
Assisting Strategic Analysis in an Uncertain World

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A common theme within public, academic, professional and Government discussions relating to Defence today is the increased uncertainty of the international environment and the obstacles that this poses for depiction of likely futures and planning (for equipment, personnel, budgets and international engagement). Professionals who operate in the Defence strategy domain¹ are tasked with managing this situation and producing policy in the form of strategic guidance to give Defence planners priorities on which to base their decisions.

Strategic guidance and planning is the cornerstone for Australia's engagement with the world. Without strategic level planning, acquisitions and capability development (military or otherwise) become ad hoc and less likely to achieve desired effects, thereby wasting limited resources and putting Australia and its interests at risk.

Defence is not alone in grappling with the challenges of strategic planning. It is similarly crucial in private enterprise. In this domain, recognition of the importance of strategic planning has been matched over the past decade with investment in developing processes that can be used by trained professionals to manage resources and risk in an uncertain world. This investment reflects an understanding that it takes a specialised professional to manage the complexity of existing needs and future challenges taking all pertinent factors into account. However it also reflects an understanding that decision making processes need to be transparent and defensible over time if they are to be accepted and implemented by stakeholders.

Given the crucial role for strategic planning, and the potential benefits of getting it right, it is astounding that so little time and energy is devoted to analysing the practice of strategic thinking and to developing strategic thinkers in the Australian Defence organisation. It seems to be taken for granted that strategic thinkers will continue to produce analysis and to make decisions of a consistently high level with little or no training in strategic thinking and no established analytical processes. Further, it seems to be

¹ For the purposes of this discussion, 'strategic thinkers' refers to those professionals working for the Australian Defence Organisation, conducting strategic level analysis and decision making that relates to Australia's military and political engagement in the international environment.

taken for granted that stakeholders will accept and implement strategic guidance, even though they are not privy to the method and logic behind it. Defence is in desperate need of a long-term sustained intellectual commitment in the strategy domain.

It is not the intention of this article to list and examine potential strategic analysis techniques. Rather, this article seeks to enhance acceptance of the notion that strategic thinkers can benefit greatly from applying analytical tools. This article aims to highlight the opportunity that exists to greatly improve the quality and credibility of strategic level decision making within Australia, which in turn would enhance policy acceptance and implementation.

Background

The advice of Defence strategic thinkers is sought in many forms from Parliamentary questions on notice, comments on capability proposals to round tables and professional forums, but it is the periodical strategic guidance documents that are the most visible displays of their work. These documents were recently defined in Defence's *Strategy Planning Framework Handbook*² as:

Unclassified Strategy Guidance Documents

- a. *Defence White Paper and Updates;*
- b. *The Foundations of Australian Military Doctrine;* and
- c. *Defence 2030.*

Classified Strategy Guidance Documents

- a. *Defence Planning Guidance;*
- b. *Quarterly Strategic Review;*
- c. *Australia's Military Strategy;*
- d. *Future Joint Operating Concept;* and
- e. *Defence International Engagement Strategic Plan.*

Defence strategic planning occurs in a fluctuating and highly demanding environment where short notice requests for information and analysis from the Defence Executive are juggled with longer term environmental scanning and strategic policy development. In this environment strategic thinkers are often preoccupied with *urgent but not important* tasks, with little time to dedicate to the *important but not urgent* ones. The result, especially during

² Department of Defence, *Strategy Planning Framework Handbook*, 2006, pp 11-17.

times of high operational tempo, is that strategic thinkers do not have the time they would like to dedicate to the research and analysis that underpins quality strategic policy development.

Current Obstacles and Persistent Challenges

Before articulating solutions for the problems faced by strategic thinkers, it must first be established that there are in fact problems. The assertion that there are shortcomings in Australian Defence's strategic analysis is a controversial one. Some may argue that strategic analysis is being conducted to the highest standard possible given an international environment that is more complex than ever before. However, as this section of the article will demonstrate there is room for improvement which would benefit Defence at a time when it can use every advantage available.

TRAINING

One of the challenges facing Defence strategic thinkers is that their knowledge and the quality of their analytical practices need to be constantly reassessed. They are not something that once gained will remain indefinitely. This persistent need for taking time to re-create knowledge and analytical processes has been referred to as the development of a trusted craft.³ In theory Defence appears to agree with this, listing the following as a priority in its May 2007 Bulletin on reform in Defence: "We want to be professional—well trained, taking pride in the quality of our work and creative in our approach to challenges."⁴

However in practice, it is evident that policy development and strategic thinking, while valued, is not yet considered to be a task that requires dedicated professionals with specific skill sets and tailored training and support frameworks. This has been widely observed within and outside Defence, as articulated by the Australian Strategic Policy Institute in 2007:

One of the greatest paradoxes of military culture is that Services (quite properly) take a very conservative approach to the development of individual skills in the area of core warfighting, but assume (quite incorrectly) that corporate and policy roles can be discharged by individuals with no substantive experience or qualifications ... on the civilian side of the house, the corresponding malady is the cult of the generalist public service officer who ... can supposedly undertake any task without subject matter expertise or professional qualification.⁵

³ Dr P. Persson of the Swedish National Defence College, *Understanding and Creating Cultures – the Intelligence Function's Raisons d'être*, presentation to 'Intelligence Analysis in the Asia-Pacific 2007', University of Adelaide.

⁴ Office of the Secretary and CDF, 'Moving Forward: Reform in Defence', *Bulletin*, no. 2, Department of Defence, May 2007.

⁵ M. Thomson, *Improving Defence Management* (Canberra: Australian Strategic Policy Institute, January 2007), p. 8.

It should be understood here that the author's argument is not that all strategic thinkers should undergo lengthy specialist training before engaging in productive work, as well as constantly updating such training—this desirable notion is simply not practical in the real world of high staff turn over and limited timeframes. It is instead argued that if it is not possible to ensure desired levels of specialised training for strategy staff, they should at least be supported by strategic analysis experts who can provide some assurance that decision making is of the highest quality possible.

GROUP DYNAMICS

Another challenge for strategic analysis in Defence is managing the effect of the prevailing organisational culture on the quality of decision making practices. The Harvard Business School's text on decision making theory recognises that:

A command and control culture tends to make decisions in line with the preferences of powerful individuals. No matter how well informed they may be ... every decision is ad hoc and there is no consistent approach to dealing with important choices.⁶

While it can not in fairness be said that today's Australian Defence Organisation has a command and control culture, analysts need to be aware of the risk of the emergence of such a culture, and they need to be vigilant to ensure that this risk is countered with intellectual rigour in decision making.

On the other hand, seeking multiple inputs presents its own challenges. Many analysts, including those working in the Defence strategy domain, are faced with the difficulties of attaining useful outcomes from group discussion and synthesising decisions that accurately reflect that discussion. Defence strategic analysts will increasingly face this challenge with an emphasis on national security and the need for whole-of-Government consultation and coordination. Here, an *unaided*⁷ analyst may struggle to guide discussion along relevant lines and prevent it from deteriorating into debate about individual agendas. Participants may become frustrated or confused if the purpose or boundaries of a group discussion are not clear. This was a point recently emphasised by the Defence Secretary, Nick Warner:

I have been struck by the number and length of meetings within Defence, and consider it is critical to effectively manage the time spent, particularly at this time of high operational tempo ... The first question to ask is whether in fact a meeting is necessary. Then you might focus on what is to be

⁶ Harvard Business Essentials, *Decision Making – 5 Steps to Better Results* (Boston: Harvard Business School Press, 2006), p. 6.

⁷ *Unaided* is the term used by some decision analysis practitioners to describe unstructured decision making which relies on simple, subjective heuristics. P. Goodwin and G Wright, *Decision Analysis for Management Judgment*, 3rd Edition (Hoboken, NJ: John Wiley and Sons, 2004), p. 15.

achieved ... How many people really need, versus want, to be involved ...
In essence is this a good use of our time?⁸

Further, the ambiguity of inadequately managed group discussion presents an opportunity for dominant individuals to have excessive influence and may result in the group adopting one perspective as the group's view, at the expense of new or perhaps more valid input.

CREDIBILITY AND RIGOUR

As mentioned in the introduction, Defence strategic analysts are required to assess likely futures to inform long term planning. The speculative nature of this practice can make the resulting judgements highly questionable, if they are not underpinned by rigorous reasoning processes. All strategic judgements are likely to be subject to debate, especially those contained in the unclassified (public) strategic guidance documents listed above. In the course of such debate, there is a high risk to policy credibility if the strategic judgments cannot be justified by a rigorous, documented methodology, which records assumptions and logic flow. Credibility and fostering trust for professional judgment is fundamental to work in the highly speculative domain of Defence strategy, particularly when providing advice to Government. The issue of decision making and policy development credibility was highlighted in the 2007 Defence Management Review, which found that:

Within the APS [Australian Public Service], Defence is perceived as insular and inwardly focused ... There is a perception ... that Defence staff ... do not have a well developed understanding of the policy development process or of the importance of providing advice to government.⁹

The review reported that the "well-informed observers of Defence" surveyed "drew particular attention to a degradation of skill and experience in strategic policy".¹⁰

ERRORS OF HEURISTICS

Many Defence strategic thinkers would claim that they already employ systematic analysis, both in groups and individual work. The danger here is that without sufficient training in strategic analysis methodologies, techniques can be used from a biased or inaccurate start point and can actually provide false assurance of quality, and more importantly, lead to exclusion of vital factors and continuation of bias. Goodwin and Wright describe the predicament of the strategic thinker as follows:

⁸ Secretary Nick Warner, 'Prioritisation and focussed discussion', *Defence Magazine*, April 2007.

⁹ Australian Defence Headquarters, *Defence Management Review* (Canberra: Department of Defence, 2007), p. 12.

¹⁰ *Ibid.*, p. 13.

When faced with a large and complex problem, there may be too much information to handle simultaneously so the decision maker is forced to use simplified mental strategies, or heuristics, ... to cope with the complexities of making estimates of probabilities. While they can ... reduce the effort required by decision makers, they can also lead to systematically biased judgements.¹¹

Another problematic tendency when resorting to heuristics is reversion to previous approaches and the use of past iterations of documents without making sufficient adjustment to take account of changes in the strategic environment. These past reference points are known as *anchor points*,¹² and while they can be a timesaver for analysts tasked with producing an update, they can lead to replication of the flaws and assumptions of previous iterations of guidance. The error of *anchor points* also refers to the application of analogies to previous situations which are inaccurate or misleading. It would be the subject of contentious debate as to whether Defence is suffering from this analytical ailment. It is perhaps less contentious to suggest that Defence has suffered it in the past in terms of the defence of Australia strategic frame, which gave priority to developing capability for defending Australian territory from conventional military attack, while changes in the international environment were making unconventional warfare and regional instability the primary challenges to Australia's national security.

Solutions

Having examined some, but not all, potential problems faced by Defence strategic thinkers, it is clear that it would be prudent to dedicate some effort, within this article and beyond, to consider solutions. As mentioned in the introduction, this is not new territory given that academic and private enterprise domains have been developing and exploring solutions to the challenges of strategic analysis and decision making for some time. Strategic analysis methodologies have been developed and well tested over time, and when applied appropriately, they offer:

- increased understanding of a problematical situation via understanding of the various relevant perspectives on that situation;
- greater likelihood of unbiased approach with a sense of genuine inquiry;
- options for action to improve the situation; and
- transparency and a record of process allowing accountability and future amendment or replication of the process.

¹¹ Goodwin and Wright, pp. 27 and 250.

¹² Harvard Business Essentials, pp. 100 and 110.

A misconception often held by strategic thinkers is that applying strategic analysis methodologies requires the luxury of time. However, it is precisely when time is short that the application of proven methodologies is most beneficial. A structured approach also gives some assurance that key factors are considered and that conclusions are drawn from logical deduction, instead of making assumptions in haste or excessive reliance on *anchor points*. Of particular relevance to Defence strategic thinking, a strategic analysis methodologist will identify any pertinent factors that are being neglected, or given inconsistent consideration, because of lack of availability of time, resources or information. Further, the additional time required to receive and process inputs from multiple sources can be overcome by employing shared mental models and similar knowledge structures.

TRAINING

Short of asking strategic thinkers to gain expertise in various methodologies, providing them with access to a professional methodologist would constitute a significant improvement. The presence of a methodologist would allow strategic thinkers to dedicate time to their specialised field, while methodologists tailor decision support and analysis tools for various tasks as required. Ron Johnston of the CIA Centre for Intelligence Studies articulates the role as follows:

Most domains have specialists who study the scientific process or research methods of their discipline. These people are concerned with the epistemology of their domain, not just philosophically but practically. They want to know how experts in their discipline reach conclusions or make discoveries. Rather than specializing in a specific substantive topic within their domain, these experts specialize in mastering the research and analytic methods of their domain.¹³

GROUP DYNAMICS

Attempting to manage multiple inputs, negotiating consensus in a hierarchical organisation and avoiding group conformity effects and *group polarisation*¹⁴ are problematic. The application of analytical models can prevent these negative group tendencies by making identification of competing perspectives or *world views*¹⁵ part of the analytical process, requiring participants to identify, explain and perhaps even question the assumptions behind their differing opinions. As stated in the introduction, it is not the purpose of this article to detail strategic analysis techniques, so the

¹³ Ron Johnston, 'Integrating Methodologists into Teams of Substantive Experts', *Studies in Intelligence*, vol 47, no. 1 (April 2007).

¹⁴ *Group polarisation* refers to the phenomenon of like minded individuals with shared moderate views engaging in discussion and confirming each others views at the expense of consideration of other perspectives, resulting in an unwarranted strengthening of original opinions.

¹⁵ P. Checkland and J. Poulter, *Learning for Action: A Short Definitive Account of Soft Systems Methodology and its use for Practitioners, Teachers and Students* (Hoboken, NJ: John Wiley and Sons Ltd., 2006), p. xv.

author will only briefly mention a couple of the benefits available from the application of strategic analysis techniques, as an indication of how to guide group consultation and make quality outcomes more likely.

Before the difficult and often time consuming exercise of group consultation is commenced, some effort should be made to ensure that optimal conditions are established for quality debate and decision making. Especially in the strategy domain where those consulted are often senior members of Defence and other departments who want to ensure that their limited time is used effectively. Consistent application of an agreed methodology can also assist in overcoming communication disparities between experts in different fields. Agreed methodology can result in the adoption of a common vocabulary on a given topic, minimising misunderstandings and attempts by participants to place inappropriate importance on their own domain with the use of jargon and technical speak.

CREDIBILITY AND RIGOUR

Decision analysis methodology emphasises that judgments and policy are far more likely to be well accepted and faithfully implemented if the strategic thinking processes and assumptions that led to them are transparent and consistent. The development of Defence's strategic direction should not be perceived as a little understood process of *black magic*, known only to a privileged few. Users and authors of subsequent documents should be able to reflect on and potentially re-use proven strategic thinking methodologies. Some strategic analysts may fear that a high degree of transparency would leave policy too open to query or debate. On the contrary, visibility of the range of options considered and the reasoning behind preferred options gives policy decisions greater credibility and would significantly enhance acceptance, or in the worst case scenario reveal analytical errors before they have an adverse impact.

As discussed above, projecting future strategic patterns presents unique challenges to strategic thinkers with a broad range of potential variables and consequences. Analytical tools can assist by providing structured pictures to capture the interaction of a range of factors over time in a far more effective manner than any configuration of prose.¹⁶ The use of a rigorous approach for strategic thinking does not require practitioners to reduce the complex strategic environment to a single testable hypothesis. In fact a great deal of decision making methodologies are centred around the process of creating numerous hypotheses, and seek to identify the assumptions and complexities that underpin them. This characteristic makes such methodologies particularly applicable as responses to a constantly changing strategic environment.¹⁷

¹⁶ Ibid., p. 27.

¹⁷ Ibid., p. 17.

Using established analysis techniques to increase intellectual rigour and minimise personality driven policy direction does not mean taking the human element out of the equation. The expertise provided by strategic thinkers and their ability to evaluate and articulate likelihoods, impacts and consequences, is central to the production of quality strategic guidance. Strategic analysis methodology simply provides some structure and assurance of comprehensiveness to this process. Where there is a large amount of data to be considered in comparison of alternatives ('large' being beyond the quantity that the human brain can effectively hold and process) IT based analysis tools may be useful as an adjunct to the human element. Also, in recognition of the skill of strategic analysts in adapting to unique or unprecedented situations, the aim of decision analysis tools is not to reduce such unprecedented situations to a form that will neatly fit into established models. Rather, analysis tools are beneficial in ensuring that the most unique and little understood factors are considered in the same comprehensive manner as familiar factors.

ERRORS OF HEURISTICS

Defence, like all organisations (and indeed individuals), is at risk of strategic inertia. That is, continuing to use *anchor points* or a frame that becomes outdated as the world outside the organisation changes. Methodologists recognise that as commitment to an inappropriate strategy increases, it becomes more deeply embedded.¹⁸ Defence is far less likely to encounter this problem if its strategic thinkers are trained in, or have access to those trained in, regular, unbiased, consistently rigorous strategic analysis techniques which would confront the reluctance to question the commitment of further resources to justify initially poor, or outdated decisions.

Conclusions and Recommendations

It may be asked, if Defence strategic thinking has been carried out quite adequately to date without bothering with institutionalised strategic analysis techniques, why take the time, in the midst of high Defence demand, to change now? The answer is that now is exactly the time to consider improving the way national threats are analysed and how we develop policy priorities for addressing those threats. As recently reiterated by the Australian Strategic Policy Institute,

one of the hardest tasks confronting Australian security planners is to find a principle of strategic reductionism that appropriately addresses our most important threats.¹⁹

Australia faces a more complex international environment than ever before, yet the resources available to meet the challenges that this environment

¹⁸ Goodwin and Wright, p. 361.

¹⁹ Rod Lyon, *Australia's strategic fundamentals* (Canberra: Australian Strategic Policy Institute, June 2007), p. 3.

presents continue to be limited. Therefore there is more need than ever before to ensure that comprehensive, insightful judgments are made about current and future threats and the prioritisation of resource allocation. This level of assurance should be demanded not only by Government as the client of Defence, but also by every element of Defence that uses strategic guidance to underpin their work. As explained in the preceding discussion, there is an opportunity to improve analytical timeliness, decision quality and policy communication by using analysis techniques.

It follows that there are two options for improvement:

- Train strategic thinkers in the science of strategic analysis. This would constitute a significant training liability for an already stretched Defence strategic policy domain with Defence strategists taking large portions of time to acquire new knowledge which lies outside their area of expertise. Also, in addition to the initial learning period would be a persistent liability for maintaining awareness of developments in strategic analysis techniques.
- Establish a professional cadre of strategic analysis methodologists who are a consistent part of Defence's strategic thinking process to assist in identifying appropriate research designs, analytical techniques, data analyses tools, and methodologies. The methodologist can then be available to monitor the quality of analysis and decision making, and tailor processes to overcome problems encountered along the way.

The result of either option would be strategic analysis that is empowered to take on the challenges presented by an increasingly complex and uncertain world, with detailed, comprehensive and practical policy that is easier to justify, act upon and amend in line with the changing strategic environment.

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