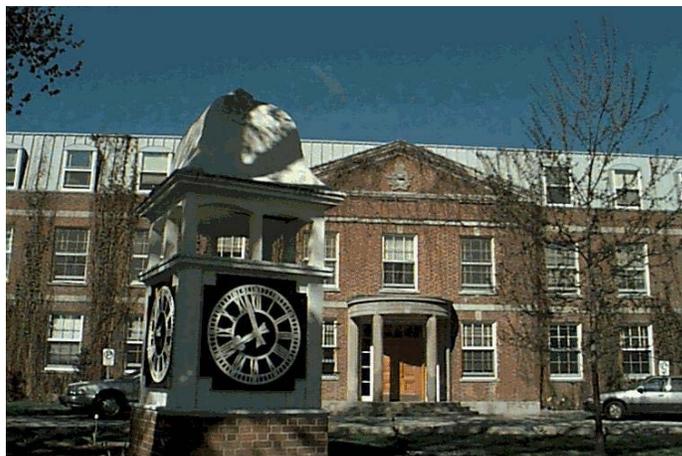


Canadian
Forces
College

Collège
des
Forces
Canadiennes



RECONCEPTUALIZING COMMAND FOR THE COMPLEX WORLD: LEADERSHIP, MANAGEMENT AND AUTHORITY

Wing Commander P. Wilkinson

JCSP 40

Exercise Solo Flight

Disclaimer

Opinions expressed remain those of the author and do not represent Department of National Defence or Canadian Forces policy. This paper may not be used without written permission.

© Her Majesty the Queen in Right of Canada, as represented by the Minister of National Defence, 2014.

PCEMI 40

Exercice Solo Flight

Avertissement

Les opinions exprimées n'engagent que leurs auteurs et ne reflètent aucunement des politiques du Ministère de la Défense nationale ou des Forces canadiennes. Ce papier ne peut être reproduit sans autorisation écrite.

© Sa Majesté la Reine du Chef du Canada, représentée par le ministre de la Défense nationale, 2014.

CANADIAN FORCES COLLEGE – COLLÈGE DES FORCES CANADIENNES
JCSP 40 – PCEMI 40
2013 – 2014

MASTER OF DEFENCE STUDIES – MAÎTRISE EN ÉTUDES DE LA DÉFENSE

**RECONCEPTUALIZING COMMAND FOR THE COMPLEX WORLD:
LEADERSHIP, MANAGEMENT AND AUTHORITY**

By Wing Commander P Wilkinson

“This paper was written by a student attending the Canadian Forces College in fulfilment of one of the requirements of the Course of Studies. The paper is a scholastic document, and thus contains facts and opinions, which the author alone considered appropriate and correct for the subject. It does not necessarily reflect the policy or the opinion of any agency, including the Government of Canada and the Canadian Department of National Defence. This paper may not be released, quoted or copied, except with the express permission of the Canadian Department of National Defence.”

Word Count: 5428

“La présente étude a été rédigée par un stagiaire du Collège des Forces canadiennes pour satisfaire à l'une des exigences du cours. L'étude est un document qui se rapporte au cours et contient donc des faits et des opinions que seul l'auteur considère appropriés et convenables au sujet. Elle ne reflète pas nécessairement la politique ou l'opinion d'un organisme quelconque, y compris le gouvernement du Canada et le ministère de la Défense nationale du Canada. Il est défendu de diffuser, de citer ou de reproduire cette étude sans la permission expresse du ministère de la Défense nationale.”

Compte de mots : 5428

RECONCEPTUALISING COMMAND FOR THE COMPLEX WORLD: LEADERSHIP, MANAGEMENT AND AUTHORITY

Everything should be made as simple as possible, but no simpler.

- Albert Einstein

In the spring 2002 Canadian Military Journal, Ross Pigeau and Carol McCann (from the Defence and Civil Institute of Environmental Medicine) published the paper “Re-conceptualising Command and Control”¹ in which they described their conceptualization of Command and Control based on work originating in 1993. Their work originated from the observation that command and control theory was “‘inchoate’, ‘diffuse’, ‘conjectural’ and ‘seemingly random’”² and led them to develop an “internally consistent set of command and control concepts that would form the framework for a uniquely Canadian research program”.^{3, 4, 5} Since publication, the Pigeau-McCann Command Model has become a respected and staple element of Canadian Armed Forces (CAF) doctrine⁶ and Professional Military Training (PMT).⁷ However, the model has not been without its critics (discussed later) and the employment of the CAF in Whole of Government⁸ or Joint, Interagency, Multinational and Public (JIMP) environments⁹ has presented the CAF with new more complex command challenges for which the model

1 Ross Pigeau and Carol McCann, "Re-Conceptualizing Command and Control," Canadian Military Journal (Spring, 2002a), 53-64.

2 Ibid, 53.

3 Ibid, 54.

4 Ross Pigeau and Carol McCann, "What is a Commander?" in Generalship and the Art of the Admiral, eds. Bernd Horn and Stephen J. Harris (Ottawa: Vanwell publishing Ltd, 2001).

5 Ross Pigeau and Carol McCann, Using the Command and Control Framework to Analyse Command Challenges (Toronto: Defence R&D Canada,[2002b]).

6 Department of National Defence, "B-GL-300-003/FP-001," Command in Land Operations (2007).

7 Canadian Forces College, "The Competency-Authority-Responsibility Model of Command" Command Activity Package DS-556/COM/AY-3, 2013a).

8 Department of National Defence, "B-GJ-005-000/FP-001," CFJP 01, Canadian Forces Joint Publication (2011), 6-4.

9 Department of National Defence, B-GL-300-003/FP-001..., 1-17.

provides little guidance. In the context of complex multi-actor scenarios, the CAF track record for command as a partner participant with external agencies has been inconsistent and often lacking due to culturally different approaches to hierarchy, doctrine, leadership and management as researched by Michael Thomson et al from Defence Research and Development Canada:

Some of the issues that seem to currently hinder collaborative efforts (on the part of the CAF) may be the product of long-term socialization processes as the military profession has evolved. The [Subject Matter Expert] SME data pointed to a number of organizational factors (e.g., structures, systems, style) that frustrated collaboration with multiple diverse actors (i.e., [Other Government Departments] OGDs / [Other Government Agencies] OGAs, [Non-Government Organisations] NGOs and [International Organisations] IOs) in theatre. For example, the notion of territorialism may be a product of the process of professionalization as personnel learn the roles and responsibilities of their profession.¹⁰

This paper aims to reconceptualise command (as used in the military context) to better meet the needs of the modern, more complex world. The paper sets out an alternative model for command consisting of three pillars: *Leadership*, *Management* and *Authority*. As each of these pillars individually can be considered complex concepts they are expanded ontologically¹¹ in order to consider the whole – from which a simplified understanding can be derived – rather than attempting to provide a simplified definition which, by definition, would not truly represent their complex nature. The argument is enabled by key concepts that have been developed since the publication of the Pigeau-McCann model; specifically, the paper makes use of theories regarding leadership in

10 Michael H. Thomson et al., *Collaboration within the JIMP (Joint, Interagency, Multinational, Public) Environment* (Toronto: Defence Research and Development Canada, [2010]), 38.

11 A particular theory about the nature of being or the kinds of things that have existence

complex environments; Drath et al's alternative ontology of leadership: *direction*, *alignment* and *commitment*;¹² and uses works by Drucker, Kotter and more recent management preferences to re-evaluate the ontology of management: *economy*, *efficiency*, *effectiveness* and *risk*.

The paper starts by providing an overview of the extant command paradigm and outlines the main criticisms of the Pigeau-McCann model. The concept of complexity is then introduced prior to the ontological description of management and leadership. The concept of authority is little changed from the work of Pigeau and McCann so the expansion given is sufficient only to complete the model as its justified position as an element of command has been widely accepted and remains largely unchanged from the reference material. Having argued the case for an alternate model of command, the paper finishes with the implications of the model.

This paper is an outline argument for a change in command paradigm. In line with this argument, it is noted that it is just such cognitive stimuli can seed change within a complex adaptive systems but will be resisted within a bureaucracy.

¹² Wilfred H. Drath et al., "Direction, Alignment, Commitment: Toward a More Integrative Ontology of Leadership," *Leadership Quarterly* 19, no. 6 (12, 2008), 635.

COMMAND: THE RULING PARADIGM

Command, and the subordinate but linked concept of control, have been a part of military organisation as long as there have been militaries; however the terms themselves, according to the historian Martin Van Creveld, are a relatively recent introduction, only becoming common after the second world war.¹³ Whilst there is a general consensus between NATO countries on the constituents of command within doctrine - an authority vested in an individual (usually legal authority for a regular military) with responsibility to take action, to direct, coordinate and control forces and be held accountable^{14, 15, 16, 17} – the actual definitions vary and are describe by Pigeau and McCann as often “circular”, i.e. control is described as being distinct from command (command and control, C²) but, at the same time, being used to define command.¹⁸

To overcome this confusions, Pigeau and McCann took a more conceptual view of command and control by building a framework from first principles.¹⁹ They defined command as ‘the creative expression of human will necessary to accomplish the mission’²⁰ and control as ‘those structures and processes devised by command to enable

13 Martin Van Creveld, *Command in War* (Cambridge, MA: Harvard University Press, 1985), 1.

14 NATO Standardization Agency, AAP-06(2013)- NATO Glossary of Terms and Definitions (English and French) (Brussels: NATO Standardization Agency,[2013]).

15 Joint Doctrine Branch, CFJP 01 Canadian Military Doctrine (Ottawa: Department of National Defence,[2011]).

16 Department of Defense, JP1 Doctrine for the Armed Forces of the United States (Washington: Department of Defense,[2013]).

17 The Development, Concepts and Doctrine Centre, JDP 0-01 British Defence Doctrine (Swindon: Ministry of Defence,[2011]).

18 Pigeau and McCann, *Re-Conceptualizing Command and Control...*, 53.

19 Pigeau and McCann, *What is a Commander?...*, 80.

20 Pigeau and McCann, *Using the Command and Control Framework to Analyse Command Challenges...*, 2.

it and to manage risk.’²¹ Their framework recognises that anyone can command but that command capacity is a function of *competence* (subdivided into Physical, intellectual, emotional and interpersonal), *authority* (legal appointed and informally earned through reputation and character) and *responsibility* (extrinsic and intrinsically accepted). Having sufficient competency and responsibility to match the given authority and the needs of the task is described as being on the *Balanced Command Envelope*. Command capacity is then translated into action through their mastery of *control* systems to enable command and manage uncertainty; and their ability to establish *common intent* in order to achieve unity of effort (consisting of explicit intent - that which is made evident through orders, briefings and discussion – and implicit intent – that which is normalized through common language, training, ethos and culture).²²

The Pigeau-McCann model has been used many times to analyse individual commanders within the CAF PMT;²³ however, it has also been criticised:

- The competence dimensions are too broad and could be applied to a wide variety of roles regardless of whether they have an element of being “in command” or not.
- The model can be used to analyse a commander but it is less useful in describing how to prepare for command.

²¹ Ibid.

²² Ibid.

²³ Canadian Forces College, "Essay on a Complex Command Situation" Command Activity Package DS-556/COM/AY-5, 2013b).

- The model doesn't explain the relationship between command and leadership and management even though there is wide recognition that there is a linkage (discussed later).
- The model is centred on command as applied to an individual and is less useful in understanding command where responsibilities and authorities are more complex – indeed the model would simply describe this as a deviation from the balanced command envelope and would lead to the conclusion that command needed to be more centralised onto a single authorised individual.

In summary, the extent command paradigm, both doctrinal and as advocated by Pigeau and McCann, tends toward the authority and task vested in an individual (to command) rather than the act of commanding (to take action, to direct, coordinate and energise forces). It is this emphasis on the “cult of personality”²⁴ commander that, it is suggested, contributes the hierarchical structures and traditional military style of communicating (i.e. based on position and rank) that hinders collaboration with multiple diverse actors in the JIMP environment²⁵ which we now look at in more detail.

24 “intense devotion to a particular person”

<http://wordnetweb.princeton.edu/perl/webwn?s=cult%20of%20personality>

25 Thomson et al., Collaboration within the JIMP (Joint, Interagency, Multinational, Public) Environment..., 17.

BUREAUCRACY AND COMPLEXITY

Whilst most militaries would like to consider themselves to be leader driven adaptable organisations they mostly tend toward the internal characteristics of a bureaucracy.

1. A hierarchical structure of formal authority
2. Hierarchical formal communications networks.
3. Extensive systems of formal rules.
4. An informal structure of authority.
5. Informal and personal communications networks.
6. Formal impersonality of operations
7. Intensive personal loyalty and personal involvement among officials, particularly in the highest ranks of the hierarchy.²⁶

The term bureaucracy is often viewed with scorn and suggests that the military is inflexible; however, a bureaucratic structure has enabled a meritocratic hierarchy and, arguably, has served to keep the CAF subservient to civilian control and stable through changing government priorities. The hierarchical structure, respected as legitimate whilst the CAF has operated independently or in coalition with like-minded partners (i.e. NATO partners), has also ensured unity of effort in times of crisis. However, the post-cold war and post-9/11 environment has changed and the CAF increasingly finds itself working with multiple external partners that each have different cultural perspectives and don't necessarily understand the military approach to command. This increasing complexity has led the Director of Land Concepts and Designs to describe the ability of the CF to

²⁶ Anthony Downs, *Inside Bureaucracy* (Boston MA: Little, Brown and Company, 1967), 49.

seamlessly integrate within a JIMP framework as a key enabler for the future.²⁷ The CF is not alone in facing this changing environment and new organisational theories (i.e. “Complex Adaptive Systems (CAS)”²⁸) have emerged to help explain the dynamic.

A full description of CAS is beyond the scope of this paper although a basic overview is required. Christopher Paperone, Ruth Anderson and Reuben McDaniel, from the US Army Command and General Staff College, describe CAS as “a number of agents interacting locally in a dynamic, non-linear fashion.”²⁹ A CAS differs from a hierarchical system in that members interact across organisational boundaries forming “aggregates”³⁰ of members in cooperating clusters. Relationships and interactions emerge according to simple rules that adapt based on the outcome of the same interactions. The order of the organisation is a function of its history and is non-linear (i.e. the system cannot be returned to a previous state in order to re-run the same events). Similarly, the future of the CAS is unknowable, though not random, as small changes within the interactions can have a recursive accelerating effect or die-out depending on the pattern of the interactions. A CAS cannot be understood by understanding the individual contributors – it is the interactions and relationships that count – so the whole is greater than the sum of the parts. Significantly, CAS generate their own local tension

27 Thomson et al., Collaboration within the JIMP (Joint, Interagency, Multinational, Public) Environment..., 2.

28 Mary Uhl-Bien, Russ Marion and Bill McKelvey, "Complexity Leadership Theory: Shifting Leadership from the Industrial Age to the Knowledge Era," *The Leadership Quarterly*, no. 18 (2007), 298.

29 Christopher R. Paperone, Ruth A. Anderson and Reuben R. Jr McDaniel, "Where Military Professionalism Meets Complexity Science," *Armed Forces & Society*, no. 34 (2008), 439.

30 Uhl-Bien, Marion and McKelvey, Complexity Leadership Theory: Shifting Leadership from the Industrial Age to the Knowledge Era..., 303.

but it is this tension in response to environmental change that drives emergent creativity and learning as “aggregates” solve problems, overcome and re-assemble.^{31,32}

Although the military is generally hierarchical there are frequent internal examples where the formal and informal links within the organisation behave like a CAS. As stated by Mary Uhl-Bien et al (University of Nebraska, Clemson University and UCLA), “In formal organisations, one cannot disentangle bureaucracy from CAS.”³³ Uhl-Bein et al go on to observe that during times of stability a hierarchical structure may be preferred but during times of change it is CAS that offer greater scope for innovation and flexibility. It is the role of leadership to guide, influence and enable the rhythm, delivery and transition between these states as required by the changing environment.³⁴

Complexity leadership theory steers an organisation away from the concept of a central authoritative commander; instead, the organisation should develop leaders to enable adaptation, lever specialist skills and overcome problems in the face of complexity. How leadership contributes to command (in both complex and non-complex situations) along with the complementary discipline of management is discussed next.

31 Papparone, Anderson and McDaniel, Where Military Professionalism Meets Complexity Science

32 Uhl-Bien, Marion and McKelvey, Complexity Leadership Theory: Shifting Leadership from the Industrial Age to the Knowledge Era

³³ Ibid, 301.

³⁴ Ibid., 306.

COMMAND: A FUSION OF LEADERSHIP, MANAGEMENT AND AUTHORITY

The assertion that Command comprises leadership and management is not new. Lieutenant-Colonel Peter Bradley (formerly head of the Military Leadership and Psychology department at the Royal Military College of Canada) reviewed CAF doctrine, historical texts and external academic literature to make the argument that “Command involves both leadership and management. Both are distinct processes that need to be employed by all commanders.”³⁵ His article goes on to classify all command behaviours as being either leadership or management, i.e. command is a combination of leadership and management and no other. Critically, this assertion relies on an understanding of the difference between leadership and management – a difference that is explained later in this paper.

The author finds Bradley’s argument to be compelling; however, there is an additional dimension to command that it is felt needs to be recognised separate to leadership and management – that is *authority*. As determined by Pigeau and McCann, authority is a key concept of military command as it defines the scope of empowerment in which to act. Authority enables the understanding of the resources (including people) over which the commander is given power to lead and manage in the pursuit of an organisational goal. Whilst, the allocation of authority can be considered a management

35 Peter Bradley, "Distinguishing the Concepts of Command, Leadership and Management," in *Generalship and the Art of the Admiral: Perspectives on Canadian Senior Military Leadership*, eds. Bernd Horn and Stephen J. Harris (St Catharines, ON: Vanwell Publishing Limited, 2001), 119.

mechanism to divide a task into coordinated sub-tasks by higher level command (or government), there is a fundamental requirement for commanders at each and every level to understand the boundaries of what is and isn't legitimate. Authority is discussed in more detail later; however, for now, it is sufficient to note that command in this paper is considered to consist of *leadership* and *management* within a given *authority*.

A particular argument addressed in Bradley's essay but worth expanding here is that the CAF values leadership over management or considers management to be a civilian rather than military endeavour. This aversion to the term management is evident in CAF doctrine which avoids the use of the term management altogether when defining command: "The Canadian Forces' [CAF] philosophy of command demands the highest standards of leadership; doctrine, and training; effective decision making; and mutual trust between leaders and their subordinates."³⁶ The CAF Leadership Conceptual Foundations sums up the management in command discussion as:

Rather than uncritically asserting that command and management are different constructs, or that management is a component of command, it is more accurate to say that the general management role as practiced in civilian organizations is functionally equivalent to the command role in the military. It is readily acknowledged, however, that the *resource-management* function – with its emphasis on dollars, quantitative methods, and efficiency – is a subordinate element of both general management and military command. It is this function that is often characterized as the antithesis of, but a necessary complement to, leadership and command.³⁷

36 Joint Doctrine Branch, CFJP 01 Canadian Military Doctrine..., 5-1.

37 Canada Department of National Defence, *Leadership in the Canadian Forces : Conceptual Foundations* (Ottawa: Published under the auspices of the Chief of the Defence Staff by the Canadian Defence Academy, Canadian Forces Leadership Institute, 2005), 9.

Significantly, this statement differentiates management from command and leadership whilst accepting that management is an element of command. Unfortunately; however, it perpetuates the notion that management, in the command context, is purely about managing resources. Thus, the cognitive schema is set such that military officers value leadership over good management which limits their, and the organisations, pursuit of best management practice. To counter this cognitive limitation we next look at the ontology of management and how *good* management is an essential component of command.

MANAGEMENT

The respected and highly influential author on leadership and change management, John Kotter, is often quoted as saying most organisations “are over-managed and under-led”³⁸ but what is often overlooked is his subsequent statement “strong leadership with weak management is no better, and in some cases actually worse than the reverse.”³⁹ Kotter describes leadership as coping with change, and management as bringing a degree of order and consistency. Management is about plans and budgets, organising and staffing, controlling and problem solving.⁴⁰ Management optimises in stable conditions, making incremental improvements to improve efficiency and effectiveness. Many of the tools associated with management are intended to achieve exactly that – seek out wasted effort and produce the same-with-less or more-with-the-same (where “more” can be any

38 John P. Kotter, *What Leaders really Do* (Boston, MA: Harvard Business Review, 1999), 51.

39 Ibid, 52.

40 Ibid, 52-62.

combination of dependability, flexibility, speed and quality but not all of them).⁴¹

Management is about productivity. Without productivity improvements we would still be in the pre-industrial age – skilled craftsmen producing individual articles or solving problems from raw constituent parts. The benefits of good management - be it project, programme, capacity, quality, safety management or other - are now so well documented that further amplification is not required here; all that is required is to legitimise management as an integral component of command.

Peter Drucker has written extensively on the subject of management and in his 1998 book he dedicates a whole chapter to the productivity challenge in the information-age concluding that the basic steps to improved productivity through management is to define the task, concentrate work on the task (economy of effort) and define performance.⁴² These are all steps that would be familiar to a commander's operational planning process and matches some of the principles of war (i.e. selection and maintenance of the aim, concentration of force, economy of effort, and administration).⁴³

A more recent management tool, and one with considerable following, is "Lean Six-Sigma"⁴⁴ which uses the acronym DMAIC to achieve a similar effect: where DMAIC

41 Nigel Slack, Stuart Chambers and Robert Johnston, *Operations Management*, Sixth ed. (Harlow, Essex: Pearson Education Ltd, 2010), 60.

42 Peter F. Drucker, *On the Profession of Management* (Boston MA: Harvard Business Review, 1998), 153.

43 Joint Doctrine Branch, *CFJP 01 Canadian Military Doctrine...*, 2-4.

44 Six Sigma gets its name from the target to achieve consistence in tolerance performance to within six standard deviations of the mean (99.99966% or no more than 3.4 defects per million). Whilst the name gets its roots in statistical process control the actual methodology needed to achieve this level of quality has been described as "a vision; a philosophy; a symbol; a metric; a goal; a methodology" with the principles of DMAEC having applicability in all forms of management with or without the need to measure statistical variability. Quote taken from Isixsigma, "The History of Six Sigma" accessed April 21, 2014, <http://www.isixsigma.com/new-to-six-sigma/history/history-six-sigma/>

stands for Define (the problem to be resolved), Measure (quantitatively, or objectively, map out the current process/situation), Analyse (Identify the cause of the problem), Improve (implement and verify the solution), and Control (sustain the improvement through measurement, analysis and improvement).⁴⁵ Again, principles that are only separated from a commanders planning activity by lexicon and aspect (internal vs external). There are many more management tools each with a variation of nomenclature (indeed, this is one of the oft cited criticisms of management “which fad are we following today”); however, at an ontological level they are all ways of framing the same cognitive challenges, namely: *economy* (of inputs), *efficiency* (of process), *effectiveness* (of output) and *risk* (minimising the impact and probability of what is not done).

By conceptualising management as the optimisation of economy, efficiency, effectiveness and risk the challenge of good management becomes much clearer. In the ideal situation a manager will be able to achieve the organisational objective in the most effective manner, using the least amount of resource (inputs) by application of the most efficient process with the least amount of risk to people, reputation and achievement of the objective. However, the real world is less accommodating – guaranteeing the achievement of the objective usually requires more resources than the economic minimum; applying less than the necessary resource incurs risk which then needs to be mitigated; achievement of the perfect process would require all resources (including personnel) to be at the right point, at the right time, with full situational awareness, full understanding of their task and with contingency plans for all eventualities. As any

⁴⁵ GoLeanSixSigma, "The Basics of Lean Six Sigma," GoLeanSixSigma, <http://www.goleansixsigma.com/dmaic-five-basic-phases-of-lean-six-sigma/> (accessed April 21, 2014).

manager, or commander knows, achievement of all these requirements in a dynamic environment is unrealistic and so management becomes an imprecise science affected by the complexity of human and environmental factors. That said, the application of good management practice and tools can go a long way to achieving the effect in an efficient, economic and low risk way, especially when given the opportunity to rehearse or refine the approach.

Accepting this ontology of management allows for a number of deductions relevant to the practice of command:

- Good management is not the same as resource management although management of resources is included. Management is the application of the physical sciences to the problems of organisation. Efficient process is as much about the human interface as it is about physical resource, technology and other factors.
- Good management does not imply bureaucratic processes. There is nothing within management, as expressed here, which requires an organisation to be based on hierarchy, impersonal treatment, rule bound or require forms to be submitted in triplicate. On the other hand, bureaucracy is a form of management albeit corrupted by other factors such as the need to align all stakeholders behind a decision (alignment is discussed further under leadership).
- Good management requires knowledge. There are many management tools that move in and out of fashion. Some tools are applicable in some

situations but inappropriate in others. Just as science theories require study and knowledge, so do management theories. To avoid the pitfalls, one must understand the assumptions and limitations of a particular model/practice and be aware of alternatives.

- Management is as applicable in war situations as it is in peace time. War is a complex and unstable environment; peace is a more controlled environment but, given the multitude of stakeholders and agendas, no less complex. However, within this complexity there are still many complicated but solvable problems that require economy, efficiency, effectiveness and risk optimisation. The most obvious example is logistics, but readiness training, reporting systems, the measurement of operational effectiveness and many others can be added.

Good management alone, however, will never be good enough as management in isolation has a downside. The exclusive pursuit of economy, efficiency, effectiveness and risk optimisation would eventually lead to irrelevant perfection as the changes needed to match the operating environment would go unnoticed. The observation here is particularly relevant to the military where the optimum solution for one conflict is unlikely to be the same solution needed for the next and this may be why the military has traditionally placed a higher valued on leadership within command in order to provide adaptability and change.

Before moving onto leadership though, it is worth emphasising that adaptability and change themselves need to be effective, efficient, economic and risk mitigated as does the sustainment of the change once implemented. Good management then is an essential and equal partner to good leadership.

LEADERSHIP

As there are many different management theories, so there are many different leadership theories. Avolio, Walumbwa and Weber's 2009 paper on leadership considered only current theories and research but still detailed twelve different leadership constructs;⁴⁶ Northouse's 2013 book states that in the last 60 years "as many as 65 different classification systems have been developed to define the dimensions of leadership."⁴⁷ Certain models have found particular favour with the military over the years including Trait Theory,⁴⁸ Hersey's Situational Approach⁴⁹ and Bass's Transformational Theory⁵⁰ with the CAF's current philosophy of leadership being based on two principles: distributed leadership and values-based leadership. In essence, CAF recognise that leadership exists and should be encouraged at all levels and that the leader should exercise influence based on "accomplishing the mission; acting as part of a cohesive team; developing and looking after their people; anticipating and adapting to the unexpected; and exemplifying and upholding the civic, legal, ethical, and military norms

46 Bruce J. Avolio, Fred O. Walumbwa and Todd J. Weber, "Leadership: Current Theories, Research, and Future Directions," *The Annual Review of Psychology*, no. 60 (July 23, 2009).

47 Peter G. Northouse, *Leadership: Theory and Practice*, sixth ed. (Thousand Oaks, CA: SAGE Publications Inc, 2013), 4.

48 *Ibid*, 19.

49 *Ibid*, 99.

50 *Ibid*, 185.

inherent in the military ethos.”⁵¹ These principles are not questioned here but there is an underlying basic assumption within the military that is relevant to the reconceptualization of command within a complex environment: that leaders lead and followers follow; or, put alternatively, that influence is a one-way activity.

Drath et al, from the Centre for Creative Leadership, explore how the belief in leaders and followers is predominant in virtually all definitions of leadership and how this cognitive schema is now being questioned as research into increasingly complex social constructs forces a reconsideration of the mechanisms of leadership. The prevalent leadership ontology is given by Drath et al as *leader* (or leaders), *followers* and *common goal*. Thus, leadership becomes a question of who is the leader and how do they interact with the followers in order to attain the shared goal. There are clear parallels here with command, i.e. who is the commander and how do they achieve unity of action. Drath et al argue that this predominant leadership ontology is limiting understanding of leadership across cultures (i.e. where the concept of leaders and followers differs between cultures) and the understanding of the emergence of leadership (for example within the JIMP environment where no single individual or commander has executive authority over all other contributors). To overcome these issues, Drath et al offer a new ontology: *direction, alignment* and *commitment* (DAC). Direction is described as a “shorthand for shared direction,”⁵² but within the military taxonomy this could be replaced by strategy, mission, vision, operational design, course of action or problem solution. Alignment is

51 Canada Department of National Defence, *Leadership in the Canadian Forces: Conceptual Foundations...*, 124.

52 Drath et al., *Direction, Alignment, Commitment: Toward a More Integrative Ontology of Leadership*

the extent of agreement and acceptance of the direction across all involved stakeholders and commitment is the level to which the stakeholders are engaged or motivated to contribute towards the agreed direction.⁵³ Using this ontology, successful leadership becomes the achievement of an organisational objective through the creation of a solution that sufficient stakeholders found acceptable and were sufficiently willing to commit effort to; or, within a competitive environment, winning leadership becomes the level of commitment and support, amongst stakeholders, that can be recruited towards the optimal strategy.

Using the DAC ontology and emerging concepts of leadership, Drath et al explore the contribution of “belief” in leadership noting that leadership is not simply the ability of a leader but is strongly linked to the follower’s belief that the influence (or command) of the leader is legitimate, i.e. leadership is not just a function of the leader’s skill at influencing but also of the collective’s cognitive acceptance of leadership, or whether there is a culture of leadership. A culture of leadership is recognised as being very strong in the military and exists at a subliminal level, or as identified in the Pigeau-McCann model as the factors which go to make up *implicit intent*. Whilst a military commander is operating within a military context, they are able to use this normative institutional value to derive DAC through authority based leadership. However, within a JIMP environment this cultural value will be different and may not exist at all. Given the strength of the leadership culture within the military a commander may easily remain blind to this

⁵³ Drath et al refer to Alignment as “the organisation and coordination of knowledge and work” (pp 647); however, the author believes that this expansion overlaps the role of management as conceptualised by other authors and used in this paper.

intrinsic assumption and, therefore, not recognise the need for a change in approach. In this context, the DAC ontology offers a number of advantages over more traditional definitions of leadership.

The DAC framework divides leadership into constituent parts, which, depending on the situation, will require different attention at different times. For example, at the beginning of an operation the emphasis could either be the creation of direction or generating commitment to take action (whatever the action might be). Creating a direction where there is no commitment is likely to be both nugatory and risks alienating people from what they could later see as an imposed direction. Similarly, generating commitment to action where there may be no acceptable solution risks discrediting the commander. Of course, a diverse group is unlikely to have all of its members at the same juncture at the same time, being able to break the leadership challenge into sub-components enables the leader to address individual concerns appropriately.

Under a leader-follower framework the temptation is for the leader to decide upon a direction and then, through power and influence, sell the solution to the follower. Under the DAC framework all three components are considered essential to leadership; thus, it is the leadership role to balance effect in one dimension with the impact in the others. To illustrate, most organisations will have debated whether centralised functions with small project team construct is better than larger project teams with an embedded functional capability. Assuming efficiency of scale there will likely be a logic based argument that supports centralisation as the best organisational solution (efficient direction); however, it

has also been shown that people are more engaged and productive (committed) if their work is seen to be closely linked to an organisational output.⁵⁴ The leadership challenge in this example is to determine which is better for the organisation: efficient direction or people commitment, or should the leader look for an alternative. A key concept here is that the perfect direction (strategy) is not necessarily a leader's best option if they are unable to gain alignment and motivated support. Compromise in direction is an acceptable course of action if it results in better alignment and commitment. This applies equally in competitive environments where an aligned and committed team will often beat a better equipped team. That said, alignment and commitment to the optimum strategy is a leader's ultimate goal.

The DAC framework does not invalidate previous theories on leadership but it does assist the commander in critically assessing which theory and tool is most appropriate to the circumstance; thus, a transformational leadership style may be preferred in situations where gaining commitment may be the difficulty, whereas, a more managerial logic based approach may be most appropriate in a bureaucracy where alignment is the greatest challenge.

Finally, the DAC framework lends itself better to the world of complex-wicked problems where there are a large number of stakeholders each with a different but valid perspective, where there is no optimum solution and the instigation of any action will

⁵⁴ This relationship is not proven here however linking effort to output is widely recognized within several motivational theories.

change the understanding of the problem. In such circumstances, the direction will likely alter over time and will need leadership effort to re-craft, reform and renew the DAC.

Leadership then is an essential partner to management. One element creates direction (through management process, individual initiative or based on team collaboration), aligns opinion and generates commitment. The other optimises stakeholder effort to the achievement of the direction in an economic, efficient, effective and risk tolerable manner. Combined, leadership and management are the activities of command.

AUTHORITY

So far we have discussed a reconceptualization of command as the activities needed to achieve command, namely leadership and management. What should not be overlooked, however, is that command is an appointment as well as an activity and it is the notion of authority that assigns command, and therefore responsibility and accountability onto an individual rather than a collective or aggregate. For expediency, this paper acknowledges the criticality of authority within the concept of command but leaves the discussion as an acceptance that authority has to be balanced with the individual's mastery of management and leadership and that sufficient resources (including people) need to be made available – either under direct authority or in coalition with partners – in order to achieve the assigned task. This is not to suggest that authority is any less important than leadership and management but is an

acknowledgement that this aspect is widely recognised and accepted as essential to command.

IMPLICATIONS OF THE MODEL

Earlier in this paper the criticism of the Pigeau-McCann model were listed and, having expanded on the leadership, management and authority conceptualisation it is appropriate to consider whether these issues have been addressed.

Under the reconceptualised model of command as Leadership, Management and Authority (LMA) a competent commander would be described as having mastered the art and science of leadership and management sufficient to operate commensurate with the level of authority and assigned task. The Pigeau-McCann's sub-divisions of competency (physical, intellectual, emotional and inter-personal) are implicit within the requirement to be credible, competent and resilient as a leader and manager. The reverse could also be said to be true, i.e. that leadership and management are implicit within intellectual, emotional and inter-personal competence; however, this breakdown, as identified in the criticisms of Pigeau-McCann, is too broad and does not assist in understanding what skills and knowledge are needed in preparation for command. For example, a doctor, social worker and a warehouse manager all need to be physically, intellectually, emotionally and inter-personally competent but we would not describe them as needing to prepare for or exercise a position of command.

This previous point raises an interesting question of the specialist skill requirement within the LMA command model. In principle, the model does not require specialist military skill or knowledge in order to be a commander; however, it is posited that lack of such knowledge means that *the* commander would be highly reliant on subject matters experts when determining the direction in which to seek alignment, gain commitment and manage effectively. This may sound counterintuitive, i.e. a commander must be well versed in military matters to be a commander but, when viewed from afar, it is most often the case that a commander will have detailed knowledge in some areas but will be reliant on others for specialist knowledge even in a purely military scenario, i.e. an army commander will be reliant on his Air Force liaison officers for airpower knowledge, on his logisticians for logistics knowledge and many others for whatever detailed information they required. However, the more knowledgeable a commander the easier it will be to assimilate the specialist knowledge and the more credible they will be when seeking alignment to the plan – noting that it is not possible have an in-depth understanding of all the complex issues that a military commander is likely to encounter. Within the JIMP environment, this fusion of specialist skills becomes even more important as the numerous government and non-government actors will each bring knowledge that a commander cannot hope to match.

The final point is that any individual officer cannot be equally suited to, with an equal preference for, and be equally proficient in, both leadership and management in the same way that an entrepreneur starting a business from nothing may not be the best person to be Chief Executive Officer (CEO) when it becomes a multinational

corporation. By recognising the equal contribution of leadership and management to the discipline of command we can make two deductions. First, the organisation can appoint the right person into command to meet the needs of the situation, i.e. in a prolonged campaign, such as counterinsurgency (Afghanistan) or peace-keeping / peace-enforcement (the Balkans), the early period of a campaign would be best commanded by someone able to gain alignment and foster commitment; whereas, the execution and consolidation of campaign effects would be best effected by a commander inclined towards delivering effectiveness efficiently. Second, an officer finding themselves to have a particular aptitude or preference towards certain elements of leadership or management needs to pair with a command team or trusted aid, ie Chief of Staff (COS), who have the complementing aptitudes in order to provide the optimised command package.

Since the early 1990s development of complexity theory has changed the way researchers view leadership; management theories (such as Total Quality Management,⁵⁵ Business Process Reengineering⁵⁶) have been tried and improved; and military concerns have become security concerns involving whole of government and external agencies. Legacy concepts of command are inhibiting efforts to collaborate and are hindering

55 Wikipedia, "Total Quality Management," http://en.wikipedia.org/wiki/Total_quality_management (accessed May 2, 2014).

56 Wikipedia, "Business Process Reengineering," http://en.wikipedia.org/wiki/Business_process_reengineering (accessed May 2, 2014).

communication – it is time to bring the concept of command from the industrial age to the knowledge era.⁵⁷

CONCLUSION

This paper set out to reconceptualise command (as used in the military context) to better meet the needs of the modern, more complex world. The paper gave an alternative model for command consisting of three pillars: *Leadership*, *Management* and *Authority* (LMA) and expanded them ontologically. In comparison to the Pigeau-McCann model and doctrinal definitions of command it was argued that the LMA command model is not only better suited to the JIMP environment and the progression of complex problems within complex adaptive systems but is also compatible with purely military environments. The conception is not entirely new but synthesising the LMA concept with the ontological descriptions of leadership and management gives a better appreciation of how command should be delivered and developed. It is anticipated that full acceptance of the model by the CAF institution will take time as the model fundamentally challenges deep held institutional beliefs on the term “management” and on the antecedence of command intent. It is hoped that this outline will promote internal tension and possibly even adaption.

⁵⁷ Uhl-Bien, Marion and McKelvey, Complexity Leadership Theory: Shifting Leadership from the Industrial Age to the Knowledge Era, 298.

BIBLIOGRAPHY

- Avolio, Bruce J., Fred O. Walumbwa, and Todd J. Weber. "Leadership: Current Theories, Research, and Future Directions." *The Annual Review of Psychology* no. 60 (July 23, 2009): 421-449.
- Bradley, Peter. "Distinguishing the Concepts of Command, Leadership and Management." In *Generalship and the Art of the Admiral: Perspectives on Canadian Senior Military Leadership*, edited by Horn, Bernd and Stephen J. Harris, 105-120. St Catharines, ON: Vanwell Publishing Limited, 2001.
- Canada Department of National Defence. *Leadership in the Canadian Forces: Conceptual Foundations*. Ottawa: Published under the auspices of the Chief of the Defence Staff by the Canadian Defence Academy, Canadian Forces Leadership Institute, 2005.
- Canadian Forces College. "The Competency-Authority-Responsibility Model of Command." Command Activity Package DS-556/COM/AY-3.
- . "Essay on a Complex Command Situation." Command Activity Package DS-556/COM/AY-5.
- Czerwinski, Thomas J. "Command and Control at the Crossroads." *Parameters* 26, no. 3 (Autumn, 1996): 121-132.
- Department of Defense. *JPI Doctrine for the Armed Forces of the United States*. Washington: Department of Defense, 2013.
- Department of National Defence. "B-Gj-005-000/fp-001." *CFJP 01, Canadian Forces Joint Publication* (2011).
- . "B-Gl-300-003/fp-001." *Command in Land Operations* (2007).
- Downs, Anthony. *Inside Bureaucracy*. Boston MA: Little, Brown and Company, 1967.
- Drath, Wilfred H., Cynthia D. McCauley, Charles J. Palus, Ellen Van Velsor, Patricia M. G. O'Connor, and John B. McGuire. "Direction, Alignment, Commitment: Toward a More Integrative Ontology of Leadership." *Leadership Quarterly* 19, no. 6 (12, 2008): 635-653.
- Drucker, Peter F. *On the Profession of Management*. Boston MA: Harvard Business Review, 1998.
- English, Allan and John Westrop. *Canadian Air Force Leadership and Command: The Human Dimension of Expeditionary Air Force Operations*. Trenton ON: Canadian Forces Aerospace Warfare Centre Production Section, 2007.

- GoLeanSixSigma. "The Basics of Lean Six Sigma." GoLeanSixSigma, accessed April 21, 2014, <http://www.goleansixsigma.com/dmaic-five-basic-phases-of-lean-six-sigma/>.
- Gosselin, Daniel. "Hellyer's Ghosts: Unification of the Canadian Forces is 40 Years Old – Part Two." *Canadian Military Journal* 9, no. 3 (2009): 6-16.
- ISixSigma. "The History of Six Sigma." , accessed April 21, 2014, <http://www.isixsigma.com/new-to-six-sigma/history/history-six-sigma/>.
- Joint Doctrine Branch. *CFJP 01 Canadian Military Doctrine*. Ottawa: Department of National Defence, 2011.
- Kaplan, Robert S. and David P. Norton. "Using the Balanced Scorecard as a Strategic Management System." *Harvard Business Review* (January-February, 1996): 75-85.
- Keegan, John. *The Mask of Command*. New York: Penquin Books USA Inc., 1988.
- Kotter, John P. *What Leaders really do*. Boston, MA: Harvard Business Review, 1999.
- NATO Standardization Agency. *AAP-06(2013)- NATO Glossary of Terms and Definitions (English and French)*. Brussels: NATO Standardization Agency, 2013.
- Northouse, Peter G. *Leadership: Theory and Practice*. sixth ed. Thousand Oaks, CA: SAGE Publications Inc, 2013.
- Paparone, Christopher R., Ruth A. Anderson, and Reuben R. Jr McDaniel. "Where Military Professionalism Meets Complexity Science." *Armed Forces & Society* no. 34 (2008): 433-449.
- Pigeau, Ross and Carol McCann. "Re-Conceptualizing Command and Control." *Canadian Military Journal* (Spring, 2002): 53-64.
- . *Using the Command and Control Framework to Analyse Command Challenges*. Toronto: Defence R&D Canada, 2002.
- . "What is a Commander?" In *Generalship and the Art of the Admiral*, edited by Horn, Bernd and Stephen J. Harris, 79-104. Ottawa: Vanwell publishing Ltd, 2001.
- Slack, Nigel, Stuart Chambers, and Robert Johnston. *Operations Management*. Sixth ed. Harlow, Essex: Pearson Education Ltd, 2010.
- The Development, Concepts and Doctrine Centre. *JDP 0-01 British Defence Doctrine*. Swindon: Ministry of Defence, 2011.

- Thomson, Michael H., Barbara D. Adams, Courtney D. Hall, and Craig Flear. *Collaboration within the JIMP (Joint, Interagency, Multinational, Public) Environment*. Toronto: Defence Research and Development Canada, 2010.
- Uhl-Bien, Mary, Russ Marion, and Bill McKelvey. "Complexity Leadership Theory: Shifting Leadership from the Industrial Age to the Knowledge Era." *The Leadership Quarterly* no. 18 (2007): 298-318.
- Van Creveld, Martin. *Command in War*. Cambridge, MA: Harvard University Press, 1985.
- Weber, Roberto, Colin Camerer, Yuval Rottenstreich, and Marc Knez. "The Illusion of Leadership: Misattribution of Cause in Coordination Games." *Organizational Science* 12, no. 5 (September-October, 2001): 582-598.
- Wikipedia. "Business Process Reengineering." accessed May 2, 2014, http://en.wikipedia.org/wiki/Business_process_reengineering.
- . "Total Quality Management." accessed May 2, 2014, http://en.wikipedia.org/wiki/Total_quality_management.