Adapting the Canadian Army Organisation: ‘Transformation’ and the Enduring Nature of Warfare

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Based on a perceived need to break step with the past, the Canadian Army underwent a formal process of transformation in the early years of this decade. Much of it was based upon opaque concepts of capability requirements, a belief in the revolutionary advantages of technological sophistication, and a misunderstanding of doctrine and of the nature of conflict itself. However, faced with the reality of conflict in Afghanistan, it was soon realised that previous assumptions were false and that many of the changes labelled as transformation actually undermined the Army’s fighting power. In the end, the Canadian Army indeed transformed across its moral, intellectual and physical components, but in step with the enduring nature of conflict, proven doctrines and capabilities.

In the tradition of British foot drill, the command of Change Step is still used when marching troops are found to be clearly out of step with other troops or the band, so that they make a natural transition to be “in step” with their surroundings. That of Break Step, was to be ordered in preparation for large bodies of troops crossing a bridge, based on the belief that troops marching in step would cause the bridge to resonate to the point of ultimate collapse. To break step though, does place a military force out of step with itself and with other elements.

Although rather antiquated, these drill commands provide an analogy for the changes in the Canadian Army over the last decade. In attempting to cross the conceptual bridge from the Cold War era to the current range of threats, complex environments, technological changes and operational predictions, the Canadian Army attempted to break step with the past in the early 21st century. Much of this demand for a break was based on the fashionable trends in allied militaries and subscription to academic theories about the future, changing nature of conflict and the revolutionary impact of technologies.¹ These trends and ideas forecasted major changes in

technology, structures and doctrine that would fundamentally change the character and conduct of military operations, and were used to inform subsequent capability development for the Canadian Army.\(^2\) Under this process titled “transformation”, the Canadian Army broke with fundamental principles and proven practices to alter structures, traditions and doctrines.

However, these changes proved to be largely detrimental to the fighting power of the Canadian Army.\(^3\) In recent years, the Afghanistan campaigns and other military engagements caused the Canadian Army to recall the enduring nature of conflict, the critical aspects and demands of all operating environments and the proven, enduring principles of military operations and doctrine. As a result, the Canadian Army simply conducted a natural change of step, which in some cases has reversed previous conclusions and decisions deemed central to the transformation process.

**Breaking Step with the Past—An Army Undergoes Directed Transformation\(^4\)**

Despite being fully committed to a wide array of operational deployments of combined arms units during the 1990s, the Canadian government demanded from its military the peace dividend expected with the end of the Cold War. This led to the trend of “re-engineering” and the conceptual oxymoron of doing more with less. Cutbacks affected all levels of command and included reductions in national and regional headquarters and staffs and a loss in the number of army units. Continuous rotations to UN and NATO missions that

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Concept development overviews in the first part of this decade included references to concepts such as network-enabled operations and effects-based operations. See, Department of National Defence, *Purpose Defined: The Force Employment Concept for the Army* (Ottawa, Ontario: Commander Land Force Command; 2004), pp. 4-7. Such work was supported by public announcements such as, “the rules of battle have changed forever”. See, Defence, Director Strategic Land Planning, ‘A Soldier’s Guide to Army Regeneration’, March 2003, [http://armyonline.kingston.mil.ca/CLS/143000440016067/ASOLDIERSGUIDE_E.PP](http://armyonline.kingston.mil.ca/CLS/143000440016067/ASOLDIERSGUIDE_E.PP) [Accessed 16 Nov 2009]. The term “regeneration” was used to describe a move to the interim army structures that would in turn lead to the transformed future army. For an indication of the Canadian Forces’ corporate idea that “the world has changed”, see also, Vice-Admiral G. Garnett, Vice Chief of Defence Staff, ‘The Canadian Forces and the Revolution in Military Affairs: A Time For Change’, *Canadian Military Journal*, vol. 2, no. 1 (Spring 2001), pp. 5-10, [http://www.journal.dnd.ca/v02/no1/doc/5-10-eng.pdf](http://www.journal.dnd.ca/v02/no1/doc/5-10-eng.pdf) [Accessed 14 January 2010].

\(^3\) Fighting power is defined as, “the ability to fight, consisting of three essential, inter-related components: a physical component: a moral component and an intellectual component”.

Conceptually it includes the entire ability of a force to achieve objectives, be they combat related or not. The model was developed from UK doctrine. See Department of National Defence, *B-GL-300-001/FP-001 Land Operations* (Kingston: Army Publishing Office, 2008).

\(^4\) Transformation is formally defined as, “a continuous and proactive process of developing and integrating innovative concepts, doctrines and capabilities in order to improve the effectiveness and interoperability of military forces”. See NATO Allied Administrative Publication (AAP) 6, NATO Glossary of Terms and Definitions, 2009. This same definition is used in the Canadian Army Terminology Repertoire.
showed slow progress, an unsuccessful mission to Somalia that included publically embarrassing breakdown of traditional discipline, a perceived lack of government support, and a rust-out of some equipment types, played havoc with the collective morale of the Canadian Army. This was compounded by a lack of corporate vision and an atrophied capability development process. The period has come to be known colloquially as the “decade of darkness.”

The end of the Cold War paradigm with its focus on large, conventional forces, combined with the operational and governance stresses—both moral and physical—of the 1990s, demanded institutional change across Army governance. Although effectively begun in 1997 with senior leadership initiated discussions, the process and supporting concepts of transformation were eventually articulated in a series of documents between 2002 and 2007. During that time, the process was energised by the deployment of manoeuvre forces to Afghanistan following the 2001 9/11 events. The nature and demands of this deployment superimposed upon the previously recognised need for institutional change led the Army into a serious and much needed period of reflection, from which many changes emerged.

The 1998 Army strategic direction articulated the traditional roles and raison d’être of the Army and spoke greatly to the moral component of its fighting power, to its ethical framework and traditions. Subsequent articulations stressed the following aspects of Army governance: the need to understand and train for irregular (often termed “asymmetric”) threats; the need to have a managed readiness plan for force deployments so that the government can understand the capabilities available for their strategic plans and so that commanders and troops can properly anticipate their operational commitments within reason; the need to task tailor flexible force packages to meet the demands of the strategic plans and threats at hand; and, the development of a formalised capability development programme with three planning horizons—Army of Today; Army of Tomorrow (five to ten years

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7 Major Godefroy, ‘Transformation and the Army of Tomorrow’, pp. 3-1 to 3-10.
8 Many of these publications featured photos of troops deployed to Afghanistan. See, Department of National Defence, Advancing with Purpose: The Army Strategy (Ottawa, Ontario: Commander Land Force Command, May 2002).
9 Department of National Defence, Canada’s Army: We Stand on Guard For Thee (Ottawa, Ontario: Department of National Defence, 1998).
out), and Future Army (the ten to thirty year timeframe).\textsuperscript{10} All this work rightly sought a rational change of step to be in harmony with the expectations of the Canadian government and its public, and within the expected resource limitations and reflective of likely threats, operational demands and operating environments.

The challenges of re-designing the army’s means and routines of training and deploying, all in the face of a government whose support of the military has been historically fickle even at the best of times, were no doubt great and the fact that much was accomplished, speaks volumes about the architects involved. However, despite the value and merit of the larger governance objectives described above, the subsequent directed, tangible changes and transformations to capabilities and their conceptual application actually undermined the overall operational effectiveness of the Canadian Army.

Various articulations of how the Army would generate and apply its fighting power in operations were developed, often justified with woolly, opaque concepts and questionable assumptions.\textsuperscript{11} Much of the motivation to change was based upon the assumption that concepts about a vastly altered operational environment, a technology driven revolution in military affairs, effects-based operations, network-centric warfare, information dominance and force re-structures held insight and value for the Canadian Army.\textsuperscript{12} Both the military and the Canadian public were told that the Soviet bear, for which the Canadian Army had prepared during the Cold War, had been replaced by the “snakes” of irregular threats in failed and failing states.\textsuperscript{13} As a result, deep and broad changes across the Army were deemed necessary in order to operative effectively in this new paradigm.\textsuperscript{14}

\textsuperscript{10} Department of National Defence, \textit{Advancing with Purpose}, pp. 4-8, 20, 22, 23, 31, 32. For a detailed discussion of the process that led to many of these governance changes, see, Major Godefroy, ‘Transformation and the Army of Tomorrow’, pp. 3-1 to 3-10.

\textsuperscript{11} Much of this section will be drawn from the following: Department of National Defence, \textit{Purpose Defined}. This publication was supported and elaborated upon though a variety of briefings and media releases, as cited herein. Given his role in capability development at the time, the author attended many of these briefings and was present when senior Army leadership discussed planned changes to structures and doctrine and the reasons for them.

\textsuperscript{12} See for example, Sloan, ‘Canada and the Revolution In Military Affairs’, p. 8. Many of these concepts are referenced in the Army’s 2004 employment concept, Department of National Defence, \textit{Purpose Defined}.


\textsuperscript{14} Vice-Admiral Garnett, ‘The Canadian Forces and the Revolution in Military Affairs’, pp. 5-10.
A REDUCTION OF COMBAT POWER IN THE INFANTRY

Linked to the popular concepts of Revolution in Military Affairs, Network Centric Warfare and other such concepts spurred by advances in information technology and the demise of Cold War threats and assumptions, the belief or perception developed that modern armies required fewer combat or manoeuvre capabilities as the increased intelligence and command systems would make the residual combat capabilities much more precise and effective. Indeed, the Army force employment concept discussed and illustrated a shift in combat power from the Cold War preference for manoeuvre forces to an emphasis on command and intelligence capabilities. (See Figure 1.)

Figure 1: An Illustration of the Shift in Emphasis of Capability Types


15 Combat power is the physical component of a force’s fighting power. See Department of National Defence, B-GL-300-001/FP-001 Land Operations.
16 Sloan, ‘Canada and the Revolution In Military Affairs’, p. 8. The Army’s force employment concept articulated this idea in a model showing a transition from an emphasis on combat power (manoeuvre forces) to an emphasis on command and intelligence capabilities under a transformed force. See Department of National Defence, Purpose Defined, pp. 7 (see illustration), 10.
17 Ibid., pp. 7, 24. The illustration of such a concept as given in Fig 1 here was commonly referred to as the “big head/little head” model and the right side as the “big head/small body” concept. The author joined Army doctrine and capability development just after this publication was released in March 2004.
Vague but robust sounding concepts such as “information dominance” that would allow new tactical approaches like “manoeuvre to strike”, became popular, based on the belief that superior surveillance and intelligence systems would generally render tactics such as advance to contact antiquated.  

Supporting this concept were earlier considerations and recommendations that the capabilities listed under the broad title of Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) be brought under the command of a new, single unit or sub-unit within a formation and unit. This belief reflected a poor understanding of the very opaque Information Operations doctrine and a failure to realise ISTAR is simply a list of related functions that need to be coordinated to support a commander’s decision making process, rather than specific capabilities that must be grouped together under a single command. Furthermore it predicted a flow of information and precision regarding the enemy that proved utterly false once operations were begun in southern Afghanistan.

To enhance and centralise ISTAR specific capabilities, in a period of imposed zero growth, other capabilities were to be cut. Under the label of transformation, the Army thus sought to rid itself of what it perceived to be 

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18 Department of National Defence, *Purpose Defined*, pp. 7 (see illustration), 10. The term “manoeuvre to strike” is illogical. The term “manoeuvre” is defined as movement supported by fire to gain a position of advantage (see NATO Allied Administrative Publication 6) which is in fact a striking action.


20 Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) is defined as, “A grouping of information collection, processing, dissemination and communication assets designed, structured, linked and disciplined to provide situational awareness to support targeting and decision making. Note: ISTAR is used to refer both to the operational process and to the personnel, assets and architecture involved in the process.” Source: Canadian Army Terminology Repertoire. Any capability that collects information—including a dismounted soldier on patrol—is considered part of the ISTAR process. Information Operations doctrine was deemed to be so confusing the Canadian Army capstone doctrine simply discusses it in terms of a single subordinate capability of Influence Activities. See Department of National Defence, *B-GL-300-001/FP-001 Land Operations*.

redundancies within its capabilities. Specifically targeted as redundancies were manoeuvre support capabilities within the infantry, comprising mortars, assault pioneers, and eventually direct fire support in the form of infantry anti-armour platoons. Even when ISTAR was realised to require only a coordination capability the appetite for cuts to these supposed redundancies remained extant.

A key standing infantry capability to go as part of Army transformation between 2002 and 2003 was the battalion mortar platoon, based on the belief that brigade group artillery regiments provide indirect fire and if necessary could man the 81mm medium mortars as a secondary task. In short, the infantry lost its guaranteed indirect fire for close support to movement, thus helping it to manoeuvre. Whilst allies in Afghanistan continue to use their infantry mortar groups to great effect in intimate support of sub-units, Canadian units are forced to choose between mortars or artillery. With the loss of integral mortars, all Canadian land tactical movement must remain within the ranges of brigade artillery and must await its availability, if they desire indirect fire support.

By the time transformation began in the late 1990s, the Canadian Army had refined its assault pioneer capabilities to a very high standard. Although

22 Department of National Defence, Director Strategic Land Planning, ‘A Soldier’s Guide to Army Regeneration’. This explanation was given by the then Chief of Land Staff, LGen Jeffries during a visit to Op ELCIPLSE, the Canadian Army deployment to Eritrea, February 2001. The author was the Cdn G1 for the mission and present at the discussion. The author was also Officer Commanding Combat Support Company, 2 RCR, (July 2002 to June 2003) when these perceived redundancies were cut and this explanation was routinely briefed to All Ranks. The restricted funding envelope during this period of transformation was confirmed by the then Minister of National Defence, The Honourable John McCallum. See, Dr Richard H. Gimblett, ‘Sovereignty, Defence and Global Security: Defending Canada’s Interests in the 21st Century’, Minutes from the Canadian Defence Association 19th Annual Seminar, 2003, <http://www.cda-cdai.ca> [Accessed 3 January 2010].


24 Notwithstanding this general concern, recent testimonials from the Afghanistan campaign give witness to the excellent support being provided by the newly acquired Canadian M777 155mm artillery, which provides guaranteed fire support to the Canadian Battle Group and deploys to ensure adequate coverage. However, this arrangement may not exist or even be desired in other theatres and the deployment of individual gun troops will preclude the possibility of massed fires. For recent examples of individual gun troop deployment, see, Hope, Dancing with the Dushman, pp. 78-9.

25 Each infantry battalion, regardless of its role, contained a platoon of assault pioneers, infantry soldiers cross-trained in basic engineer skills to provide dedicated mobility, counter-mobility and force protection support to the battalion and any attached arms. Although adopted from the British Army model, the Canadian Army had a superior capability to that of the former. Whereas the British Army only provided dedicated formed assault pioneer platoons to their light battalions the Canadian Army had them in all battalions with extensive training and specialist equipment tables. This observation is based on the author’s experiences whilst on regimental exchange with the British Army and during operational deployments to Bosnia. It should be noted that British Army doctrine continues to highlight the valuable role of assault pioneers. See Army Field Manual, Volume 1, Combined Arms Operations (London: Ministry of Defence, 2007), Part Two, Battle Group Tactics.
infantry troops, these specially trained and equipped soldiers provided low level engineer skills to the infantry battalion and its sub-units for purposes of mobility support, breaching, counter-mobility, counter-mine and IED (improvised explosive device) protection and basic field construction tasks. Despite having proven their worth in deployments to the former Yugoslavia and the prediction that the Canadian Army would be facing more asymmetric threats in the future (and presumably with their historical tendency to use IEDs) assault pioneers were deemed to be a redundant capability given the tasks preformed by combat engineers. However, field and combat engineers are constantly in high demand during operations and the loss of dedicated moment-to-moment mobility and force protection capabilities within the infantry were unlikely to be satisfied by engineers and their requirement to support all elements of a brigade. What was in truth complementary capabilities—mobility and force protection at different levels of command—were deemed to be redundancies. Indeed, no mention was made in the transformation plans to mitigate this loss in infantry capability, but only to focus such capabilities in one corps. Similar capability losses were felt by the armoured regiments in their loss of assault troops.

This loss of assault pioneer capability has had more than a theoretical denigration to army capabilities. Lessons learned reports from the Afghan theatre indicate that the presence of assault pioneers in close support of infantry patrols would reduce IED strikes. Additionally, the breaching skills inherent in assault pioneers would be most useful in the breaching of compounds and other fortifications exploited by irregular forces. In short, the loss of assault pioneers has reduced the force capabilities of mobility and force protection.

The third aspect of integral infantry support to disappear was the anti-armour platoon inherent to each battalion. Army commanders and staff presumed that since the armour threat of the Cold War had disappeared and the threat of conventional warfare was minimal it seemed reasonable to delete or at least substantially reduce this capability and in any case, remove it as a capability integral to the infantry.

28 Assault troops fulfilled the same role as assault pioneers but for an armoured regiment. See Department of National Defence, Director Strategic Land Planning, ‘A Soldier’s Guide to Army Regeneration’.
29 Lesson Synopsis Report 08-011 (Kingston: Canadian Army Lessons Learned Centre, 2008).
30 Canadian Army News, ‘Army Transformation To Begin Affecting More Units, Branches’. For the perception regarding decline in conventional threats, see, Hillier, ‘Commander Speaks About Army Transformation’. See also, Department of National Defence, Purpose Defined, p. 4.
Adapting the Canadian Army Organisation

capability development staff and commanders and the ensuing decision revealed a lack of understanding regarding the nature of Army requirements and capabilities, particularly those of the infantry, and in light of the nature of threats. Discussions overlooked that the infantry is a manoeuvre arm and in order to manoeuvre—movement supported by fire—integral direct fire capabilities are required, even when faced with an irregular or asymmetric foe.\(^{31}\)

Here lies the misconception that existed: the role of anti-armour platoons was not anti-armour, but rather direct fire support to permit manoeuvre at the unit and sub-unit level. Anti-armour was simply the characteristic of the capability based on the dominant characteristics of the most likely threat. The requirement for infantry to manoeuvre—to close with and destroy the enemy as stated in the traditional role of infantry—remains extant, and thus so does the need for integral direct fire support.\(^{32}\) Since the need to manoeuvre is constant given the role of the infantry, the implication is for integral, thus guaranteed, direct fire support. If the nature of the threat had changed then it stands to reason that the nature of the direct fire should change appropriately, but that the capability of integral direct fire is still required. Thus if the most likely enemy is to be a dismounted irregular fighter who conceals himself in buildings, then the direct fire characteristic should perhaps seek to counter that threat, perhaps through provision of suppressive and breaching fires. Sadly, this deduction, based on a sound understanding of threats and doctrinal roles and requirements, was never made and the infantry failed to mount a strong defence along this line of reasoning for retention of the capability. In short, the doctrinal requirements of the infantry were forgotten, or at least not well articulated.\(^{33}\)

The related conceptual failing here stems perhaps from a certain and rather limited perception of the nature of conventional battle and the presumption that it is unlikely to be a contemporary experience.\(^{34}\) The term raises images in many minds of large mechanised formations as part of national armies

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\(^{31}\) The author, as a doctrine and capability development staff officer in 2004 and 2005, was present during the various staff discussions regarding the loss of this capability and is as guilty as anyone else for failing to clearly articulate the doctrinally correct manoeuvre support requirements of the infantry. Some of those present spoke to a requirement for direct fire support suited to irregular threats in an urban environments, but failed to clearly articulate it based on the core role requirement of manoeuvre. All viewed anti-armour as the role, vice merely a characteristic of the manoeuvre support role.

\(^{32}\) See Land Force capstone doctrine, Department of National Defence, B-GL-300-001/FP-001 Land Operations, pp. 1-4.

\(^{33}\) As witnessed by the author, some of the strongest arguments made by Director of Infantry staff for retaining the anti-armour support platoon focused on its use as a career path for Senior NCOs, vice a capability key to successful combat.

\(^{34}\) Lieutenant-General R. J. Hillier, ‘Army Transformation: Punching Above Our Weight’, The Army Doctrine and Training Bulletin, vol. 6, no 3 (Fall/Winter 2003), p. 3. Here this author describes the “conventional” threat of nation-state manoeuvre forces as not only being unlikely but now being “asymmetric”, however without direct reference to the relative nature of the perceived asymmetry.
conducting battles of physical attrition. Instead, it is useful perhaps to keep in mind that conventional battles are positional battles, for they are based upon forces—regardless of their regular or irregular nature—fighting for control of position and ground and force dominance. It is not limited to state-on-state militaries and most recently the August 2006 activities of insurgent forces in Afghanistan certainly reminded all that irregular forces can fight a conventional or positional battle.\(^{35}\) Thus the requirement for infantry to manoeuvre collectively in the face of both irregular and conventional threats remains valid, along with the demand for the integral fire and mobility support formerly provided by those lost capabilities. Yet these perceptions of what “conventional” means likely made it easier to cut these capabilities. Interestingly, retention of conventional capabilities for manoeuvre is what gives the Army its asymmetric advantage over irregular threats.\(^{36}\)

Despite these transformational changes to the Canadian Army, particularly the infantry, no advantages related to information dominance seem to have occurred. Certainly new capabilities have arrived such as unmanned aerial vehicles (UAVs) to improve situational awareness, but such developments have not precluded the need for intimate, guaranteed indirect fire, the mobility force protection of assault pioneers and the need for direct fire support for manoeuvre. The reliance on vague concepts of information dominance through additional technologies and structures, combined with a questionable understanding and articulation of infantry doctrinal requirements, the nature of threats, and the capability requirements of manoeuvre forces did nothing to benefit the infantry, but merely undermined its combat power in the name of transformation. The Army went from embracing concepts of “information dominance” to the reality of being ambushed on route to the line of departure and facing the requirement to breach obstacles and suppress a hidden enemy. Myths about forces being able to “manoeuvre to strike” a defined enemy were replaced with old fashioned advance to contact to find and fix the enemy.\(^{37}\) The idea that bigger command and intelligence capabilities would allow a reduction in manoeuvre capabilities (the big head/little body model—see Fig 1) is readily dismissed by experienced force commanders.\(^{38}\)

Although it could be argued that the reductions were necessary to fill the ranks of rifle companies, the counter point can be made that two rifle companies properly supported with integral manoeuvre capabilities would be more effective than three rifle companies attempting to share external support capabilities.\(^{39}\) Furthermore, it is much easier to create additional rifle

\(^{35}\) Hope, Dancing with the Dushman, pp. 1-16.
\(^{36}\) Discussions with Mr. Neil Chuka, Defence Strategist, Defence Research and Development Canada, 17 November 2009.
\(^{37}\) Hope, Dancing with the Dushman, p. 111.
\(^{38}\) Ibid., p. 146.
\(^{39}\) This is particularly true of infantry battalions in which those enabling manoeuvre support elements are infantry trained for support roles can if necessary act as an additional rifle
companies than to re-create specialist skills once lost. Indeed, the lack of integral fire and movement support capabilities brings into serious question an infantry battalion’s ability to conduct manoeuvre above the sub-unit level.\(^{40}\)

Tellingly though, recent experiences and operational lessons-learned have led to a reversal of at least part of these transformations. The Army will attempt to re-build its assault pioneer capability.\(^{41}\) Despite this partial reversal though, it can hardly be said that capability changes labelled as transformation have done much for the Canadian infantry.

\section*{A Reduction of Armour Capabilities}

The infantry regiments were not the only elements of the military to receive severe cuts in the name of transformation. Whilst the decision to delete tanks from the Canadian Army’s inventory and opt for a light mobile 105mm gun system was a political decision, it was painted and sold as a key aspect of transformation.\(^{42}\)

The main battle tank that played an important role in operations in Iraq against a variety of threats was dismissed by then-Army leadership as a relic of the past, to be replaced by a “system-of-systems” of vehicles based on light armoured vehicle (LAV) chassis that would be more strategically deployable given its lighter weight.\(^{43}\)Whilst centred on a 105mm gun on a LAV frame, titled the Mobile Gun System (MGS), the overall system included anti-tank missile systems on a LAV frame and a “multi-mission effects vehicle”, the latter based on the ageing Air Defence Anti-tank System (ADATS). The collection of systems was to be termed the Direct Fire System (DFS) and was touted a significant enhancement to the Cold War based capabilities. Tanks were dismissed as a relic of conventional, tank-on-tank warfare and unsuitable for the irregular foes that dominate the future.\(^{44}\) The systems were to be grouped within the same unit and whilst the exact sub-unit distribution was the subject of several seminars and

\[\text{company at least within a limited scope. Even after these reductions to infantry battalion structures, ongoing practice has shown that force generation still requires three garrison rifle companies to man two deployed rifle companies.}\]

\[\text{Rifle platoons and companies continue to maintain support weapon detachments and sections which support their own manoeuvre. The fire support provided by integral mechanised vehicles provides integral fire support to the rifle sections thus allowing them to manoeuvre.}\]

\[\text{\cite{Lesson_Synopsis_Report_08-011}, See also Director Land Force Development, Department of National Defense, \textit{Land Force Development SITREP—January 2010}, 5 January 2010.}\]

\[\text{\cite{Pugliese_The_Return_of_the_Leopard}, For its role in transformation, see Department of National Defence, \textit{Purpose Defined}.}\]

\[\text{\cite{Ibid., p. 26}, See also, Pugliese, ‘The Return of the Leopard’.}\]

experiments, the initial premise was that a DFS troop would include four MGS and a pair of each of the other vehicle types.\textsuperscript{45}

Many observers both within and external to the military questioned the wisdom of this change, its declared benefits as a “war-winning” capability and the manner in which diverse capabilities were to be mixed and employed.\textsuperscript{46} Whilst most could understand a government enforced decision to remove ageing tracked tanks from the Army’s order of battle to be replaced by more affordable, politically acceptable, light vehicles, they had severe difficulties with the manner in which this proposed “system of systems” substitution was presented as an operational improvement, key to success on future battlefields.\textsuperscript{47} Whereas critics could have been engaged in a discussion of making the best of government direction and the advantages of greater operational reach over certain tactical capabilities inherent in a tracked tank, no such discussion seemed to occur, nor was permitted. Critics of the plan, both within and external to the military, were harshly chided and dismissed by elements of Army leadership as being unwilling to change and as having a puerile understanding of the contemporary operating environment.\textsuperscript{48} Some supporters of the concept were so taken by it that they declared this “system-of-systems” to be revolutionary to the extent that the typical tactical tasks such as “fix”, “block” “support by fire” would no longer apply.\textsuperscript{49}

In due course the DFS seminars and experiments examining the likely tasks and structures of this construct confirmed what many suspected, that the grouping had tactical benefits in very limited scenarios but for the most part proved to be a shotgun marriage of capabilities that in general were not complementary to one another, at least no more so than any other combination of platforms.\textsuperscript{50}

\textsuperscript{45} Ibid.
\textsuperscript{46} The “war-winning” description of the concept, particularly the MGS was described in various media releases and in official announcements, such as the Army wide signal message, CANLANGEN 025, Subject: Army Transformation; 291400Z Oct 03. See also Pugliese, ‘The Return of the Leopard’. Staff officers within capability development, of whom the author was one, lead a number of studies to determine the practicality of the systems and the complementary nature of the grouping. Critics existed within and outside of the military; see, Ibid.
\textsuperscript{47} See Army wide message, CANLANGEN 025, Subject: Army Transformation; 291400Z Oct 03. See also, Hillier, ‘Commander Speaks About Army Transformation’. See comments by the then Chief Land Staff, as quoted in: Pugliese ‘The Return of the Leopard’.
\textsuperscript{48} Ibid. See also David Pugliese, ‘Canada to Ship 20 Tanks to Afghanistan as Pullout Looms’, The Ottawa Citizen, 29 December 2009, <http://www.ottawacitizen.com/story_print.html?id=237234&sponsor> [Accessed 04 January 2010].\textsuperscript{49} Taken from the author’s notes (following Exercise Initial Strike planning session with Comd 1 Brigade in LdSH lines, Camp Wainwright, Alberta, November 2004).\textsuperscript{50} The author, as a staff officer with the Directorate Land Concept Development for doctrine and capability development, attended both the field trials and the seminar war games during the evaluation period throughout 2005 and drafted portions of the exercise assessments internal to the Directorate of Army Doctrine.
Concerns over nagging technical difficulties with the MGS, the potential rising costs, and potential issues in the US-linked contract began to raise doubts about the timely procurement of the system. Coincidental with these issues, the Canadian Army came to realise the nature of operations in southern Afghanistan against a foe that whilst not conventional at times adopted conventional tactics. As a result, a request was made to the government to cancel the MGS purchase. 51 Neither was the DFS unit formed. It seemed that lessons learned in Op MEDUSA (a battle group operation against Taliban defensive positions in Afghanistan, September 2006) and other contacts during which an irregular, lightly armed yet determined foe adopted conventional tactics in a complicated built-up area, had convinced, at least in part, the Army leadership that the MGS was no longer the war-winning vehicle of the future and that tanks still have a place on the modern battlefield when manoeuvre is required, even if only used as intimate support to the infantry. 52 The plan to scrap the remaining Leopard 1 tanks was halted and a cannibalisation programme undertaken to deploy an armoured squadron to theatre. Since then contracts have been finalised to purchase residual Dutch Leopard 2 main battle tanks, some of which are currently deployed to Afghanistan as replacements for the Leopard 1 series. 53

This entire episode of the DFS concept—even if simply marketed to justify a government decision to replace ageing main battle tanks with a cheaper, more politically acceptable option—revealed seriously questionable perceptions of current and future conflicts and irregular forces, along with a dubious understanding of combined arms operations and the doctrine for the integrated manoeuvre of those arms. The idea that “information dominance” over a technically ignorant adversary would allow a force to be more “effects” oriented and thus justify significant changes to doctrine and manoeuvre unit structures was proven to be false. 54 Instead, tactical experiences in Afghanistan revealed the same lessons from previous campaigns and experiences, along with the enduring value of doctrine developed from those

52 Defense Industry Daily, ‘Tanks for the Lesson; Leopards, too, for Canada’.
54 The original justification is discussed in various documents and media releases. See, Department of National Defence, Purpose Defined, pp. 4-7. It is interesting in this document how the fashionable term of “effects-based operations” was simply a new idea and term for what is essentially the well established but possibly not well understood concept of the manoeuvrist approach to conflict.
experiences. This is not to say that the MGS would not have been useful in the current fight, but a true recognition of its limitations and a properly envisioned employment scenario as a means for intimate support to infantry manoeuvre would have been most welcome. An army must always suffer the temporal policy decisions of its government, but it should not attempt to build flawed doctrine to justify them.\(^{55}\) In short, this key element of transformation proved hollow.

**THE ECHELON SYSTEM TRANSFORMS OUT OF EXISTENCE**

Despite the proven value of the echelon system that provides service support for all levels of a line unit, the entire logistics system was placed under stress due to re-engineering initiatives in the 1990s, a shortage of tradesman and logisticians and the introduction of centralised fleet management and its ensuring reduction of vehicle stocks in line units.\(^{56}\) With previous operational deployments used as a template projected into the future, the assumption was made that the deployed forces would henceforth work from static camps, supported by a single National Support Element encompassing first and second line echelon support.\(^{57}\)

This assumption was wrapped up into the overall transformation process and significant changes were made to the echelon structure of the Army. Line units were stripped of their maintenance and supply platoons, their cooks and their medical staff. For training and operations, such support would be allocated to units from garrison or other centralised resources as required. It was envisioned that during deployments, line units and sub-units would operate from and return to a fix installation for service support and that the centralised service support would only send forward detachments as required to units or sub-units.\(^{58}\)

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\(^{55}\) There is an interesting distinction to be made here between policy and doctrine. Doctrine describes how things should be done, whereas, policy, due to often valid resource limitations or political considerations, describes how things will be done. Policy often conflicts with doctrine. When failure occurs, doctrine can indicate if policy is to blame.

\(^{56}\) The echelon system is common to British and Canadian Armies incorporates a flexible, cascading system of combat service support capabilities from formation down to sub-unit level so that within line units, the minute-to-minute and hour-to-hour service support requirements of the fighting troops are met. The echelon system was so valued that the policy of its removal from the Canadian Army was never incorporated by doctrine writers who continued to write doctrine referring to the unit echelon system. For details on the development of the Canadian service support construct since the 19th century, see, Lieutenant-Colonel John Conard, *What the Thunder Said: Reflections of a Canadian Officer in Kandahar* (Toronto, Ontario: Dundurn Press, 2009), pp. 55-70, 89-90.


For those familiar with line unit operations and their logistical requirements, two problems were evident with this model from the start. Firstly, it undermined the cohesion and unity vital to the morale component of a unit’s fighting power. In this new design and practice the vital and highly valued technical tradesmen of an echelon arrived at, and departed the line units as strangers, unfamiliar with the units and sub-units and the people who rely upon them heavily. Secondly, a centralised support system located in a fixed base without an integral echelon within manoeuvre and support units would preclude tactical flexibility and operational reach. Even if a unit or sub-unit were to be allocated an echelon slice from a fixed base to meet an unexpected tactical or operational demand, it stands to reason that its cohesion and adaptability would be significantly less than that of a permanently established echelon organisation.

The issue of cohesion was addressed by the designers of transformation by the fact that deployed combined arms groups would be formed six months prior to assumption of high readiness footing or deployments and thus any service support personnel would have plenty of time to form cohesive bonds within their units. Whilst true to some extent, this concept is not without its problems. Cohesion develops over time in both routine and extra-ordinary circumstances, more so than in the forced, artificial environment of pre-deployment training. Furthermore, any administrative or disciplinary problems with attached support personnel would naturally only come to light well into training, when resolution would be impossible and replacement difficult.

Although shortages played a role in motivating change, it was in good part a specific set of presumptions that led to this transformation of the Canadian Army's service support and loss of echelon structure: that the moral component of fighting power, if important, can be quickly built in the feigned environment of pre-deployment training; that future deployments will automatically involve fixed bases from which first and second line support can operate; and that manoeuvre and other line units do not require integral echelons but will routinely return to a fix base for support.

Notwithstanding these directed changes to the Army structures, the Army continued to write doctrine for an echelon system, based on the belief that

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59 Problems of this nature have already been experienced in various theatres. See, Bell, 'An Operating Concept of Sustainment for the Army of Tomorrow', p. 9-1. See also, Conard, What the Thunder Said, pp. 89-90.

60 Department of National Defence, Director Strategic Land Planning, 'A Soldier’s Guide to Army Regeneration'.

61 This problem is made more serious by the unique Unification structure of the Canadian Forces, in which a support soldier may have spent his entire career prior to deployment with air force or navy units and thus find himself suddenly thrown into an army line unit environment, and perhaps even with leadership responsibilities. Such situations are inherently problematic.
the doctrine would be needed in many types of operations.62 Indeed, by the end of the initial deployment to southern Afghanistan these presumptions of service support transformation were shown to be hollow and the resulting changes detrimental to the operational capabilities and fighting power of the Army.63

THE EFFICIENCY OF WHOLE FLEET MANAGEMENT—TRANSFORMING EFFICACY

The need to better manage planned and short-notice deployments across the Army was well recognised and was one of the major objectives of the Army’s 2002 Strategy.64 In order to support this and better standardise training, the Canadian Manoeuvre Training Centre (CMTC) was established in Northern Alberta and has become a world class training facility with a dedicated enemy force, weapons effects simulation and dedicated exercise control staff. The cost, however, has been significant. In order to establish a dedicated vehicle fleet for CMTC, and to better manage the overall vehicle fleet to support operations, the Army adopted a policy of Whole Fleet Management (WFM). Under this policy, the vehicle fleets, particularly the manoeuvre and service support fleets, would be broken into three groups: one third for CMTC; one third either deployed or stored in a depot ready for deployment; and, one third allocated to units.65 Hence, line units were stripped of their full complement of vehicles and left with a training cadre of roughly one third of their operational requirement. Drivers and crew commanders were denied the opportunity to become intimately familiar with their primary combat vehicle and its capabilities. The limited unit stocks were to be shared across units for both individual and collective training, if and when available.66 In short, there was no individual ownership and responsibility and thus familiarity and skill development with the operational vehicles. Both crew competence and confidence have likely been depleted through the limited shared vehicle design of WFM. Furthermore, doubts exist regarding the efficacy of centralising operational stocks in a depot, husbanded by unionised civilians in a warehouse. Given the convenience and cost savings of WFM, the policy has been expanded and is now considered an option for other equipments such as target acquisition and support weapons systems.67

63 Briefing by Lt Col Ian Hope, CO 1 PPCLI Battle Group/Task Force Orion, southern Afghanistan January to August 2006, to USMC Joint Urban Warrior Seminar, April 2007. See also, Conard, What the Thunder Said, pp. 90-91.
64 Department of National Defence, Advancing with Purpose, p. 22.
66 Ibid.
67 In his capacity as a capability developer, in 2006 the author assisted staff in the Directorate of Land Requirements in the re-writing of the Capability Development Record for the automatic grenade launcher project (termed, Company Area Support Weapon). Procurement plans
sound technical skills and confidence in vehicles and weapons systems were set aside by promises of lengthy training and preparation periods.\textsuperscript{68}

WFM may certainly be an efficient way of doing business. But in the realm of things martial, that is, in a world so dependent upon the human factor, efficiency is often far from being synonymous with efficacy.\textsuperscript{69} In short, the danger exists that the policy of WFM has undermined the moral (confidence) and physical (individual skills) components of the Canadian Army’s fighting power.

**THE CUMULATIVE EFFECTS OF TRANSFORMATION**

To summarise the effects of formal transformation of the Army and the desire of its proponents to break step with the past, one may conclude that it has not been particularly beneficial. Assumptions upon which the transformation was based have been proven false.\textsuperscript{70} Doctrine that spoke to capabilities, their raison d’êtres and their application was discarded, misinterpreted or forgotten. As a result, the Army lost significant elements of its fighting power and its ability to conduct operations. The realisation of other planned transformations such as creation of the DFS would only have furthered that erosion. The Army lost the service support echelons of its line units, and thus their tactical flexibility and operational reach as a result. The competence and confidence of line units in the use of their fighting vehicles has been jeopardised through the policy of WFM. The transformation that sought to break step with the past, cost the Army dearly.

**Afghanistan and the Real Transformation of the Canadian Army**

If the planned transformation of the Army proved to have been of little benefit, one is right to wonder if the Army has transformed in any beneficial manner other than the limited extent outlined above. It certainly has, but in ways not particularly expected. Despite the efforts to break step with the

\textsuperscript{68} Director Strategic Land Planning, Department of National Defense, *A Soldier’s Guide to Army Regeneration*.

\textsuperscript{69} Doubts along these lines are particularly strong when one considers that the location of the Canadian Manoeuvre Training Centre in Northern Alberta renders pre-deployment training there at certain times of the year virtually impossible due to extensive and harsh winter conditions. At such times, pre-deployment training has been conducted in the southern United States.

\textsuperscript{70} Hope, *Dancing with the Dushman*, p. 146. See also, Carl Osgood, ‘Revolution in Military Affairs Suffers Setback’, *Executive Intelligence Review*, 19 September 2008, [Accessed 17 February 2010]; General J. N. Mattis, ‘USJCOM Commander’s Guidance for Effects-Based Operations’, 14 August 2008, obtained from Canadian liaison staff, JFCOM HQ, Norfolk, VA. Of note in General Mattis’s direction is the conclusion that the Israeli Defence Force’s difficulties in their 2006 Lebanon campaign stemmed in good part from the assumptions made under Effects-Based Operations (EBO) theory.
past, the Canadian Army took the enduring principles and doctrines and adopted them in a natural and logical manner to the operational environment at hand. To understand this real transformation (defined as an improvement in effectiveness), one can examine it along the three components of fighting power: the moral; the intellectual; and the physical.\footnote{The moral component of fighting power consists of esprit de corps, cohesion, warrior ethos and culture. The physical component consists of personnel, equipment and training. The intellectual component consists of doctrine and professional development. See Department of National Defence, B-GL-300-001/FP-001 Land Operations.}

**TRANSFORMATION OF THE MORAL COMPONENT**


Although the limited resources to recent date have forced Canadian commanders to focus on merely disrupting Taliban efforts to secure Kandahar, recent increases in force levels have allowed a shift in campaign focus that knits together of the whole range of tactical activities into an operational scheme of manoeuvre that is more reflective of counterinsurgency doctrine and its focus on securing populations.\footnote{Hope, Dancing with the Dushman, pp. 49-51, 53, 83, 140. See also, Richard J. Evraine, ‘Canada Still Has Work To Do in Afghanistan’, The Ottawa Citizen, 16 December 2009, <http://www.ottawacitizen.com/news/Canada+still+work+Afghanistan/2345776/story/.html> [Accessed 2 March 2010].} This
success has been due not to any transformational concept nor to any small group of leaders claiming some sort of special, esoteric knowledge of a revolutionary change in conflict and martial affairs.\textsuperscript{74} Instead, it has been due to those generations of officers and NCOs who guarded, instilled and maintained in subsequent generations, traditional discipline, standards and warrior ethos.\textsuperscript{75} Despite the long, relative routine of the Cold War when most of them never heard a shot fired in anger, the crushing demoralisation of Unification and the public popularity of the peacekeeping force narrative, they maintained the martial standards that ensured the tactical effectiveness of the Army when it was needed. Realisation of the enduring nature of conflict and its central aspect of a contest of wills, vice superior technology, has been part of the real transformation of the Canadian Army.\textsuperscript{76} The Canadian Army not only believes that it is a fighting force key to achieving the strategic objectives of its nation, but its battlefield successes have proven it, to themselves, their nation and its allies.\textsuperscript{77} This has built their self-confidence, pride and collective self-esteem beyond measure.

Apart from the Canadian Army undergoing this moral transformation in their own self-assurance and self-awareness, the deployment of the Army has transformed its image in the eyes of others as well. Allies no longer wonder if the Canadian Army can muster the combat effectiveness proven in previous conflicts. Instead, allies integrate Canadian Army elements with sound confidence in not only their abilities and warrior ethos, but also in their intellectual understanding of the strategic nature and operational theme of the counter-insurgency campaign at hand.\textsuperscript{78}

At the strategic level, the Canadian populace itself has re-discovered not only its military, and thus the Army, but the realisation that the military is a strategic tool used to achieve a nation’s objectives at home and abroad,

\textsuperscript{74} See the dismissal of several of the key transformational concepts in, Hope, \textit{Dancing with the Dushman}, pp. 19, 146. See also, Grant, ‘RMA, Cold War End for Army’; Osgood, ‘Revolution in Military Affairs Suffers Setback’; Mattis, ‘USJCOM Commander’s Guidance for Effects-Based Operations’. In this direction, Commander JFCOM dismisses the extensive use of Effects-Based Operations theory. In the covering memorandum, he states his intent clearly: “we must return to time honoured principles and terminology that our forces have tested in the crucible of battle and are well grounded in the theory and nature of war”.

\textsuperscript{75} Hope, \textit{Dancing with the Dushman}, p. 21.

\textsuperscript{76} This point has been adopted in part from, Ibid., pp. 21, 146.


albeit at significant cost. They have been reminded that their soldiers engage in combat and sometimes die in pursuit of those objectives.\textsuperscript{79}

Whilst all of this may be viewed as more of a transformation of the allies and Canadian society, it has had a second order transformational effect on the Army. Its esprit de corps and sense of worth have grown significantly due to its profile and the acknowledgement by allies and Canadians of its capabilities and sacrifices. This acknowledgement is clearly illustrated in part during repatriation ceremonies for the fallen Canadian soldiers. Each time, surprisingly large, grieving crowds line the overpasses of the 250 kilometre route from the repatriation airhead to the mortuary in Toronto, Ontario. This is no design of the military nor of the government, but done on the collective initiative.\textsuperscript{80}

Adding to the self-confidence and capability to the Army was the end to the risk-averse, microscopic situation management by the operational and strategic levels of command in Ottawa. Prior to the Afghanistan deployments, all tactical decisions for deployed forces outside of the very ordinary had to be pushed to those national levels of command for review and authorisation. Something as simple and as reasonable as a request to support local police in a cordon and search operation often required a 48 hour review process back in Canada before the tactical level commander was granted permission.\textsuperscript{81} Apart from undermining the espoused philosophy of mission command doctrine, such policies hamstrung the Canadian Army’s deployed field forces, greatly limited its timely effectiveness and discredited the Army and humiliated its soldiers in the eyes of allies.\textsuperscript{82} This has now


\textsuperscript{81} Forces deployed in the UN and NATO missions in Bosnia were limited in the manner described herein. The author was the 2 RCR assistant operations officer and senior watchkeeper during Op Palladium, 1998. Additionally, forces deployed to Haiti in 2004 for Op HALO and placed under command of USMC forces following the overthrow of President Aristide were initially hamstrung in the manner described here. The author was officer commanding I Company, 2 RCR during this deployment.

changed. The delegation of reasonable authority to execute tactical level commitments by the appropriate levels of command in theatre in a timely manner, within the limits of the operational design and mission mandate of course, has not only made the Canadian Army’s deployed elements more effective, but has undoubtedly built the Army’s self-confidence, image and reputation.

**TRANSFORMATION OF THE INTELLECTUAL COMPONENT**

Whilst doctrine and its constituent elements should be as enduring as possible, there can often be a better description or articulation of its ideas. In this vein, Canadian Army doctrine has undergone a significant transformation.

The recently revised articulation of the continuum of operations construct and its constituent full-spectrum operations within the American British Canadian Australian New Zealand (ABCA) Armies Program and its subsequent adoption in NATO doctrine has been instrumental in the intellectual development of western armies, including that of the Canadian Army. It introduces nothing new in terms of historical military tasks, but simply articulates and illustrates in a clear, concise manner the range of tactical level activities and their constituent tasks that an army undertakes, and has always undertaken, in order to prosecute any campaign. In turn, it has been made clear that part of the operational art is to ensure the correct balance across that range of tactical activities—offensive, defensive, enabling and stability activities—in order to achieve the operational level objectives and desired end state. Thus, in such a case as counterinsurgency (COIN) or peace support campaigns, in which security of a population and mitigation of social strife are key, the emphasis will likely be on activities focused around civil-military cooperation capabilities, engineer...
support and manoeuvre forces needed to secure a population, with offensive and defensive operations being conducted as required.\textsuperscript{85}

Although nothing new, this doctrinal concept has formally articulated the broad range of tactical level activities that the Canadian Army, as a line army, must be expected to undertake, often simultaneously or in close sequence, regardless of the nature of the campaign and the adversaries faced. Furthermore, it has put paid to the concept that an army can divide itself into two forces, one for conventional operations and one for irregular threats, for experiences in operations have clearly shown the rapid transition that occurs across this full range of military activities, even within the same force, and thus the demand that the same force be capable of the entire spectrum of tactical operations.\textsuperscript{86}

The Army capstone doctrine \textit{Land Operations} has been substantially re-written. In addition to the concept of full-spectrum operations, it has placed at its centre the idea that both targeting and operations are to be comprehensive, in that they are to include both fires and influence activities (civil military cooperation, psychological operations and public affairs), considered simultaneously and conducted in a complementary, reinforcing manner to achieve the effects desired. As they are all tactical activities, they are all considered under the auspices of the G3 staff and considered together in the targeting process.\textsuperscript{87}

Furthermore, the publication has incorporated the philosophy of the Comprehensive Approach, which notes that a systemic approach with shared principles and practices across appropriate elements of power is needed to achieve enduring solutions to conflicts; hence, the Army realises that it alone is unlikely to achieve an enduring solution to a conflict and must work in conjunction with, often in a supporting manner, other elements of power. In short, there has been clear recognition that the army works to create a secure operational space in which other agencies—those that can create enduring solutions to civic strife—can effectively operate. Additionally, the doctrine has introduced the campaign planning concept of Campaign Authority that stresses the need to build perceptions of legitimacy across the various audiences affected by a campaign. This sense of legitimacy is important in all campaigns but particularly in those campaigns that contest with irregular adversaries the control of populations.\textsuperscript{88}


\textsuperscript{86} Department of National Defence, \textit{B-GL-300-001/FP-001 Land Operations}.

\textsuperscript{87} Ibid.

\textsuperscript{88} Ibid. It is interesting to note that the US doctrinal definition of irregular warfare stresses the importance of perceptions of legitimacy when faced with such adversaries: “A violent struggle among state and non-state actors for legitimacy and influence over the relevant population(s).”
On the impetus of the then Director of Army Doctrine, the Canadian Army produced its first COIN publication, originally drafted in late 2005. Whilst it borrowed much from British doctrine, related historical works and contemporary experiences and studies, it formalised the material to a degree previously unknown in Canadian doctrine. Written mainly from the operational level perspective, it articulates a philosophy unique to COIN campaigns, constituent guiding principles and tactical level prescriptions to help realise those principles.

In support of these doctrine developments and to enhance Army training, the Army has undertaken a renewed emphasis on lessons learned analysis. Detachments from the Army Lessons Learned Centre are embedded with multiple campaigns and regularly collect observations and conduct analysis to better inform doctrine and guide training.

**TRANSFORMATION OF THE PHYSICAL COMPONENT**

In terms of the physical component of the Army’s fighting power, that is, its physical capabilities and training, the transformation has in some cases virtually been a counter-transformation, akin to a counter-revolution, from that originally envisioned. It seems that reality has dislocated the vague conceptual ideas regarding the nature of current and future conflict and the benefits of technology that once fuelled the envisioned extent of capability transformation.

In some cases, forecasted transformations have been adjusted in a very logical manner to reflect a natural progression of affairs, but in keeping with enduring principles and proven practices. Unit and formation headquarters structures have grown to include ISTAR coordination centres to exploit the increase in tactical sensors and information sources and the fact that such systems can be concentrated against an irregular force relatively small in comparison to a conventional force. The notion of an ISTAR unit to achieve “information dominance” has been left behind with the realisation that all capabilities have an operational function of “sense” and that the key is coordination and processing of information in support of the commander’s decision making process.

Whilst legitimacy is especially important in those competitions over control of populations, it can be considered as a campaign planning consideration in all campaigns.

90 The director of Army Doctrine at the time was Colonel F. Lewis. The author was a member of the original drafting team for the counterinsurgency manual.

91 In January 2010, the Army Lessons Learned Centre had detachments in Afghanistan, Haiti and with the Op Prodius mission in the Middle East. Although the COIN manual was only distributed in January 2009, the Chief of Land Staff directed that it be reviewed so that it could be informed by the latest developments in Afghanistan.

Capabilities are being developed that complement the revised operational and tactical level doctrines and that are being demanded in the current conflicts. Civil-military cooperation (CIMIC), psychological operations (PsyOps) capabilities and the importance and role of public affairs are all being enhanced and better integrated across the Army. Whereas fires, or those activities that have a first order physical effect on the target, are considered battle-winning, these capabilities that seek to inform and influence target audiences and build perceptions of legitimacy are deemed campaign-winning capabilities. They are being made a permanent fixture in all formations and are planned to be allocated when appropriate down to the unit and even sub-unit level, mainly as a matter of course, rather than exception.93

The requirement for protected manoeuvre and intimate support to the infantry has been met by the purchase of Leopard 2 main battle tanks. These have helped to revitalise the Royal Canadian Armour Corps and subsequent distribution will see the creation of symmetrical regiments, each with a fully equipped sabre (tank) squadron and three lance (reconnaissance) squadrons.94 This combination will ensure the deployed Battle Groups will, if deemed appropriate, deploy with both sabre and lance capabilities. They will be grouped as appropriate rather than in forced groupings of uncomplimentary capabilities as previously heralded under the Direct Fire Support transformation model. Doctrine for these capabilities will reflect traditional manoeuvre doctrine, applied through the operational art to reflect the nature of the threat and campaign in question, rather than through imaginary concepts of “manoeuvre to strike”. Additionally though, and reflective of the construct of full-spectrum operations, doctrine publications for manoeuvre forces will include prescriptive details regarding the conduct of those stability operations so critical to the enduring success of many campaigns, such as the security of population centres and assistance to other agencies.95

In order to fully exploit the limited capabilities and depth of the Army, infantry battalions have been structured to be identical across the Army, and will

93 The unit Orders of Battle (ORBATs) for various missions such as Op Halo in Haiti (2004) and Op Athena (ISAF mission in Afghanistan) include the employment of CIMIC, PsyOps and public affairs capabilities at various levels of command. Such practices are being further tested in the Army’s Optimised Battle Group Experiment. See, Major Jim Terfry, ‘The Army of Tomorrow Optimized Battlegroup Experiment’, Chapter 5 in Toward Land Operations 2021: Studies in Support of the Army of Tomorrow Force Employment Concept (Kingston, Ontario: Department of National Defence, Directorate of Land Concepts and Design, 2009), pp. 5-7.
95 Directorate of Army Doctrine is currently re-writing doctrine for platoon, combat team and battle groups that will maintain the proven tactics for manoeuvre (fires and movement) but will also be expanded to incorporate tactics and techniques for stability operations and their constituent activities.
include two mechanised rifle companies and one light company, mounted in light patrol vehicles. Although this will negate the benefits of collective skill development and mass for light forces, it reflects the reality that light forces have a limited envelope of capabilities for a relatively small army requiring, by and large, a general purpose force.

In terms of fire support, operational requirements—based upon the enduring nature of conflict—have caused the Army to acquire 155mm M777 field guns for each of its close support regiments and the expansion of this system is planned as a standing capability. UAVs are being integrated into the Surveillance Target Acquisition batteries in order to better support both formations and battle groups with timely information.

Based upon the lessons learned from Afghanistan, direction has been issued to develop again assault pioneer skills within each battalion. Even the proven developments in information and intelligence systems and precision weapons have obviously not precluded the need for tactical mobility and force protection afforded by pioneer skills. Unfortunately, the limitation on manning will preclude the creation of formal pioneer platoons, and thus the direction has stipulated the individual training of two riflemen per section for a secondary skill set as assault pioneers. Whilst this is not an ideal solution, it is at least recognition of the importance of these skills and a means to maintain them until resources and will allow a better structure of formed platoons.

To the greatest extent possible, the Army is re-establishing the echelon system within its line units, having come to the realisation that tactical flexibility, operational reach and unit cohesion require these traditional...
structures. This will include affiliated echelon detachments down to sub-unit level.\(^{102}\)

Infantry battalion combat support companies—once deemed by many to be disposable—are now viewed as a foundation for the integration and husbandry of special attachments such as indigenous security force training teams (be they military, police or some other organisation), civil reconstruction elements, specialist advisors and elements from other agencies.\(^{103}\)

Assessment of the operational environment identified gaps in other capabilities that simply needed to expand rather than radically change. Intelligence capabilities have adjusted both focus and capabilities to understand elements of the environment other than an enemy. Electronic warfare (EW) capabilities are set to grow in order to exploit the vast array of sensors and information gathering capabilities that exist. As mentioned above, Psyops and CIMIC capabilities and training are expanding to meet the demands of working amongst and in support of civil agencies and populations.\(^{104}\) Furthermore, the Army staff college has begun short operational planning courses for members from other government agencies such as foreign affairs, so that they might better understand, inform and integrate with the military planning process.

Finally, the drawbacks of Whole Fleet Management have been realised and direction issued to end its practice.\(^{105}\) Although certain resource limitations may force some centralisation of equipment to be continued, as a general rule any fleets not needed for centralised, collective training or ongoing operational deployments will not be left to “sit idle” in a depot but placed in units or training centres.\(^{106}\)

Hence, in terms of the physical component of its fighting power, the Army has in effect conducted a counter-march by undoing many of the initiatives previously heralded as part of transformation and discarding many of the myths that motivated them. Not all lost capabilities have been recovered

\(^{102}\) Army force structure update from the Director of Land Force Development, Land Staff, Ottawa. See, Ibid.

\(^{103}\) Army force structure update from the Director of Land Force Development, Land Staff, Ottawa. See, Ibid. This concept is nothing new for under the previous infantry battalion structures, the normal inclination was to place attachments under the support company. The formal transformation of the Army with its deletion of combat support capabilities (mortars, pioneers and anti-amour) threatened this structure and thus capability.

\(^{104}\) Army force structure update from the Director of Land Force Development, Land Staff, Ottawa. See, Ibid.

\(^{105}\) Briefing to Directorate of Army Doctrine staff by Assistant Director, 1 March 2010, based on direction from Chief of Land Staff.

\(^{106}\) Army force structure update from the Director of Land Force Development, Land Staff, Ottawa. See, 3000-1 (A/DLFD) Land Force Development SITREP—January 2010. The tone of this situation report from the Director of Land Force Development indicates a definite contempt with which WFM is now viewed.
though, particularly those key to manoeuvre of an infantry battalion. Financial and resource limitations will always call for difficult decisions regarding which capabilities to retain and which to cut, but such decisions should be based on a sound assessment of the role the capabilities play in military operations and the enduring nature of operational environments themselves.

Conclusion

The Canadian Army’s recent experiences in Afghanistan and other contemporary theatres have brought significant changes and advancements to the Canadian Army, along all three components of its fighting power: the moral; the intellectual; and the physical. Not only has the Army been re-equipped in many ways, but more importantly it has gained a broader and deeper professional knowledge, re-discovered enduring truths of the nature of conflict, and re-built an image—for itself, its government and its population—of a combat capable, fighting force and strategic tool of the nation.

Ironically, this real transformation has been in many ways a virtual counter-transformation of that envisioned in the early part of this decade. The planned transformation of the Canadian Army stemmed in large part from fuzzy conceptual ideas about current and future conflict, forecasts of the benefits of technological superiority and was muddled by a poor understanding of doctrine, traditional force structures, the components of fighting power, and the true nature of conflict. The focus became the exploitation of technological advances to best an inferior, irregular foe. Capabilities and structures deemed relics of the past where discarded as being irrelevant: the necessity of integral direct fire support for tactical manoeuvre was forgotten; the value of armour was conveniently rejected and uncomplimentary systems forced together in a canard of revolutionary “system of systems” fire support; doctrine was twisted to suit temporal policies; integral capabilities for tactical effectiveness and overall fighting power of the infantry were dropped; echelons were removed from line units under a false presumption of benefits and effectiveness of centralisation; and, unit ownership of fighting vehicles was considered secondary to centralised training regimes.

This planned transformation was a breaking step with the past that caused the Canadian Army to in fact be out of step with the true nature of the operational environment. Faced with the reality of conflict, even against an irregular adversary, the enduring value of the Army’s doctrine, structures and capabilities was proven and is now being regained to the greatest extent possible. Where real gaps existed however, a natural transformation occurred to meet the demands of the operational environment at hand. Hence, all that was truly needed was a change of step, to put more emphasis on different capabilities (such as CIMIC and inter-agency
cooperation) to achieve the operational objectives distinct to the nature of the campaign at hand. It is nothing more than the operational art itself.

As the Canadian Army heads towards its next operational challenges and the ensuing capability development process it must be weary of suspect concepts and initiatives and the desire to discard proven and enduring doctrines and practices. Adherents to RMA dogma have adopted new concepts of “transforming transformation” and seemingly view the experiences of Afghanistan and other theatres as inconvenient distractions on the road to real transformation.\(^\text{107}\) In his 1961 farewell speech, President Eisenhower did well to warn his audience of the “unwarranted influence” of the military-industrial complex. Perhaps he should have warned too of the influences of the military-academic complex that espouses vague and woolly concepts and lexicons to dislocate enduring beliefs, doctrines and structures regarding the nature of conflict. Any suggestion to alter capabilities, structures and doctrines should be met with a simple set of questions: what is truly new, and why do the current structures and doctrines exist? Sadly, these questions were not clearly answered or at least asked when the Canadian Army began its transformation quest. In the end, it was the enduring nature of conflict that answered them.