance short-term and long-term thinking incentives.

Lack of time. The lack of time to think deeply about any particular issue was raised by multiple respondents. Ultimately, many of our senior leaders have limited agency in driving the commitment of their time. The requirements of government and individual ministers are a significant influence on the time available for senior leaders to ponder issues at any length. This has resulted in 'tunnel vision' in some individuals and inhibited their capacity to fully understand any given issue. It has also constrained their ability to consider a range of different solutions or see how things might be done differently. One potential solution might be to review the Defence committee structure and remove events relating to situational awareness that do not contribute to effective strategic decision-making. Noting recent developments of the new Defence committee structures, this may not be a popular solution.

Individuals think strategically, not institutions. However, the development of strategic thinkers cannot be separated from institutional culture.

Another potential solution could be to review existing strategic forums to ensure correct attendance. Some respondents noted that, often, too many people attend strategic committees. This was thought to hinder useful discussion and result in lowest-common-denominator decision-making. While it is accepted that the complexity of many matters requires the presence of different experts, this option is worthy of consideration.

Lack of curiosity. Finally, we must tackle the lack of curiosity. This includes an inability to value diverse views or see problems from the perspective of those outside their organisation, Service or the Department of Defence. Indeed, the capacity to see different perspectives was consistently stated as a necessary skill by respondents and was a central element in the review of strategic thinking characteristics. We should consider institutional incentives that encourage this ability to appreciate different perspectives.

The lack of curiosity also manifests as an inability to fully understand risk. As a consequence, leaders have limited ability to tolerate risk; leaders in this position can often limit the capacity of their subordinates to learn through failure. A lack of understanding about risk is also influenced by a lack of imagination – risk is not linear. As a former commander of mine described it, risk often appears from the flanks. Curious, imaginative senior leaders take the time to read and look to the flanks for opportunity and risk.

We must create incentives for more of our people to write and develop their critical thinking, influence and communication skills.

Another indicator of a lack of curiosity and of a sub-par strategic learning culture is a shortfall in reading and writing by senior leaders. At heart, this is not just indicative of a lack of time; it is indicative that we lack the institutional incentives for our people to hone a growth mindset through continuous, lifelong learning. Many admitted to me that they lack time to read broadly about many national security topics and advanced technologies. The pressing demands on senior leaders' time mean that many are unable to look beyond their institutional responsibilities. We must create incentives for more of our people to write and develop their critical thinking,

influence and communications skills. This must start early – as a junior leader – so that it is embedded by the time leaders reach middle and senior ranks. If we fail to do so, we will perpetuate our current problem, which is that we are making great operators but not great strategists

The following submission from one of the respondents makes a fitting conclusion to this section. It describes the environment in many military organisations, including our own. It is indicative of a strategic culture that does not nurture new or disruptive ideas. We need to evolve our strategic learning culture to remove as much of this as possible.

I've been in countless discussions with high performing mid-ranking officers who are competitive, and in most cases, are selected for senior ranks. In these conversations I've recommended countless times that they write up and publish their arguments. They almost never do and when I ask them why their answers are 1) they don't have time and writing is time-consuming, 2) they don't know the mechanics of getting something published, and that's a roadblock because the unknown is intimidating, 3) they are afraid their ideas aren't 'good enough', and will be rejected (a rejected article is equated with 'failure'), and 4) they conclude that a publishing record of any sort is bad for their careers because somehow it'll come back to haunt them when they are up for promotion/confirmation. As a result, by the time they reach star/flag rank, they have zero inclination to write and publish anything.³³

Sound familiar?

Challenge 3: The Opportunity for Reviewing Talent Identification and Selection

The opportunity to improve the identification and selection of those with strategic potential was a common theme among many respondents. There were three key aspects. First, not everyone has the capacity or inclination to think and act strategically, but those who show promise can be identified and developed. Second, we should possess an explicit talent identification process for strategic thinkers.

Third, we should be undertaking this identification earlier in the careers of our people to provide more opportunities for their development over multiple years. Identifying potential strategic thinkers just before they enter the star ranks denies them the opportunity to develop and hone their intellect and critical-thinking capabilities – a process that takes many years or even decades.

Explicit talent identification process. One respondent noted that our current career management processes ‘worked well enough to generate high order operational thinkers but did us no favours in terms of strategic thinkers’. In considering a better talent identification and selection process, the organisation must have the capacity to identify those who show an inclination for this type of work. Annual performance reports for military personnel might be a good place to start. We would require the development of a system that allows for a diversity of candidates. It cannot be just a ‘combat arms developmental assignment’ that is a pathway to star ranks. This process needs to include people who are both predisposed to this type of work and those who might eschew it because they think it will not enhance their career.

Earlier talent identification. Many respondents noted that it is too late to identify potentially talented strategic thinkers if we are focusing on star-ranked or SES-level officers or those just about to enter this group. Thus, the ADF and wider Department of Defence might consider identifying people in junior-ranking or mid-ranking positions. This may potentially involve enhanced processes at officer training school and the APS graduate program, which will demand different types of triggers for identifying strategic talent. This could then be combined with identifying experiential opportunities to provide them with perspective that is critical for strategic thinking.

While the reports for officers of the rank of Colonel and above (and their equivalents) contain an area to assess strategic acumen, this is lacking in the reports of lower ranked personnel. A revised joint report for all ADF personnel that allows for early identification of those with the potential for strategic thinking might be considered. Additionally, identification of such people during formal training activities, such as the Australian Command and Staff Course, should be considered. We possess a very strong selection program at the Australian Command and Staff Course; we can easily watch, identify and track individuals from the top-performing graduates, especially those in the Art of War and Perry Group programs.³⁴

Institutional Communication. If an explicit talent management system is established for strategic thinkers, we should ensure that this issue is understood and resonates across the ADF and wider Department of Defence. We must clearly explain the rationale for the program and its various components. Unintentionally, the ADF could marginalise some of its finest officers if the scope of the problem and its solution (including broader development and career management issues) are not broadly understood by the organisation. This is what happened with the Afghanistan–Pakistan Hands program in the US military, which ran from 2009 to 2020.

One respondent noted that our current career management processes ‘worked well enough to generate high order operational thinkers but did us no favours in terms of strategic thinkers.’

Many respondents noted that it is too late to identify potentially talented strategic thinkers if we are focusing on star-ranked or SES-level officers or those just about to enter this group.

Challenge 4: The Opportunity for Better Development

The development of strategic thinkers should be considerably enhanced if we more clearly define the ADF and Defence need for strategic thinking, improve selection and develop a strategic learning culture that provides more incentives for strategic thinking (including promotion pathways). For the purposes of this paper, I have assumed that we can develop strategic thinkers; however, it is not just a nature versus nurture argument – it is a combination of both. As Colin Gray writes, '[u]nquestionably, strategy is as important as it is awesomely difficult to do well enough ... To be performed well, its multiple demands *require extraordinary natural gifts, advantages that need nurturing by education and experience*' [emphasis added].³⁵ So, what then can we do to better develop strategic thinkers?

First, a revised learning approach is required. There is no single learning activity or event that will fix this problem. We require a more systemic and connected approach that includes formal learning (at military and external academic institutions), experience and self-learning activities. This includes exposing our people earlier in their careers to strategy and policy development and execution. Formal education must include external graduate education (not just internally conducted JPME) that emphasises analytical (qualitative or quantitative), integrative and writing abilities. The ADF might also better advocate for the types of informal self-learning that are already occurring through an ecosystem of blogs, social media and events, such as the Defence Entrepreneurs Forum.

A revised learning approach might encompass cohort learning and construction. No single individual can fully understand every dimension of continuity and change in the strategic environment, but a carefully constructed team of strategic thinkers might. Similarly, no individual can provide the diverse range of options necessary to address the challenges inherent in our security environment, but a team of diverse thinkers might be able to provide a broader range of better-informed solutions to potential problems. Therefore, we may wish to consider the deliberate construction of interdisciplinary strategic-thinking teams, who are systemically screened and matched, both as a learning mechanism and as a way of addressing strategic problems across the ADF and Department of Defence.

Second, we need to provide a variety of learning experiences. Basic complex adaptive system theory states that complex problems can only be solved through the generation of a diverse array of options. Similarly, there is no definitive education, training or experience that provides a 'strategic thinker'. It is more important that our people have a variety of learning opportunities to broaden their perspectives and skill sets. Similarly, they should be provided with diverse learning experiences and exposure to STEM (science, technology, engineering and mathematics) and humanities disciplines and theories. We require multiple approaches to improving our strategic thinking, to broaden our diversity and prevent an institutionalised Defence view. A combination of training, education and experience is the recipe, but opportunities need to be identified early and staff should be managed purposefully throughout their careers. Military officers need to spend time in the policy development sections of Defence. APS personnel need more time developing an understanding and an empathy for the ADF, its capabilities and its people.

We require multiple approaches to improving our strategic thinking, to broaden our diversity and prevent an institutionalised Defence view. A combination of training, education and experience is the recipe, but opportunities need to be identified early in careers and staff should be managed purposefully throughout their careers.

Secondments to other government agencies and relevant private enterprise organisations are good ways to broaden thinking. Secondments to organisations like the Australian Strategic Policy Institute, the Lowy Institute, and the Institute of Public Affairs, should continue to be provided for selected APS and ADF personnel. As one respondent noted, 'we have too many examples of individuals promoting within the same area or technical function, with no broader experience. At some point these individuals reach a natural ceiling, because they have only worked in one team and have not built a comprehensive understanding of the Department and its

strategic issues.’ Developing people with a broader array of experiences, skills and networks is a critical part of building better strategic thinkers and a better institutional capacity for strategic thinking.

Third, our developing strategic thinkers need to be routinely tested. In addition to normal command career development, this developmental pathway would incorporate demanding staff assignments, involvement in strategic, problem-focused tiger teams and secondments in government departments and to overseas Five Eyes military staffs. We could also expand activities that replicate, at the strategic level, how we conduct Tactical Exercises Without Troops (TEWTs). This could include tabletops or historical scenarios where the department was challenged (e.g., ‘children overboard’, looking at personalities, policy, politics and media), or other potential future crises involving the same factors. The ADF and APS should conduct such exercises together, similar to the current approach at the Australian Defence College. Ideally, political and media representatives would also be involved; what others think is often more important than what we do. Finally, completion of every military assignment should come with an assessment of how individuals have performed with respect to the development of their strategic-thinking capabilities. Not everyone will succeed every step of the way. In our personal correspondence on this topic, Dr Paula Thornhill noted, ‘we will have to deal with the paradox that failure is an option, but perfection is not expected.’³⁶

Creating a strategic adviser position to complement a commander or senior leaders’ staff would be another method to grow strategic thinkers through experiential development.

Fourth, we must further educate developing strategic thinkers through involving them in tough, real-world problems; offering broad experiences, both inside and outside Defence; encouraging writing; and training them to challenge the status quo. Nascent strategic thinkers might be employed as strategic advisers or consultants to senior leaders in Defence and beyond. They would be asked to apply their analytical skills to examine and solve organisational challenges. Their solutions should be written, not briefed, for the obvious reason that writing clarifies thought. Creating a strategic adviser position to complement a commander or senior leaders’ staff would be another method to grow strategic thinkers through experiential development. Further, such postings would create a perception across the officer corps that such thinking is desirable.

Developing strategic thinkers must also include writing and publication. Possessing an avenue that encourages contribution to strategic debate (through academic papers, opinion pieces and think tank activities) is a good way for individuals to develop strategic-thinking abilities through research and consultation. If our nascent strategic thinkers lack the intellectual courage (or senior leader tolerance) to put forth new or different ideas in writing, they will be unlikely to do so in any forum where senior decision-makers are present. This approach would require a greater tolerance in our institution for different ideas – which is currently low – and for challenging extant programs and paradigms.

Fifth, we need to mentor our nascent strategic thinkers. Mentors will be an important component of this blended strategic education. We may wish to consider the development of a pool of mentors from recently retired ADF and APS officers who have a strong predilection for strategic thought, remain current on strategic issues, demonstrate interest through publications and have capacity for coaching junior personnel. Having senior serving officers and APS officials (including CDF, SEC and senior ministerial staff) informally explain how they are approaching problems, and why, should be part of this approach to developing our future strategic thinkers. Additionally, we may wish to consider an enhanced approach to mentoring, more akin to the Oxbridge Tutorial system³⁷, where small groups of developing strategists (with reading preparation and draft essays) could meet regularly with experts.

Sixth, we must continue to evolve our endorsed JPME curriculum to ensure that JPME Learning Levels, 3–5 in particular, support the identification and continued development of those with potential for strategic thinking.³⁸ There is currently an opportunity to shape the next version of this work. We should include narratives that describe the characteristics of officers with strategic-thinking skills in this document (see historical examples in Annex B). Regardless of how much we evolve this JPME continuum, the extant single Service and joint cultures for military education provide an excellent foundation for the improved development of strategic thinkers.

Part II

Finally, we must get the incentive structure right. A reinvigorated strategic learning culture will be an essential prerequisite. However, beyond that, we must consider the incentives for individuals to invest in what is a multi-decade journey in becoming an effective strategic thinker. It demands better talent identification and management across our system. It must be a talent management process – linked to promotion boards at every level – that does not penalise or overly protect strategic thinkers. This is another major failing in our current system; we do not protect unique, elite cohorts, such as those who have completed the second-year advanced warfighting courses in the US. Indeed, our system often eviscerates them during the promotion process. Conversely, we do not want to create protected prima donnas. Those who wish to develop strategic-thinking skills may have to delay their promotions early in their career to invest the time in requisite education and experiences. However, this should balance out in the later stages of their career. This balance should come through the assignment and mentoring process.³⁹ At heart, we should accept that strategic thinkers can deliver outcomes for the organisation; we need to recognise and reward these outcomes.

Conclusion

In his 2015 book, *The Future of Strategy*, the late Colin Gray describes how 'we cannot avoid noticing that our society and its political leaders do not appear to inhabit or behave on behalf of a long-term future. The temptation to mortgage the long- and even medium-term future in the interest of anticipated short-term advantage can be seen as permanent'.⁴⁰ Despite this challenge of acting for the immediate over the longer term, the fact remains that we require an institutional capacity to nurture strategic thinking and planning. No single person can stay abreast of every strategic challenge and every change in the security or technology environment. However, we must develop enough strategically minded leaders and staff to anticipate and adapt to the challenges of the 21st century. Concurrently, our institution must better design the teams within the ADF and wider Department of Defence that are involved in strategic thinking and ensure this complements strategic planning.

Developing better strategic thinkers is possible, but not easy. This challenge is not unique to our institution. In a 2013 global study by the Management Research Group, the leadership practices of 60,000 managers and executives in over 140 countries were examined and analysed. The study found that a strategic approach to leadership was, on average, 10 times more important to the perception of effectiveness than other behaviours. It was twice as important as communication and nearly 50 times more important than lower-level tactical behaviours.⁴¹

This paper has provided a description of the current challenges to effective strategic thinking in the context of the ADF and the wider Department of Defence. These skill sets are core aspects of developing effective members of the profession of arms, and Defence public servants. The challenges of definition, strategic culture, talent identification and development are in themselves significant but, in combination, demand an institutional response. This paper has, therefore, proposed potential solutions for how our institution might respond to this challenge.

Improving our capacity for strategic thinking will require commitment over the medium term by all institutional leaders and communication with all of our people to realise this improved capacity for strategic thought. It will be hard, but we have little choice if we are to effectively navigate the challenges of the current and future security environments.

Annex A

Star Rank and Senior Executive Service Development Education Courses

Australian Defence Force Officer Development Courses:

- Advanced Management and Leadership Programme (short course), Oxford University
- Advanced Management Program, Harvard Business School
- Advanced Management Programme, INSEAD
- Apollo Future War Analysis (short course), Australian Defence College
- Capstone Program, Department of Defence
- CAPSTONE General and Flag Officer Course, National Defense University
- Commander Joint Task Force Course, Australian Defence Force
- Defence and Strategic Studies Course, Australian Defence College
- Executive Education Programs, Singularity University
- Executive Development Program, The Wharton School, University of Pennsylvania
- Executive Programme in International Management, National University of Singapore
- Executive Education, Stanford Graduate School of Business
- Leadership Decision Making, Harvard Kennedy School
- Leadership Program, Harvard Club Australia
- Operations Based on Experience (OBOE) Program, Australian Defence College
- Pinnacle Program, National Defense University
- Senior Joint Information Operations Applications Course, Maxwell AFB, Air University
- Senior Executive Development Program, National Security College, Australian National University
- Senior Executives in National and International Security, Harvard Kennedy School
- Senior Executive Programme, London Business School
- Senior Managers in Government, Harvard Kennedy School
- *Strategos* Strategic Theory for Practice (short course), Australian Defence College
- Transnational Security Cooperation Course, Asia-Pacific Centre for Security Studies
- Vincent Fairfax Fellowship, Ormond College, The University of Melbourne

Senior Executive Service Development Courses:

- Australian CAPSTONE
- Master Programmes, Royal College of Defence Studies
- Operations Based on Experience (OBOE) Program, Australian Defence College
- Senior Executive Development Program, National Security College, Australian National University
- Senior Executives in National and International Security, Harvard Kennedy School
- Senior Managers in Government, Harvard Kennedy School
- Strategic Leadership Program, Australian and New Zealand School of Government
- *Strategos* Course, Australian Defence College

Annex B

Professor Robert O'Neill: An Australian Exemplar of Strategic Thinking and Leading

Bob O'Neill rose to the pinnacle of his chosen profession –the academic study of arguably the most critical subject of public policy, that of war and peace, strategy and defence policy.⁴²

Professor Robert O'Neill is an eminent Australian scholar who has served as an Australian Army officer, institution builder, distinguished academic and strategic thinker since the late 1960s. After studying at Oxford University as a Rhodes Scholar in the mid-1960s, Professor O'Neill returned to the Army and served in Vietnam as a Captain in the 5th Battalion of the Royal Australian Regiment. After a posting as an instructor at the Royal Military College – Duntroon, Professor O'Neill then transitioned to academia and became a Senior Fellow at the Australian National University. Within a short period of time, he had been appointed as the head of the Strategic and Defence Studies Centre. He grew the centre in size and reputation, including its work on the strategic nuclear balance and the evolution in thinking about the defence of Australia. He left to live and work in England in the early 1980s.

In 1982, Professor O'Neill was appointed as the first non-European to head the International Institute for Strategic Studies in London. He led this institution for five years, during which time he built its international reputation. In 1987, he was appointed as the Chichele Professor of the History of War at All Souls College, Oxford University, from 1987 until 2001. He was preceded in this position by Sir Michael Howard and succeeded by Sir Hew Strachan. His tenure as Chichele Professor saw an expansion of international relations courses and reinvigorated postgraduate courses.⁴³

In 2001, Professor O'Neill returned to Australia to become the founding chairman of the Australian Strategic Policy Institute. He is the author of multiple books, including *The German Army and the Nazi Party, 1933–1939* (1968); *Vietnam Task: The 5th Battalion, the Royal Australian Regiment, 1966/67* (1968); *General Giap: Politician and Strategist* (1969); and the two volumes of Australia's official history of the Korean War (1981, 1985). He also edited and co-edited multiple books on nuclear arms and strategy, the strategic environment in the 1980s, arms control and the defence of Australia.

Professor Robert O'Neill is perhaps one of Australia's finest examples of a strategic thinker, leader and influencer. A soldier–scholar, mentor and institution builder, he is a worthy exemplar of the kind of individual that we should be aspiring to identify and develop.

The remainder of this case study will examine Professor O'Neill's career through the lens of the 10 attributes of strategic thinkers (see Table A1).

Table A1. Attributes of Strategic Thinkers

Attribute	Example from Professor O'Neill's career
The capacity to understand and evaluate alternative perspectives from one's own, or perspectives from outside one's institution (i.e., not have 'tunnel vision').	Early in his career, Professor O'Neill produced highly regarded books on the military institutions of foreign nations, such as Germany, and on leaders, such as Vietnamese General Giap. This demanded a high level of empathy for different cultures and different viewpoints.
The possession of advanced cognitive skills, including critical thought, and the ability to identify interdependencies in complex issues, assess assumptions against reality, and coherently challenge extant paradigms and ways of thinking in light of changing circumstances.	Professor O'Neill published a large number of high-quality books throughout his career. He was also one of the few who taught counterinsurgency in the 1990s.
The possession of an insatiable curiosity and desire to undertake lifelong learning – in both one's work and personal lives.	Professor O'Neill demonstrated a lifelong approach to learning, from his Rhodes Scholarship as a young Army officer through to his leadership in a range of different academic institutions, think tanks and other organisations.
The courage to defend evidence-based arguments with senior officers and to sustain a strong ethical core in the conduct of strategic thinking.	Professor O'Neill defended the academic integrity of all institutions he led or was a part of. In particular, he resisted interference from departmental officers (including the Secretary of the Department of Defence) in research projects. ⁴⁴
Demonstrate critical-thinking and creative-thinking skills, interpersonal skills and communications skills that support development and implementation of strategies and complex activities.	Professor O'Neill led the development of capacity at the Strategic and Defence Studies Centre to better contribute to debate on Australian defence policy in the 1970s through to 1982. As Paul Dibb writes, 'With great foresight, he argued: "Primacy must be given to our operational doctrines to the defence of Australia." He strongly supported "a nationwide, functional joint service command structure", which he believed would "be the ultimate answer to our requirements"'. ⁴⁵
The ability to network outside ones' immediate area of expertise or Service, and to be a persuasive communicator, influencer and relationship builder, inside and outside one's parent organisation.	Professor O'Neill branched out from military history to nuclear strategy, arms control and national defence issues in the 1980s and 1990s. This attribute is also evidenced by his strong collaborative skills, particularly in the number of edited and co-edited books that he produced on different topics.
The ability to observe trends, anticipate and lead rapid adaptation and innovation.	In Professor O'Neill's book <i>Vietnam Task</i> , adaptation was a key theme. ⁴⁶ He also adapted his study areas and adapted between think tanks, public institutions, such as the Australian War Memorial, and academia throughout his career.
Able to develop effective, prioritised plans to execute strategy, and oversee implementation and measurement of success or failure.	Professor O'Neill established, reinvigorated or expanded different organisations over the course of his career in Australia and in the United Kingdom, all of which were improved by his leadership and retain international reputations.
The strong inclination to constantly mentor and develop other subordinates and peers.	Professor O'Neill holds a strong reputation as a mentor and academic supervisor. He supervised more than 50 PhD candidates and mentored many more.
The ability to combine these skills to generate influence and action through political and social acumen.	Professor O'Neill was an energetic lobbyist on behalf of the institutions he led in Canberra and London. He secured funding for academic positions from governments as well as other organisations.

General Sir Francis Hassett: A Strategic Leader, Reformer and Thinker

General Sir Francis Hassett was an eminent Australian soldier and strategic leader who served as an Australian Army officer, Chief of the Army and Chief of Defence Force Staff. His career spanned his entry to the Royal Military College – Duntroon, as a sixteen-year-old, through to his retirement in 1977, as the most senior serving military officer in Australia.

As a military officer and leader, Hassett has a distinguished record. He was an infantry leader in the Middle East and Papua New Guinea during the Second World War. He commanded the 3rd Battalion, Royal Australia Regiment in Korea, including during its victory in the Battle of Maryang San. Professor Robert O'Neill described this as 'probably the greatest single feat of the Australian Army during the Korean War'.⁴⁷ Hassett also led the 28th Commonwealth Brigade in Malaya, where his Division commander wrote: 'As a brigade commanding officer, he is in a class of his own.'⁴⁸

Hassett had a strong inquisitive streak which he utilised as an integral part of his command philosophy. As a mid-ranking officer in Papua New Guinea, he conducted operational studies and analysed lessons from the Buna-Sanananda operations.⁴⁹ Later, he would study in depth the post-colonial insurgencies in South East Asia and turn some of his observations into a British doctrinal publication. He also had a strong interest in modern technology and its impact on warfare and spoke on this topic during his lectures on leadership.⁵⁰

Hassett frequently undertook instructional roles. Whether it was as an instructor on the Army Command and Staff Course, Commanding Officer of the School of Infantry or as Director of Military Arts at the Royal Military College Duntroon, Hassett constantly sought to better engage trainees and innovate in methods of instruction while ensuring that training and education was relevant.

As a strategic leader and influencer, Hassett's record stands out from the majority of Service Chiefs and Chiefs of Defence in the past half century. In Army, he was a highly influential advocate for the Army's shift from its Pentropic organisation to more mobile structures suited to operations in South East Asia. He led the 1970 Hassett Review, which resulted in a fundamental restructuring of the Army, and organisation, which endured until the end of the first decade of the 21st century. As Vice Chief of Defence Staff, he led efforts to reform the Services in the wake of the Vietnam War and cessation of conscription in December 1972.

General Hassett was appointed as Chairman of the Chiefs of Staff Committee in 1975. His appointment was re-titled as Chief of Defence Force Staff in 1976. Hassett is one of the Australian military's best modern examples of a strategic thinker, leader and influencer. A soldier, leader, mentor and institution builder, he is a worthy exemplar of the kind of individual that we should be aspiring to identify and develop. The remainder of this case study will examine General Hassett's career through the lens of the 10 attributes of strategic thinkers (see Table B1).

Table B1. Attributes of Strategic Thinkers

Attribute	Example from General Hassett's career
The capacity to understand and evaluate alternative perspectives from one's own, or perspectives from outside one's institution (i.e. not have 'tunnel vision').	Demonstrated this particularly in his examination of insurgencies in Malaya and Vietnam. Honed his ability to appreciate alternative perspectives during his time at the Imperial Defence College, as Vice Chief of the Defence Staff and as the first Chief of Defence Force Staff. He was also, against the wishes of some Service Chiefs, an early advocate for the formation of the Australian Defence Force Academy in Canberra. ⁵¹
The possession of advanced cognitive skills, including critical thought, and the ability to identify interdependencies in complex issues, assess assumptions against reality, and coherently challenge extant paradigms and ways of thinking in light of changing circumstances.	Demonstrated inquisitive nature from early time in career, but significantly in evidence during his times in command and as a trainer. As Brigade Commander in Malaya he launched different studies of insurgency, counterinsurgency and the area of operations.
The possession of an insatiable curiosity and desire to undertake lifelong learning – in both one's work and personal lives.	Hassett demonstrated this continuously throughout his career. As a battalion and brigade commander, he introduced battlefield studies, and co-authored the British Army's doctrine Anti-Guerrilla Operations in South East Asia in the early 1960s. ⁵²
The courage to defend evidence-based arguments with senior officers and to sustain a strong ethical core in the conduct of strategic thinking.	Hassett could mount coherent and successful arguments in the face of strong opposition by senior military and civilian leaders, including his time as Army DCGS (two star) facing off against the then Chief of Defence Staff (four star) on Army requirements. ⁵³
Demonstrate critical-thinking and creative-thinking skills, interpersonal skills and communications skills that support development and implementation of strategies and complex activities.	Led the reformation of Army in its shift from Pentropic organisations, as well as in the wake of the 1970 Hassett Review.
The ability to network outside ones' immediate area of expertise or Service, and to be a persuasive communicator, influencer and relationship builder, inside and outside one's parent organisation.	As Director of Military Art at Duntroon he led a change to their culture to equally value military and academic endeavours by cadets. Commanded a multinational Brigade in Malaya, as part of the 17th Gurka Division, adapting the Brigade from counter-terrorism to its SEATO role for missions north of Malaya. ⁵⁴ As VCDF played a key role in the post-Vietnam and post conscription ADF.
The ability to observe trends, anticipate and lead rapid adaptation and innovation.	Was early to recognise changes to warfare in South East Asia in the early 1960s and became a leading advocate for changes from the Army's Pentropic structure to a lighter, more mobile approach.
Able to develop effective, prioritised plans to execute strategy, and oversee implementation and measurement of success or failure.	Demonstrated the capacity to do so with Malayan civil officials while commanding 28th Commonwealth Brigade, as well as during his appointments as Chief of the General Staff and as Chairman of the Chief of Staffs Committee.
The strong inclination to constantly mentor and develop other subordinates and peers.	While always a teacher in whatever appointment he occupied, Hassett relished his time as Commanding Officer of the School of Infantry, instructor at Army Command and Staff College and his five years as Director of Military Art at Duntroon.
The ability to combine these skills to generate influence and action through political and social acumen.	Whether it was reforming the Army as part of the 1970 Hassett Committee or restructuring the Services after Vietnam (as VCDF), Hassett was an exemplar of competent and influential leadership. His influence skills came to the fore as Chief of Defence Force Staff, where he had responsibility for ADF activities, but no staff to effect the planning and command activities that accompanied this responsibility.

Notes

- 1 Senior respondent, email correspondence with author.
- 2 Alan Millett and Williamson Murray, 'Lessons of War', *National Interest* 14 (Winter 1988): 83–95.
- 3 Nicholas Jans, Stephen Mugford, Jamie Cullens and Judy Frazer-Jans, *The Chiefs: A Study of Strategic Leadership*, (Canberra: Australian Defence College, 2013). <https://www.defence.gov.au/adc/publications/archive.asp>; Stephen Day, 'Thoughts on Generalship: Lessons from Two Wars', *Army Research Paper*, No. 5. (Canberra: Department of Defence, 2015). <https://researchcentre.army.gov.au/library/occasional-papers/thoughts-generalship-lessons-two-wars>.
- 4 The result of the study was the three-volume series on military effectiveness, published by Cambridge University Press in 1988 (and reprinted in 2010). Covering the First World War, the interwar period and the Second World War, each volume used the same analytical framework for multiple countries. This historical period was chosen because it supplied insights into potential responses to the ongoing strategic competition between the US and the Soviet Union at that time. We are now in another period of strategic competition; the analytical framework used by Millett and Murray remains relevant in the current environment, albeit in an updated and modified form.
- 5 Allan R. Millett and Williamson Murray, *Military Effectiveness: Volume 1, The First World War* New Edition, (New York: Cambridge University Press, 2010), 2. <https://doi.org/10.1017/CBO9780511778254>
- 6 Department of Defence, *Defence Corporate Plan 2020–2024* (Canberra: Defence Publishing Service, 2019), 10–26.
- 7 This may not be a complete view of effectiveness because it is largely focused on assuring the Australian Government that Defence is meeting its policy needs. However, there are two other elements of strategic effectiveness that are not evident in the Corporate Plan: strategic competition and its demands on our strategic leaders; and the anticipatory and adaptive capacity of our strategic leaders. A central idea in the theory and practice of strategy, and, therefore, in achieving strategic effectiveness, is that it exists in an environment where actors are competing (i.e., strategic competition) and where there is some misalignment of larger objectives. As Beatrice Heuser has written, 'Strategy is a comprehensive way to pursue political ends, including the threat or use of force, in a dialectic of wills – there have to be at least two sides to a conflict' (Beatrice Heuser, *The Evolution of Strategy: Thinking War from Antiquity to the Present* (Cambridge University Press, 2010): 27b). This capacity for strategic thinking is especially compelling given the complex problem of running military activities is likely to occupy the skills and minds of senior commanders so completely that it is easy to forget why they are being run. In relation to anticipatory and adaptive capacity, Defence, working within a more integrated national security environment, must better anticipate threats and adapt more rapidly to new technologies and other capabilities being fielded by state-based competitors and by non-state actors. Besides the new high-velocity and low-signature weapon systems, an array of non-kinetic capabilities – such as cyber, quantum encryption, stealth technologies and influence activities – must be addressed. Accompanying these new systems are new ideas about how to use them. Both the Chinese and Russians have invested in new operational concepts that are designed to attack Western systems and joint forces where they are weak. Military institutions must be capable of generating new, competitive strategies that place their strengths against potential adversary weaknesses, align with national strategies, make best use of available resources and complement those of allies and security partners. Therefore, another element of strategic effectiveness for 21st century military institutions is their capacity to anticipate and adapt.
- 8 Loizos Heracleous, 'Strategic Thinking or Strategic Planning?', *Long Range Planning* 31, no. 3 (1998): 484.
- 9 Heracleous, 'Strategic Thinking', 486.
- 10 Ellen F. Goldman and Andrea Casey, 'Building a Culture That Encourages Strategic Thinking', *Journal of Leadership and Organizational Studies* 17, no. 2 (May 2010): 119–128, <https://doi.org/10.1177/15-48051810369677>; Mohammad Arayesh et al., 'The Effects of Organizational Culture on the Development of Strategic Thinking at the Organizational Level', *International Journal of Organizational Leadership* 6 (2017): 261–275.
- 11 'Officers and senior executives at this level possess the habits of mind, personal mastery and critical faculties to operate in a competitive, technologically complex and volatile environment at the highest level of strategic responsibility. They influence and holistically implement national strategy by orchestrating all instruments of national power in a coherent plan to achieve national objectives in peace, crisis and war.' Australian Department of Defence (Dept of Defence), *The Australian Joint Professional Military Education Continuum* (Canberra: Australian Defence College, 2018), 23.
- 12 Dept of Defence, *Australian Joint Professional Military Education Continuum*, 23–24.
- 13 In researching this paper, I sought the views of all Band 3 (APS SES 3) and 3-star officers across Defence, as well as a selection of external government personnel and academics (in Australia and beyond), on the topic of developing better strategic thinkers. In doing so, I posed three questions: do we in the ADF and Defence have a problem with strategic thinking? What is the diagnosis of the problem? What are some solutions? There was broad agreement with the first question. Respondents agreed that we need to continue improving our capacity for strategic thinking and that there are gaps in our capacity to think and act strategically. The latter two questions are addressed in Part II.

Notes

- 14 Paula Thornhill, message to author.
- 15 The description 'cross multiple lanes' was provided by Dr Tanya Monroe.
- 16 Einstein is quoted in Martin E. Dempsey, *No Time for Spectators: The Lessons That Mattered Most from West Point to the West Wing* (Arlington, VA: Missionday, 2020), 77.
- 17 It might also be indicative of a lack of humility.
- 18 Francis Park, 'A Framework for Developing Military Strategists', *Infinity Journal* 5, no. 1, (Fall 2015): 9–14 (note in 2020 *Infinity Journal* was renamed *Military Strategy Magazine*).
- 19 Harold Henkel, 'Can Strategic Thinking Be Taught?', *Journal of Strategic Leadership* 3, no. 1 (2011): 1–6.
- 20 Colin S. Gray, 'Can Strategy be Taught?', *Infinity Journal* 6, no. 3 (Winter 2019): 4–9.
- 21 Andrew W. Marshall, 'Commentary: Strategy as a Profession in the Future Security Environment', in *On Not Confusing Ourselves: Essays on National Security Strategy in Honor of Albert and Roberta Wohlstetter*, ed. Andrew W. Marshall, J. J. Martin and Henry S. Rowen (Boulder, CO: Westview Press, 1991), 627.
- 22 *Grounded Curiosity*, accessed 16 March 2021, <https://groundedcuriosity.com/>; *The Cove*, Australian Army, Department of Defence, accessed 16 March 2021, <https://cove.army.gov.au/>; *The Forge*, Australian Defence College, Department of Defence, accessed 16 March 2021, <https://theforge.defence.gov.au/>; *Strategy Bridge*, The Bridge, accessed 16 March 2021, <https://thestrategybridge.org/>; *War on the Rocks*, War On The Rocks Media LLC, accessed 16 March 2021, <https://warontherocks.com/>; *Modern War Institute*, The Modern War Institute at West Point, accessed 16 March 2021, <https://mwi.usma.edu/>.
- 23 There is no widely accepted definition for strategy. Hew Strachan describes strategy as a word 'used by governments to describe peacetime policies more than by armies to shape wars' that has 'gained in breadth but has forfeited conceptual clarity'. Colin Gray calls it 'a bridge between purpose and action'. Documents such as the Defence Strategy Framework do not define what is meant by strategy, assuming readers already possess an understanding of the term. See Department of Defence, *The Strategic Framework 2017* (Canberra: Australian Government, 2017), <https://www.defence.gov.au/SPI/Docs/The%20Strategy%20Framework%202017.pdf>.
- 24 Paula Thornhill, email message to author, 22 October 2020.
- 25 This is explored in detail in Karl E. Weick and Kathleen M. Sutcliffe, *Managing the Unexpected: Resilient Performance in an Age of Uncertainty* (San Francisco: John Wiley & Sons, 2007).
- 26 Lawrence Freedman, *Strategy: A History* (Oxford: Oxford University Press, 2013), 614.
- 27 This definition draws from the work of multiple authors and researchers. This includes: Goldman and Casey, 'Building a Culture', 119–128; Arayesh et al., 'Organizational Culture', 261–275; Heracleous, 'Strategic Thinking', 481–487; Jeanne M. Liedtka, 'Strategic Thinking: Can It Be Taught?', *Long Range Planning* 31, no. 1 (1998): 120–129; Henry Mintzberg, 'The Fall and Rise of Strategic Planning', *Harvard Business Review* 72 (January–February 1994): 107–114.
- 28 Liedtka, 'Can It Be Taught?', 120.
- 29 Allan R. Millett and Williamson Murray and, *Military Effectiveness: Volume 2, The Interwar Period* (New York: Cambridge University Press, 2010).
- 30 Goldman and Casey, 'Building a Culture', 119–128.
- 31 Edgar H. Schein, *Organizational Culture and Leadership*, 3rd ed. (San Francisco: Jossey-Bass, 2004).
- 32 Reproduced with permission from Goldman and Casey, 'Building a Culture', Table 1, 122. Adapted from Schein E. H., *Organizational Culture and Leadership* 3rd ed. (San Francisco CA: Jossey-Bass, 2004).
- 33 Quote from respondent transcribed as written.
- 34 The Art of War is a specialisation within the Masters of Military and Defence Studies offered by the ANU College of Asia and the Pacific in conjunction with the Australian Command and Staff Course at the Australian Defence College. For more information see <https://programsandcourses.anu.edu.au/specialisation/AWAR-SPEC>. The Perry Group is an elective offered to students at the Australian War College that encourages using the concepts of science fiction as a creative framework to envisaging future challenges and force design. See <https://theforge.defence.gov.au/perry-group>.
- 35 Colin S. Gray, 'The Strategist as Hero', *Joint Force Quarterly* 62 (3rd Quarter, July 2011): 38.
- 36 Paula Thornhill, message to author, 30 September 2020.
- 37 The Oxbridge Tutorial system is explained at <https://www.new.ox.ac.uk/tutorial-system>. For more on the Oxbridge Tutorial system see David Mills and Patrick Alexander, 'Are Oxbridge tutorials still the best way to teach students how to think?', *The Conversation*, 8 July 2015 9:08pm AEST, <https://theconversation.com/are-oxbridge-tutorials-still-the-best-way-to-teach-students-how-to-think-44250>; see also <https://www.greenes.org.uk/greenes-education/our-history/the-history-of-the-tutorial/>
- 38 Dept. of Defence, *Australian Joint Professional Military Education Continuum*, 22–3
- 39 Paula Thornhill, message to author.
- 40 Colin S. Gray, *The Future of Strategy* (Cambridge: Polity Press, 2015), 115–116.

- 41 Robert Kabacoff, 'Develop Strategic Thinkers Throughout Your Organization', *Harvard Business Review*, 7 February 2014, <https://hbr.org/2014/02/develop-strategic-thinkers-throughout-your-organization>.
- 42 Des Ball, 'A Strategic Career', in *War, Strategy and History: Essays in Honour of Professor Robert O'Neill*, eds. Daniel Marston and Tamara Leahy (Canberra: Australian National University Press, 2016), 39.
- 43 Michael Howard, 'Foreword', in *War, Strategy and History: Essays in Honour of Professor Robert O'Neill*, eds. Daniel Marston and Tamara Leahy (Canberra: Australian National University Press, 2016), ix.
- 44 Ball, 'A Strategic Career', 44.
- 45 Paul Dibb, 'Robert O'Neill and Australian Security Policy', in *War, Strategy and History: Essays in Honour of Professor Robert O'Neill*, eds. Daniel Marston and Tamara Leahy (Canberra: Australian National University Press, 2016), 57.
- 46 Carter Malkasian and Daniel Marston, 'Lessons for Iraq and Afghanistan', in *War, Strategy and History: Essays in Honour of Professor Robert O'Neill*, eds. Daniel Marston and Tamara Leahy (Canberra: Australian National University Press, 2016), 235.
- 47 Robert O'Neill, *Combat operations, Australia in the Korean war 1950–1953: Volume 2*, (Canberra: Australian War Memorial and The Australian Government Publishing Service, 1985).
- 48 John Essex-Clark, *Hassett: Australian Leader* (Loftus, Victoria: Australian Military History Publications, 2005), 193.
- 49 D. Butler, A. Argent and J. Shelton. *The Fight Leaders. A Study of Australian Battlefield Leadership: Green, Ferguson and Hassett* (Loftus, Victoria: Australian Military History Publications, 2002), 120.
- 50 An example is his address at Duntroon in 1987 where he discusses technology and leadership at the 'senior level': The Major General Sir James Harrison memorial lecture, Royal Military College Duntroon, 29 May 1987.
- 51 Essex-Clark, *Hassett* 238.
- 52 Essex-Clark, *Hassett* 191–2.
- 53 Essex-Clark, *Hassett* 199.
- 54 Essex-Clark, *Hassett* 188.

Bibliography

- Allen, Terina. '3 Unmistakable Signs That You Are a Strategic Thinker'. *Forbes*, 20 November 2018. <https://www.forbes.com/sites/terinaallen/2018/11/20/3-unmistakable-signs-youre-a-strategic-thinker/?sh=36a86e7c6921>.
- Arayesh, Mohammad, Emad Golmohammadi, Maryam Nekooeezdah and Abbas Mansouri. 'The Effects of Organizational Culture on the Development of Strategic Thinking at the Organizational Level'. *International Journal of Organizational Leadership* 6 (2017): 261–275.
- Atsmon, Yuval. 'How to Unleash Your Strategic Thinking'. *Strategy & Corporate Finance Blog* (blog). *McKinsey & Company*, 2 May 2017. <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/the-strategy-and-corporate-finance-blog/how-to-unleash-your-strategic-thinking>
- Ball, Des. 'A Strategic Career'. In *War, Strategy and History: Essays in Honour of Professor Robert O'Neill*, edited by Daniel Marston and Tamara Leahy, 39–46. Canberra: Australian National University Press, 2016.
- Birshan, Michael and Jayanti Kar. 'Becoming More Strategic: Three Tips for Any Executive'. *McKinsey Quarterly*, 1 July 2012. <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/becoming-more-strategic-three-tips-for-any-executive>
- Bowman, Nina. '4 Ways to Improve Your Strategic Thinking Skills'. *Harvard Business Review*, 27 December 2016. <https://hbr.org/2016/12/4-ways-to-improve-your-strategic-thinking-skills>.
- Butler, D., A. Argent and J. Shelton. *The Fight Leaders. A Study of Australian Battlefield Leadership: Green, Ferguson and Hassett*. Loftus, Victoria: Australian Military History Publications, 2002.
- Cohen, Eliot. *Supreme Command: Soldiers, Statesmen and Leadership in Wartime*. New York: The Free Press, 2002.
- Davies, Barbara and Brent Davies. 'Strategic Leadership'. *School Leadership and Management* 24, no. 1 (February 2004): 29–38.
- Day, Stephen. 'Thoughts on Generalship: Lessons from Two Wars'. *Army Research Paper, No. 5*. Canberra: Department of Defence, 2015. <https://researchcentre.army.gov.au/library/occasional-papers/thoughts-generalship-lessons-two-wars>.
- Dempsey, Martin E. *No Time for Spectators: The Lessons That Mattered Most from West Point to the West Wing*. Arlington, VA: Missionday, 2020.
- Denn, William J. 'Strategic Command: General David Petraeus and the Execution of Strategic Leadership'. *Military Review*, 7 October 2016. <https://www.armyupress.army.mil/Journals/Military-Review/Online-Exclusive/2016-Online-Exclusive-Articles/Strategic-Command-General-David-Petraeus/>
- Department of Defence. *The Australian Joint Professional Military Education Continuum*. Canberra: Defence Publishing Service, 2018. <https://theforge.defence.gov.au/publications/joint-professional-military-education-jpme>
- . *Defence Corporate Plan 2020–2024*. Canberra: Defence Publishing Service, 2019.
- . *The Defence Strategy Framework 2017*. Canberra: Defence Publishing Service, 2017.
- Desjardins, Mike. 'What Does It Really Mean to Think Strategically?' *Canadian Business*, 17 December 2012. <https://www.canadianbusiness.com/leadership/what-does-it-really-mean-to-think-strategically/>
- Dibb, Paul. 'Conclusion: What is the future of strategic studies?' In *New Directions in Strategic Thinking 2.0*, edited by Russell W. Glenn, 193–205. Canberra: Australian National University Press, 2018.
- Dibb, Paul. 'Robert O'Neill and Australian Security Policy'. In *War, Strategy and History: Essays in Honour of Professor Robert O'Neill*, edited by Daniel Marston and Tamara Leahy, 47–59. Canberra: Australian National University Press, 2016.
- Essex-Clark, John. *Hassett: Australian Leader*. Loftus, VIC: Australian Military History Publications, 2005.

- Drucker, Peter. *The Effective Executive*. New York: Collins, 2006.
- Freedman, Lawrence. *Strategy: A History*. Oxford: Oxford University Press, 2013.
- Goldman, Ellen F. and Andrea Casey. 'Building a Culture That Encourages Strategic Thinking'. *Journal of Leadership and Organizational Studies* 17, no. 2 (May 2010): 119–128.
- Gray, Colin S. 'Can Strategy Be Taught?' *Infinity Journal* 6, no. 3 (Winter 2019): 4–9. https://www.militarystrategymagazine.com/wp-content/uploads/2019/11/Military_Strategy_Magazine_Volume_6_Issue_3.pdf
- . *The Future of Strategy*. Cambridge: Polity Press, 2015.
- . *Modern Strategy*. Oxford: Oxford University Press, 1999.
- . 'The Strategist as Hero'. *Joint Force Quarterly* 62 (3rd Quarter, July 2011): 37–45. <https://ndupress.ndu.edu/JFQ/>
- Harare, Yuval. *Homo Deus: A Brief History of Tomorrow*. London: Vintage Books, 2015.
- Henkel, Harold. 'Can Strategic Thinking Be Taught?' *Journal of Strategic Leadership* 3, no. 1 (2011): 1–6. https://www.regent.edu/acad/global/publications/jsl/vol3iss1/Henkel_V3I1_pp1-6.pdf
- Heracleous, Loizos. 'Strategic Thinking or Strategic Planning?' *Long Range Planning* 31, no. 3 (1998): 481–487.
- Heuser, Beatrice. *The Evolution of Strategy: Thinking War from Antiquity to the Present*. Cambridge: Cambridge University Press, 2011.
- Hoffman, F. G. 'Will War's Nature Change in the Seventh Military Revolution?' *Parameters* 47, no. 4 (Winter 2017 – 2018): 23, 31.
- Hoffman, Frank G. *Conflict in the 21st Century: The Rise of Hybrid Wars*. Washington DC: Potomac Institute for Policy Studies, December 2007. <https://publications.armywarcollege.edu/pubs/3554.pdf>
- Howard, Michael. *The Causes of War*. 2nd ed. Cambridge, MA: Harvard University Press, 1983.
- . 'Foreword'. In *War, Strategy and History: Essays in Honour of Professor Robert O'Neill*, edited by Daniel Marston and Tamara Leahy, ix–xi. Canberra: Australian National University Press, 2016.
- . 'Military Science in an Age of Peace'. *The RUSI Journal* 119, no. 1 (March 1974): 3–11.
- Ireland, R. Duane and Michael A. Hitt. 'Achieving and Maintaining Strategic Competitiveness in the 21st Century: The Role of Strategic Leadership'. *Academy of Management Executive* 19, no. 4 (November 2005): 63–77.
- Jans, Nicholas, Stephen Mugford, Jamie Cullens and Judy Frazer-Jans. *The Chiefs: A Study of Strategic Leadership*. Canberra: Australian Defence College, 2013. <https://www.defence.gov.au/adc/publications/archive.asp>.
- Kabacoff, Robert. 'Develop Strategic Thinkers Throughout Your Organization'. *Harvard Business Review*, 7 February 2014. <https://hbr.org/2014/02/develop-strategic-thinkers-throughout-your-organization>.
- King, Iain. 'Beyond Ends, Ways, and Means: We Need a Better Strategic Framework to Win in an Era of Great Power Competition'. Modern War Institute, last modified 3 September 2020. <https://mwi.usma.edu/beyond-ends-ways-and-means-we-need-a-better-strategic-framework-to-win-in-an-era-of-great-power-competition/>.
- Liedtka, Jeanne M. 'Strategic Thinking: Can It Be Taught?' *Long Range Planning* 31, no. 1 (1998): 120–129.
- Malkasian, Carter and Daniel Marston. 'Lessons for Iraq and Afghanistan'. In *War, Strategy and History: Essays in Honour of Professor Robert O'Neill*, edited by Daniel Marston and Tamara Leahy, 235–249. Canberra: Australian National University Press, 2016.
- Marshall, Andrew W. 'Commentary: Strategy as a Profession in the Future Security Environment'. In *On Not Confusing Ourselves: Essays on National Security Strategy in Honor of Albert and Roberta Wohlstetter*, edited by Andrew W. Marshall, J. J. Martin and Henry S. Rowen, 302–311. Boulder, CO: Westview Press, 1991.
- Marston, Daniel and Tamara Leahy, eds. *War, Strategy and History: Essays in Honour of Professor Robert O'Neill*. Canberra: Australian National University Press, 2016.

Bibliography

- McCauley, Daniel H. 'Rediscovering the Art of Strategic Thinking: Developing 21st-Century Strategic Leaders'. *Joint Force Quarterly* 81 (2nd Quarter, April 2016): 26–33.
- McGrath, Rita G. 'Transient Advantage'. *Harvard Business Review*, June 2013.
<https://hbr.org/2013/06/transient-advantage>.
- Millett, Alan R. and Williamson Murray. 'Lessons of War'. *National Interest* 14 (Winter 1988): 83–95.
- .eds. *Military Effectiveness: Volume 1, The First World War*. New Edition. New York: Cambridge University Press, 2010. <https://doi.org/10.1017/CBO9780511778254>
- .eds. *Military Effectiveness: Volume 2, The Interwar Period*. New Edition. New York: Cambridge University Press, 2010. <https://doi.org/10.1017/CBO9780511762963>
- Mintzberg, Henry. 'The Fall and Rise of Strategic Planning'. *Harvard Business Review* 72 (January–February 1994): 107–114.
- Murray, Williamson. *War, Strategy, and Military Effectiveness*. Cambridge: Cambridge University Press, 2011.
<https://doi.org/10.1017/CBO9780511996252>
- O'Neill, Robert. 'The Future of Strategic Studies: The Next Golden Age'. In *New Directions in Strategic Thinking 2.0*, edited by Russell W. Glenn, 179–192. Canberra: Australian National University Press, 2018.
- . *Combat operations, Australia in the Korean war 1950-1953: Volume 2*. Canberra: Australian War Memorial and The Australian Government Publishing Service, 1985.
- Park, Francis. 'A Framework for Developing Military Strategists'. *Infinity Journal* 5, no. 1 (Fall 2015): 9–14.
- Payne, Kenneth. *Strategy, Evolution, and War: From Apes to Artificial Intelligence*. Washington DC: Georgetown University Press, 2018.
- Perez, Celestino, Jr. 'Errors in Strategic Thinking: Anti-Politics and the Macro Bias'. *Joint Force Quarterly* 81 (2nd Quarter, April 2016): 10–18.
- Rapp, William. 'Civil-Military Relations: The Role of Military leaders in Strategy Making'. *Parameters* 45, no. 3 (Autumn 2015): 13–26.
- Rumelt, Richard. *Good Strategy, Bad Strategy*. London: Profile Books, 2011.
- Scales, Robert. 'Are You a Strategic Genius?: Not Likely, Given Army's System for Selecting, Educating Leaders'. *Association of the United States Army*, 13 October 2016.
<https://www.ansa.org/articles/army-system-selecting-educating-leaders>.
- Schein, Edgar H. *Organizational Culture and Leadership*. 3rd ed. San Francisco: Jossey-Bass, 2004.
- Strachan, Hew. 'The Future of Strategic Studies: Lessons From the Last 'Golden Age' '. In *New Directions in Strategic Thinking 2.0*, edited by Russell W. Glenn, 149–166. Canberra: Australian National University Press, 2018.
- . 'Strategy or Alibi? Obama, McChrystal and the Operational Level of War'. *Survival* 52, no. 5 (September 2010): 164–165.
- Sullivan, John. '6 Ways to Screen Job Candidates for Strategic Thinking'. *Harvard Business Review*, 13 December 2016. <https://hbr.org/2016/12/6-ways-to-screen-job-candidates-for-strategic-thinking>.
- U.S. Department of Defense. *Officer Professional Military Education Policy*. Chairman of the Joint Chiefs of Staff Instruction. Washington DC: U.S. Joint Staff, 15 May 2020.
- Weick, Karl E. and Kathleen M. Sutcliffe. *Managing the Unexpected: Resilient Performance in an Age of Uncertainty*. San Francisco: John Wiley & Sons, 2007.
- White, Hugh. 'Strategic Studies in Practice: An Australian Perspective'. In *New Directions in Strategic Thinking 2.0*, edited by Russell W. Glenn, 105–116. Canberra: Australian National University Press, 2018.
- Williams, Thomas M. 'Educating for Critical Thinking'. *Military Review* (January–February 2013): 49–54.

About the Author



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Major General Ryan was appointed Commander, Australian Defence College in January 2018. Over his 34-year career, he has commanded at multiple levels and served in: East Timor with the 6RAR Battalion Group in 2000; Iraq as the Deputy J3 for the Multi-National Security Transition Command; and Afghanistan, where he commanded Australia's 1st Reconstruction Task Force in southern Afghanistan from August 2006 to April 2007 and for which he was awarded the Order of Australia. He has also commanded the 1st Brigade, the Australian Army's oldest and most combat experienced combined arms brigade.

Major General Ryan has deep experience in the fields of strategy, interagency and joint operations, command and leadership, and professional military education. He was founding President of the Defence Entrepreneurs Forum (Australia), an undertaking to nurture innovation in the Australian Defence Force's junior leaders. He is a member of the Military Writers Guild and Adjunct Scholar at the Modern War Institute, West Point.

Major General Ryan graduated from the Royal Military College Duntroon in 1989, has a Bachelor's degree in Asian Studies from the University of New England and is a graduate of the Australian Defence Force School of Languages. He is a Distinguished Graduate of the United States Marine Corps (USMC) Command and Staff College and a graduate of the USMC School of Advanced Warfighting. In 2012, he graduated with distinction from the Johns Hopkins University School of Advanced International Studies, earning a Master of International Public Policy.

**Individuals think strategically, not institutions.
However, the development of strategic thinkers cannot
be separated from institutional culture.**

What can the Australian Defence Force and the wider Department of Defence do to nurture and build better strategic thinkers? In this paper, the first in *The Vanguard* occasional paper series, Major General Mick Ryan highlights the challenges and provides a framework for developing a strategic learning culture that supports strategic thinking at all levels of Defence.



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