PROJECT-SPACE: A NEW DOCTRINE FOR WARFARE

EXTRACT

Managers have long drawn concepts from the military in meeting business challenges, from marketing to leadership.

The aim of this paper is to illustrate how some project management concepts might assist the development of military doctrine for modern war

Developments to date in military doctrine appear most sophisticated at the conventional warfighting end of the Spectrum of Conflict models used by most defence forces. The doctrine at the 'peace' end of the spectrum appears less so.

Project management concepts, a 'Project-space' if you like, to accompany the Battle-space concepts in military doctrine, is discussed, using the examples of integration and stakeholder management as leads.

A Warspace Model, incorporating both sets of Battle and Project notions, appears to have good potential for depicting the true character of each conflict in the Spectrum, and for capturing the primary differences between all conflicts.

Background

Project Management as a discipline may have had its origins in war. Certainly, its early development occurred during World War II, fast-tracking General Macarthur's island hopping advance towards the Phillipines.

More generally, managers have long drawn ideas and concepts from the military so as to become more successful in meeting business challenges, from marketing to leadership.

Non-military projects, too, can have well resourced and independent opposition – say, gaining entry to a market dominated by a competitor.

In troubleshooting for such projects, or when completing forensic reviews of failed projects of this type, it is important to separate such 'redfield' or red projects from the analytical methodologies that might be used with failed Greenfield or Brownfield projects – business equivalents to military concepts assist such reviews.

The aim of this paper is to illustrate how some project management concepts might return this benefit, by assisting with the development of military doctrine for modern war

That aim will be developed through a brother notion to the existing military notion of 'battle-space', namely the notion of 'project-space', leading to a proposal for a new Warspace Model for Warfare

Doctrine on War Fighting

Current Models of Warfare. Please appreciate that, in addressing this topic, we are constrained to what is on the public record about current military thinking.

Developments to date in doctrine, offered to assist the Commanders to conceptualize and communicate the situation of conflict faced by the forces under their command, might be represented by Figure 1.

The concept essentially is a spectrum of types of conflicts. This spectrum is a sliding scale, moving from 'War' to 'Peace'.

Two broad categories of warfare are described, starting with 'Conventional War'(as in World War II, Korea and parts of Vietnam) at one end of the spectrum, through to a series of scenarios of 'Military Operations Other than Conventional War' (such as East Timor, the Solomon Islands and Aceh) towards the other end of the Spectrum.

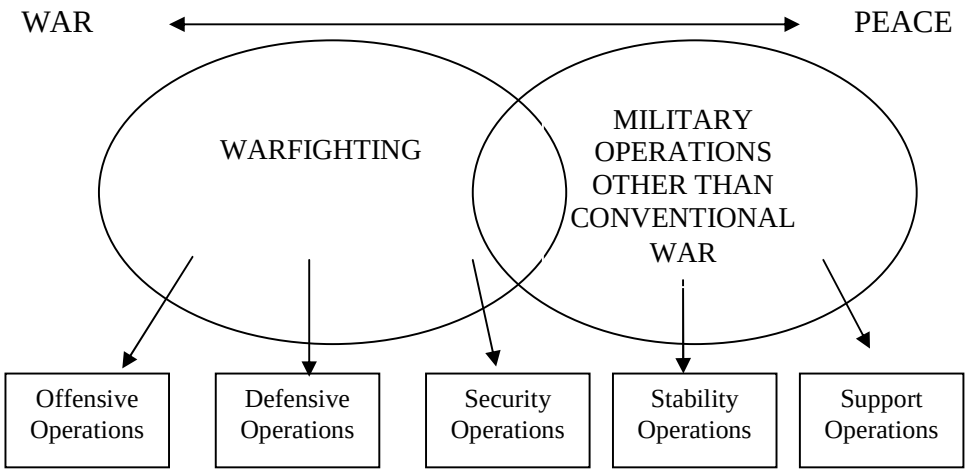

Figure 10.1: Types of Military Operations

Australian and Canadian doctrine refer to the latter by the abbreviation 'MOOCW' pronounced 'moo cow'. In US doctrine, a similar Spectrum is used, from 'General War' to 'MOOTW' – Military Operations Other Than War.

With Figure 1 comes also a:

- A series of definitions of each type of operations in this spectrum, a list that can stretch to 20 in number, and,
- A categorization of these types of conflict based on combinations of the **scale of conflict**, **intensity of conflict,** and **duration of conflict** at hand,

Other descriptions accompany these core ideas:

- *Phases* of the battle or the campaign over time, say, *pre-conflict*, then *conflict*, then *post conflict*
- *Asymmetric Warfare*, where one side has a tactic to which the adversary has little effective response
- *Non-linearity of warfare*, where operations are distributed throughout the theatre of conflict rather than concentrated on a battlefield or battle-space – the term that the military prefer. This factor is termed 'distributive' warfare by US doctrine
- *The Multi-dimensional Battle*, where an opponent is targeted from many sources, and not just from one source
- *The Perception Battle*, the battle for the hearts and minds of non-combatant stakeholders, and
- The *'Strategic Corporal'*, the criticality of the judgments made by the small unit leader in modern forms of warfare

The last mentioned concept, in particular, emphasizes the importance of achieving 'Professional Mastery' in dealing with the complexities of modern conflicts at as local a level of the modern 'battlefield' (or battle-space) as possible.

This paper argues that Figure 1 is a bad starting point for the development of military doctrine, given the natures and the types of warfighting experienced in today's theatres of operations

Problems.

There may be some inadequacies and some imbalances in this suite of concepts and tools, offered to Commanders and their staff.

This imbalance and any inadequacy might be inhibiting the development of 'mastery' by commanders and corporals at war.

An Imbalance. Firstly, while the tools provided for analysis of situations at the Conventional Warfighting end of the spectrum are quite sophisticated, they are only very rudimentary at the MOOCW end.

Warfighting or Conventional War, as a doctrine, is armed with concepts and tools such as Mission Command, Battle-space Operating Systems, the Military Appreciation Process, 'combat functions', and the 'manoeuvrist approach' – these tools and other constructs allow the Commander to fully appreciate any conventional warfighting situation from first principles.

Consider the first two of these tools.

Mission Command is a mindset for the subordinate commander that allows him or her to make timely decisions responding to changes in situations without necessarily seeking further direction from their superior Commander. A focus on mission, endstate and main effort, including a first up review during planning of the mission given by the superior commander, facilitates such initiatives being made with good judgment.

Taking initiative without orders is opposite to the military stereotype of obeying orders.

In terms of management theory, mission command extends the concept of decision-making portrayed in management texts. Figure 2 may illustrate the extension that Mission Command might impose on the classic spectrum of decision-making described by Tannenbaum and Schmidt [1974]

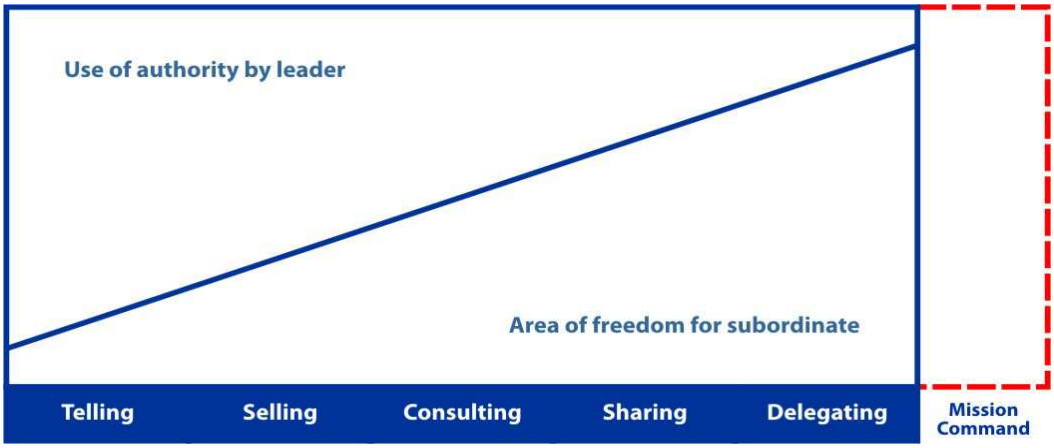

Figure 2: Tannenbaum & Schmidt Spectrum of Decision-Making

Mission Command thus has a level of sophistication to sit readily amongst the best practices in the management of quick decision environments

Battle-space Operating Systems. Similarly, the notion of Battle-space Operating Systems (or BOS) was a leap from previous tactics organized according to Corps, such as the Armoured Corps, the Artillery Corps, and the Air Corps.

Command structures organized around the command of guns versus command of tanks versus command of air – this was a type of work breakdown structure (in project management terms) based upon training and competency with the use of specialized war equipment. The BOS replaced this breakdown structure for a

> military force with a categorization of assets according to the impact or effect that the equipment could have on the battle-space.
>
> So tanks, guns and aircraft can be part of the BOS that delivers Firepower. Thus those resources, irrespective of Corps, need to be integrated into a Fireplan that maximizes the particular effect on the battle-space sought by the commander from the Firepower BOS.
>
> But also, and similarly, the tanks, guns and aircraft could also be integrated into the Mobility BOS or the Manoeuvre BOS depending upon the functionality of the type of tank, of the gun and gun ammunition or of the aircraft that is at hand

Military doctrine has nothing as sophisticated as Mission Command and the BOS for its commanders and corporals to employ at the lower conflict end of Figure 1.

This is the imbalance

Commanders appear to extend and adapt their Conventional War concepts and tools when developing methods that they apply to Other-Than-Conventional-War conflicts.

This has some disadvantages.

Conflict, its scale, intensity and duration, is the vector used to construct the spectrum.

Conflict, however, may not be the best vector to distinguish warfare situations when the level of conflict is low. Conflict, at the MOOCW end of the spectrum, may not be the dominant distinguisher

The BOS may not be able to dominate the battle-space – there may not even be very much of a battle-space - when conflict levels are low

Mission Command may equip commanders for quicker tactical response when War is hostile and furious, but it may not transfer strategic thinking to corporals when War is frustrating and ambiguous

Asymmetric Warfare allows both sides to win, simultaneously, on their own preferred battlegrounds, which is in contrast with conventional warfare where both a winner and a loser emerge from the one battle

The Non-linearity of Warfare renders fragmentation of the battle-space into a tactical advantage with lower level conflicts, in lieu of the concentration, scale and intensity that is organized to win at Conventional War

The Multi-dimensional Battle may really be about the range of the targets that are under attack in a theatre of operations, rather than the number of sources of those attacks

And the *Perception Battle* is one where the non-combatants decide the winner, not the BOS

The Inadequacy. Secondly, it follows from the Imbalance, that at the MOOCW end of the spectrum, farthest from Conventional War, the doctrine and methods of Conventional War may be removed from the vital dimensions of what is at issue in the MOOCW situations of warfare.

In the doctrine represented by Figure 1, thinking may be too mission centric, or may have a tendency to dwell upon the battle component of what is happening in each form of conflict. The 'battle-space' notion has even been termed the 'mission space' in this context.

The additional non-battle factors, that are alive in MOOCW or MOOTW conflicts, can be treated as restraints and constraints upon the Battle space Mission. This rationale is termed the 'Concept of Limitations' in British Military Doctrine.

This limitations approach for extending mission thinking may constitute insufficient appreciation of these non-battle factors – particularly where these non-battle factors are the Drivers of the military strategy, rather than just constraints to the Battle Mission.

Further, these additional non-battle factors may need to be treated in their own right, for their non-battle implications, as well as for any battle limitations.

Considerations such as control of refugee traffic on military routes, collateral damage to the civilian population, and utilization of civil infrastructure may be sufficient when operations are a form of conventional or general warfare. At the other end of the spectrum, however, it may be the military or the battle-space concerns that may merit such simple treatment, given the totality of what is at issue.

Possibilities.

There are constructs that could compete with Mission, with BOS and with Battle-space, in guiding the responses of commanders and corporals to action in MOOCW situations

These competing ideas might be given a place at the MOOCW end of the Spectrum, so as to overcome the problems asserted above for current doctrine.

Projectspace. The competitor to the Battle-space concept, at the MOOCW end of the Spectrum of Conflict, may be the Project-space.

Project-space refers to the programs of Projects being undertaken, in many conflicts, to build or rebuild communities, against the interference of well resourced, active and determined opposition, including armed opposition.

Wainright [2008] refers to such projects by the 3rd Combat Engineer Regiment, in Health, Education, Infrastructure, Security and Capacity Building as *'protected reconstruction operations'*. Here, the non-battle activity of reconstruction is the 'main effort' (a tactical term), and the battle-space activity of protection is secondary (at least until the reconstruction comes under fire)

The impact of armed opposition on such projects may suggest that these projects need to be categorised separately, as 'Redfield' or Red Projects.

Integration. One competitor to 'Mission', as a primary focus for Defence Force operations, may be 'Integration', the core concept of Project Management.

'Integration' of Corps assets for the effect that they can produce upon the battle-space is the strength that the concept of the BOS brings to Warfighting in Conventional War.

The power of 'Mission' and of 'Mission Command', especially at the heavy Warfighting end of the Spectrum of Conflict, is the Integration that mission-centric behaviours bring to large scale operations. The alignment to the Superior Commander's 'Mission', across the breadth and down the hierarchy of planning and conduct of manoeuvre and battle, amongst very large combat organisations, is essential to success.

Mission Command is essentially an integrator of all efforts on a battle or Red Project

'Mission', as an 'integrator', however, is enabled by the fact that only one major stakeholder is being served during Conventional War. That single stakeholder is, of course, the Supreme Commander.

'Integration' is the key to successful project and program management. It might be the higher order, more generic goal than 'mission'. This possibility may be made more evident when there are multiple, major, non-battle stakeholders, other than the Supreme Commander, to be served by military operations

What may be needed is a different approach, or a companion approach, to the understanding of the differences in different types of conflict.

An approach might be more helpful to 'mastery' if it facilitates a development of doctrine at the MOOCW end of the spectrum, a development equal in power and sophistication to the doctrine available for the heavy Warfighting end of the same spectrum.

That imbalance, that inadequacy, might be met, at least in part, by concepts from Project Management, or from 'Project-space', to give the suggestion a military turn of phrase.

To demonstrate these possibilities, this paper starts with two primary elements of Project-space, namely

1. 'Integration', and,

2. ‘The Management of Stakeholders’

Proposal.

A companion approach is offered below, if only to promote consideration of ways of developing the sophistication of concepts and methods that might assist the ‘professional mastery’ of commanders and corporals at the MOOCW end of the Spectrum at Conflict.

Integration. In lieu of using scale, intensity and duration of conflict to differentiate wars and the phases of War, differences in the requirements for integration might form a basis for distinguishing types of warfare – it is proposed

Stakeholders. In Project-space, however, the starting point for integration of projects, will usually be with the stakeholders

At a first level of analysis, the stakeholder groups in modern warfare appear to be the Governance authorities and the Economic entities within the community affected by War.

These two primary groups of stakeholders, it turns out, have sectors or functionaries or systems upon which these stakeholder groups depend for a successful outcome from their efforts with their own resources.

There are thus some parallels between these sectors or functions and the systems (or BOS) that military forces use for success in battle

These primary stakeholder groups, in a sense, have their own ‘space’ in which they seek to achieve an effect leading to an outcome

This ‘space’ for the Economy’ has been termed ‘Business-space’ in this paper, and the ‘space’ for Governance’ has been termed ‘Bureau-space’.

Equivalents to the ‘BOSs’ (or to Combat Functions) for these companion constructs, might be:

Business-space (a term already in use at Shrivenham Defence Academy in the United Kingdom when the author visited that Academy and was briefed by Tactics and Leadership Schools at that Academy, in 2004):

- Production (eg, agriculture, manufacturing, services)
- Distribution
- Markets and Trade (eg, food, fuel, labour, building materials)
- Banking and Currency
- Civil law, and,

Bureau-space (allowing all the ‘spaces’ to start with ‘B’:

- Legitimacy

- Public Health
- Education
- Public Utilities (eg, power, water, transport, communications)
- Law & Order (eg, legislation, police, judiciary)
- Human Rights (eg, speech, association, property)

The integration of the stakeholder spaces within Project-space, with the battle-space having the concern of the military commanders, might now be represented by three overlapping circles rather than the two circles used in Figure 1

Figure 3 portrays the new construct, termed the Warspace Model for Conflict

The overlaps of the three circles portray the concepts of trade-off and balance that are associated with achieving consistency, unification and consolidation of planning across competing interests from multiple stakeholders – that constitutes an Integration.

In multiple stakeholder projects, agreement upon a consistent, unified, consolidated Plan is the essential outcome from 'Integration'.

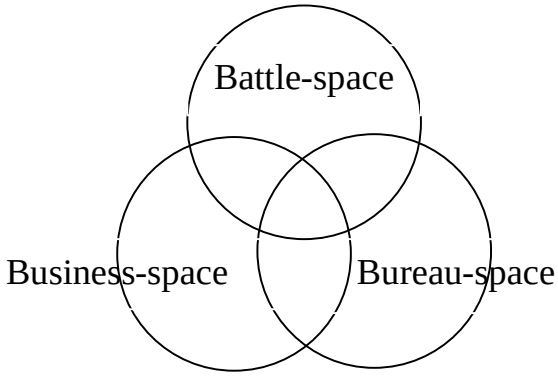

Figure 3: The Warspace Model for Types of Conflict [McMahon 2004]

The primacy of the 'battle-space' concept for mastery of the Profession at Arms can be maintained by placing the Battlespace Circle as the top circle in the three overlapping circles on the 'Warspace' model.

All of these 'operating systems', from the Bureau-space and Business-space constructs, have been the targets of enemies in past and current conflicts.

They have also been functions that have been operated by Defence Forces in situations of breakdowns in the operations of communities.

Rocket fire upon schools for girls, and upon oil infrastructure, betray the diverse nature of conflicts at the MOOCW end and MOOTW end of the Spectrum.

The important Civil-Military Integration projects can be identified with this construct, say, at the overlap of the three circles of the 'Warspace' model.

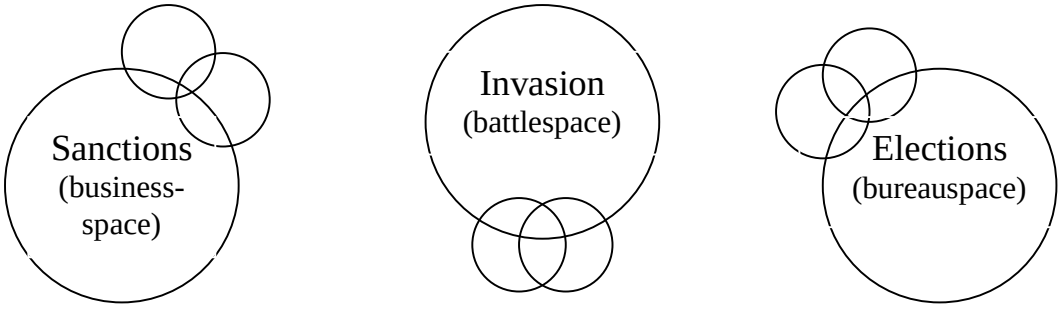

Figure 4: Phases of Conflict in Iraq

The variations in types of conflict can be portrayed by changes in the relative sizing of the circles in the Warspace Model, as demonstrated in Figure 4

Changes at Hand.

The concepts and ideas about Integration and the Warspace Model, herein proposed, are alive in the language of the 'Chiefs' of the Defence Forces in Australia, Britain and the United States.

Warner [2008], when referring to the campaign in Afghanistan, describes *the "three pillars" of security, reconstruction and governance* when advocating the parameters being used for measuring the progress in that campaign.

These *three pillars* clearly fit, one pillar into each of the three circles on the Warspace Model, if they are not near synonyms for the descriptors, 'Battle', 'Business' and 'Bureau'.

Houston [2010] attributes compatible thinking and intentions to the Commander of NATO and US Forces in Afghanistan, regarding the same Afghanistan campaign:

- The strategy of the Commander is *an Integration Strategy*
- *The main game is Governance*, it is *a Governance led campaign*, Governance is the *number one operational priority*
- Successful operations have adopted *a completely integrated approach*
- Defence Forces will *blunt the insurgency*, in order to provide time for the *resolution of political issues that are undermining Governance*

Koring [2010] quotes principal commentators from the United States, asserting that, while the Afghanistan campaign will be very demanding and very intense, it *will require an extraordinary degree of integration*

Currently, formal doctrine in the Australian Defence Force for Land Operations is based on the concept of Adaptive Campaigning along five lines of operation:

1. Joint Land Combat [Battlespace]
2. Population Protection [Battlespace-Bureauspace]
3. Public Information [Business-space – Bureauspace]
4. Population Support [Bureauspace]
5. Indigenous Capacity Building [Business-space – Bureauspace]

The Doctrine uses the word 'orchestration' across the five lines of operation, rather than 'Integration'.

Conclusion

Project Management methodology can bring more sophistication to military doctrine for the planning and conduct of complex war.

Integration of the interests of the primary stakeholder groups, namely the Force in theatre, the Governance in the community, and the Entities in business appears to be a more realistic approach to doctrine than any stretch of battle concepts into non-battle situations

The three overlapping circles in the Warspace Model have more potential, for depicting the true character of each conflict, and for capturing the primary differences between conflicts, than the two circle Spectrum representation

References:

AUSTRALIAN ARMY, *Land Warfare Doctrine 1: The Fundamentals of Land Warfare,* March 1999, httpc://www.army.gov.au

BRITISH ARMY, THE, *Design for Military Operations: The British Military Doctrine,* Office of the Chief of the General Staff, 1996

CUMMING, COL I, *Disaster Recovery in Banda Aceh,* Australian Institute of Project Management National Conference, Canberra, 2008

HOUSTON, ACM A, Evidence to the Senate Foreign Affairs, Defence and Trade Legislation Committee, *Hansard*, 31 May 1 June 2010, and A-PAC television broadcast, 11 June 2010

KORING, P, *Afghan Surge Delayed as US General Slows Down Major Offensive*, The Globe and Mail, 10 June 2010

McMAHON, G, *The Warspace Model, A Tool for Analysing Types of Conflicts*, Integrated Project Management, 2004

McMAHON, G, *Teaching Tactics*, Australian Institute of Management Special Interest Network, Brisbane, April 2008

McMAHON, G, *Teaching Tactics*, Land Warfare Centre, Canungra, August 2003

McMAHON, G, Presentations in *Strategic Leadership to Chief Executives Directors and Chairpersons*, Professional Education, University of Queensland, December 2003

SCHMIDLE, BRIGGEN R E, and HOFFMAN, COL F G, Commanding the Contested Zones, US Marine Corps, *Proceedings*, September 2004

SZEPESY, J, *The Strategic Corporal and the Emerging Battlefield*, Thesis, Tufts University, 2005

UNITED STATES MARINE CORPS, *Warfighting*, Marine Corps Doctrinal Publication, 1997

WAINWRIGHT, LTCOL D, *Reconstruction Task Force in Afghanistan*, Australian Society for Defence Engineering, Engineers Australia, Brisbane, July 2008