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Royal Canadian Air Force CT-155
Hawks in close formation over
the desert during Exercise Antler
South, staged out of Naval Air
Facility El Centro, California,
30 November 2017.

DND photo CK02-2017-1043-033 by Ordinary Seaman Erica Seymour



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Non-Commissioned Members as Transformational Leaders: Socialization of a Corps



Invasive Augmentation Technology in Canadian Defence Policy



November 11th in Canada (From 1919 to the Present): The History of a Commemoration

MILITARY JOURNAL

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NOTE TO READERS

As a bilingual journal, readers should take note that where citations are translated from their original language, the abbreviation [TOQ] at the end of the note, which stands for "translation of original quote", indicates to the readers that the original citation can be found in the published version of the Journal in the other official language.

EDITOR'S CORNER

elcome all to the Autumn 2018 edition of the Canadian Military Journal. Quite an eclectic issue this time out, with hopefully at least something that will appeal to each of you, our highly-valued readership. On point, Doctor Ben Lombardi and Major Bill Ansell (RCAF), who both work for the Director of Naval Strategy, examine Canada's maritime strategic interests within the context of the nation's national interests from a hierarchy of importance. They conclude that, "...arguably...strategic interests ought to be a core element in strategic military planning. Employing a triage approach, and ranking strategic interests so that they fall into one of three broad categories - vital, critical, and substantial - allows an assessment of the relative importance of each interest, and, in some instances, their interconnectedness and contradictions."

Next, Major Ryan Kastrukoff, an experienced fighter pilot and previous contributor to this journal, maintains that: "War never changes because what motivates people to wage war does not change. By understanding these motivations, we can determine the leverage points required to cease hostilities sooner, and in so doing, hopefully reduce the negative consequences of war." Ryan is followed with a thoughtful examination by Chief Petty Officer First Class Alena Mondelli of the evolving leadership roles of senior Canadian Non-Commissioned Members in reaction to Canadian Armed Forces organizational change, a process that is ongoing. Referred to as transformational leadership, this process takes time for large-scale organizational changes to be accepted within the culture of a long-established organization. However, Mondelli believes that: "NCMs who understand and accept the change management process, and have embraced transformational leadership, are instruments of organizational socialization within an evolving professional NCM Corps."

Moving along, postgraduate student and Army Reserve officer James Murray explores the fascinating world of personal augmentation technologies, which "... consist of technologies covering a wide range of enhancements to human physiology and psychology," how they can improve one's strength, mobility, protection, perception, endurance and normal human needs for food and sleep. Murray examines this subject in depth, how it can impact upon future warfare, and concludes that: "Canada must arm itself with the knowledge of such technologies, and even consider their uses. It is prudent to take steps toward a limited implementation

strategy, in which invasive technologies are researched, developed, and implemented on a small scale." In our last major article of the issue, from an examination of *future* warfare matters, Professor Mourad Djebabla-Brun of the Royal Military College Saint-Jean, "...invites the reader to delve into the past and uncover the origins of November 11th, from the time it was designated in 1919, until it formally became Remembrance Day during the 1930s. It will explore how the history of November 11th reflects Canada's military commitments on the international stage throughout the 20th Century and the start of the 21st Century. Those commitments influenced the commemorative discourse and the way that the commemoration was perceived by Canadians through the decades."

In our Views and Opinions section, we offer three very different opinion pieces to pique the interest of our readership. In the first, Dr. Allan English, who currently teaches history at Queen's University, but is also a former air navigator and 25-year veteran of the Royal Canadian Air Force (RCAF), opines that, "...like many other Western doctrine processes, recent RCAF doctrine has been made more like sausage than the rational doctrine process described in writings on the topic." Then, Canadian Army Major Caleb Walker uses a sports analogy (rugby versus American football) to spur professional discussion with respect to what type of wars our army should train to fight, while further asking if we can realistically expect to be good at every spectrum of conflict. Finally, long-serving former artillery officer Major Kathryn Foss, who is now the Formal Inquires section head within Director General Military Careers, contends that, "...by promoting the diversity of dress of our members, we are in fact projecting our adherence to and valuing of human rights. We should move from the uniformity of appearance to the uniform application of personnel respect and support."

Then, our own Martin Shadwick takes a close look at the current government's Defence Policy commitment of the Canadian Armed Forces to Humanitarian Assistance and Disaster Relief. And finally, we close with four book reviews dealing with very different subjects for our readership's autumn reading consideration.

Until the next time.

David L. Bashow Editor-in-Chief Canadian Military Journal



A CH-148 Cyclone helicopter prepares to land on board Her Majesty's Canadian Ship (HMCS) Montréal during Exercise Spartan Warrior 16 in the Atlantic Ocean, 31 October 2016.

Military Planning, Canada's Strategic Interests and the Maritime Domain

by Ben Lombardi and Bill Ansell

Ben Lombardi, Ph.D., is a strategic analyst with the Centre for Operational Research and Analysis. He is embedded with the Naval Staff and works for the Director of Naval Strategy. His most recent publication was a study of the future maritime operating environment.

With extensive experience as an Air Combat Systems Officer, Major J.C.W. (Bill) Ansell (RCAF) is currently the maritime air advisor on the naval staff, and he reports to the Director of Naval Strategy.

Introduction

n her book, subtitled *Strategy in the Fog of Peace*, Emily Goldman writes with regard to contemporary global affairs that:

...there is no dominant threat, no single strategic challenger, no clear enemy. Relative to the Cold War context that forged and honed our strategic constructs, we now confront a greater number of threats, greater diversity in the types of security actors that can threaten our interests, and a more interdependent world in which rapidly emerging technologies quickly diffuse and are exploited by others in unanticipated ways.¹

According to *The Future Security Environment 2013-2040* prepared by the Department of National Defence, "...we are therefore presented with a dichotomy: 'the future cannot be predicted with certainty yet analysis must occur if the Canadian Armed Forces (CAF) is to be adequately prepared.'" Under these conditions, strategic military planning is rendered very difficult.

At its core, strategic military planning attempts to impose some control over uncertainty. But there are inescapable constraints, not the least of which is that the strategic environment is incredibly dynamic. Other countries with their own perceptions and interests, some adversarial, are similarly engaged - and their actions as well, are influencing global politics and are, in many cases, influencing our own assessments. Moreover, amid the modern era's tendency to focus upon war as a technical problem inviting empirically-based solutions, we often forget that what the British/American strategic thinker Colin Gray calls the, "... sovereignty of political will over war (and peace)," also introduces uncertainty regarding the frequency and character of war. That, too, has to be confronted by any planning process.³ As former US Secretary of the Navy Richard Danzig observes, "...the number and diversity of variables" that have to be taken into account, and that these variables "evolve in a complex and non-linear fashion," confounds multi-decade predictability.4

Given ubiquitous uncertainty, therefore, what can military planners in Canada or, indeed, in any country do? What process

can be devised to mitigate that problem? This is necessary given the stakes involved because no country can afford to be so wrong that inevitable errors cannot be corrected in time. One approach is to ground strategic planning in a deep appreciation of a country's interests. There is nothing particularly insightful in emphasising interests because the international behaviour of states strongly indicates that they often adhere to a sense of individual purpose. Citing one example, British military historian Hew Strachan notes, "...the infrequency of intervention despite the atrocities and humanitarian disasters in sub-Saharan

Africa provides counter-factual evidence to support the point. Without perceived self-interest, the Western powers are reluctant to use military force."⁵

Perhaps even more important, there is a long tradition of statesmen citing interests as the basis of their own policies. British Prime Minister of the day Lord Palmerston's maxim from 1848 that Britain had no eternal friends and no perpetual enemies, but only eternal and perpetual interests, and "those interests it is our duty to follow" is a well-known example. In our own time, some political leaders have grounded foreign policy perspectives on what they believed their country's interests are, or have made

reference to interests determining strategic priorities. The national security strategy released by Barack Obama in early-2015 outlined what it described as "...priorities based on a realistic assessment of the risks to our *enduring national interests* [emphasis added] and the opportunities for advancing them."⁷

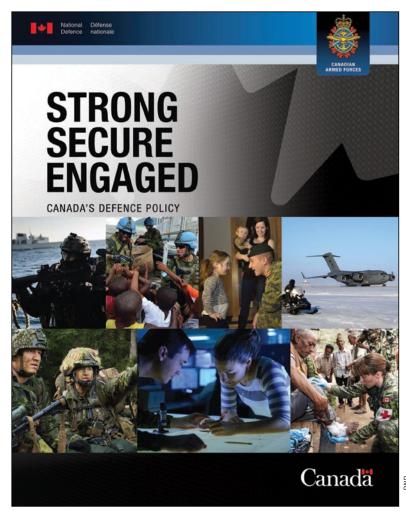
For Canada, emphasising interests presents a particular challenge because we have never tended to define exactly what our interests are. For much of the Cold War, strategic planning was dominated by existing military commitments. Given that the threat posed by the Soviet Union occupied a commanding position, the commitments outlined in the late-1950s remained largely consistent until the end of the Cold War. And, although these defence objectives might suggest an awareness of strategic interests, the latter were never explicitly identified. Speaking to this before a special parliamentary committee on defence (i.e., the Sauvé Committee) in 1963, the distinguished Czech/ Canadian author and journalist John Gellner urged greater attention to a national perspective of defence requirements in his testimony: "Instead of starting off with the military requirements set by our principals [i.e., allies], and then devising the means of fulfilling it in terms of manpower and materiel, we should begin with the definition of a Canadian national objective that requires a backing of force, and thus produce the force that can best do the job."8 When a list of objectives was eventually declassified in the 1980s, a parliamentary committee assessed that the lack of prioritisation and the absence of any linkage with military capabilities "...makes it difficult to judge

whether or not the [National Defence] department can, in fact, carry out its assigned tasks."9

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That lack of specificity is hardly surprising. Don Macnamara, a well-known Canadian specialist in national and international security affairs and strategic analysis, has written that while Canadian government references to national interest are "...often used in a noble or stirring way to support some government action or policy," the explanation for that interest being mentioned is not always obvious. ¹⁰ The general lack of such official declarations means that the three core missions – defence of Canada, defence of North America, and contributions to international

stability – found in defence white papers are probably as close to a comprehensive statement of strategic interests as most governments care to make. To its credit, the Trudeau government's *Strong, Secure, Engaged* does assert that interests are a key element underwriting Canadian defence policy, but it does not provide much detail beyond an acknowledgement of the primacy of "Canadian security and prosperity." Other strategic interests are also identified – "global stability, the primacy of the rules-based international order, and the principle of collective defence" - but the content of these categories is neither unpacked nor is their relative importance explored. Nevertheless, what is especially noteworthy is that this reticence is consistent with previous defence policies.



Interests and Strategic Triage

National interests are all about perceived self-interest. They can be defined as "the perceived needs and desires of one sovereign state in relationship to other sovereign states comprising the external environment." There is, nonetheless, a distinction to be drawn between those interests that might involve the use of military power and those that do not. Preserving a capacity for independent decision-making with respect to trade policy on a continent in which the US exercises a dominant influence is an example of a core Canadian national

interest. National environmental standards might be another. While the use of armed force can never be excluded in the relations between sovereign states, it is difficult to conceive how a resort to force by Canada would advance these national interests.

Strategic interests, on the other hand, are a subset of national interests that, should they be threatened, the use of armed force can reasonably be expected.12 They provide the principal rationale for maintaining capable armed forces. Furthermore, they provide decision-makers with a means of distinguishing between the many demands made upon limited military resources. After all, strategic interests are not all of equal importance. "A sense of priorities rooted in an established hierarchy of interests and values," a US study asserts, "is central to an interest-based approach to foreign policy."13 Author, academic and politician Michael Ignatieff has argued similarly: "...we need interests because we have to do triage, and triage is the essence of policy: making hard choices between what is desirable and what is fundamental."14 Triage informs the prioritisation of military tasks that underpin the development of sound military strategy and, because implicitly not all risks are equal, it provides the criteria for any assessment of capability gaps.

Emphasising interests creates an easily accessible framework that ties planning to policy outcomes. Military capabilities, defence procurement, strategies (necessarily incorporating threat assessments), and operational plans can be measured against a clearly defined requirement to protect, defend, or advance those interests. Furthermore, the same framework can be used to illustrate the strategic risk, and other consequences, of failing to do so. A first step is, obviously, to establish what those interests are. What is it that a country views as so important that it is willing to use armed force to protect, defend, or advance?

What are Canada's Maritime Strategic Interests?

For purposes of discussion, we can group Canada's strategic interests into three broad categories, presented in decreasing order

of importance – vital, critical, and substantial. Within each category, we can derive maritime components and thus arrive at Canadian maritime strategic interests, namely, those *focused upon*, or *influenced by* factors in the global maritime domain (see Figure 1). These factors include threats and likely sources of political frictions, current and future capabilities of allies and adversaries, the impact of climate change (i.e., the opening of the Arctic), as well as relevant technological developments (see Figure 2). Arguably, it is the ability to make this correlation so easily that validates the claim that Canada is a maritime country.

Vital

Sovereignty over Canada's ocean estate
Protection from attacks originating from the sea
Prevention of the use of Canada's ocean estate for an attack against the US
The maritime foundations of national prosperity

Critical

Alliance commitments
Order and stability in regions of strategic importance to Canada
A rules-based international order
The protection of natural resources within Canada's ocean estate

SubstantialThe security of Canadians abroad

The alleviation of human suffering
International partnerships that are not part of a formal alliance
A viable maritime environment in which intentional damage is proscribed

Figure 1: Ranking of Canada's maritime strategic interests.

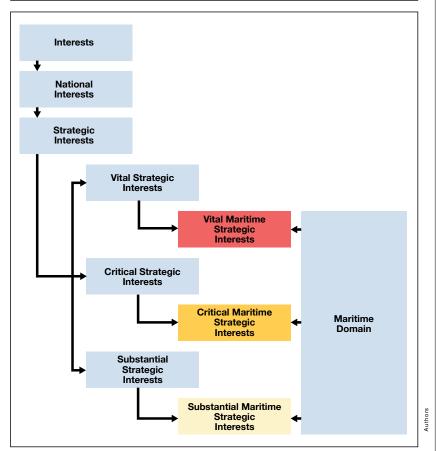


Figure 2: The formation of maritime strategic interests.

vuthors

1. Vital strategic interests

In any ranking of a state's strategic interests, those that are deemed to be vital are the most important. *Vital strategic interests* describe those things that a state and society need to exist as independent within recognisable borders, and as free from foreign control. Were an adversary to substantively damage these interests, the characteristics of a state and society, including possibly their continued viability, would be fundamentally harmed. Given their nature, the vital strategic interests of most advanced countries are remarkably similar; and include territorial integrity, respect

for government's authority within recognised borders, a population that is protected from foreign attack, stable social and political institutions, and a standard of living compatible with national understandings of human dignity.

For Canada, *vital strategic interests* reflect its advanced state of socio-economic development, its geography, and its demographics. They include protecting the territorial integrity of the country, defending its population from mass casualty attacks, countering any threat to its core institutions, and ensuring Canadian sovereignty

by preventing, deterring, and responding to external threats. And, again like many other countries, Canada's vital interests are often

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intertwined, and are therefore collectively captured by the notion of "national integrity." In *Strong, Secure and Engaged,* these interests are found in "Canadian security and prosperity."¹⁵

Geography dictates that there is an irrevocable maritime component to Canada's vital strategic interests. Ensuring Canadian sovereignty, for example, includes upholding the Government of Canada's authority within the country's maritime boundaries. Generally speaking, a list of Canada's vital maritime strategic interests must include:

- a. Sovereignty over Canada's ocean estate;
- b. Protection from attacks originating from the sea;
- Prevention of the use of Canadian ocean estate for an attack against the US; and,
- d. The maritime foundations of national prosperity.

The rationale for the first two interests is straightforward. Canada has the longest coastline in the world (over 244,000 kilometres), and has approximately 7.1 million square kilome-

tres of ocean estate (an area roughly equal to 70 percent of its land mass). ¹⁶ Canada's most important maritime strategic interest is, therefore, to preserve and defend its sovereignty in an enormous ocean estate, including territorial waters and the Exclusive Economic Zone (see Figure 3).

There is also the fact that Canada occupies the northern half of a continent shared with the United States, a more populous, wealthier, more powerful, and yet likeminded country. Security and prosperity, the foundations of Canada's existence as a stable, independent and affluent liberal democracy, depend upon cooperative and continuing amicable relations with a strong United States. There is nothing original in this assertion. It was voiced nearly 60 years ago by one of Canada's leading strategic thinkers, Robert J. Sutherland, who observed that: "...we should reflect that it is largely owing to our geography and our uniquely

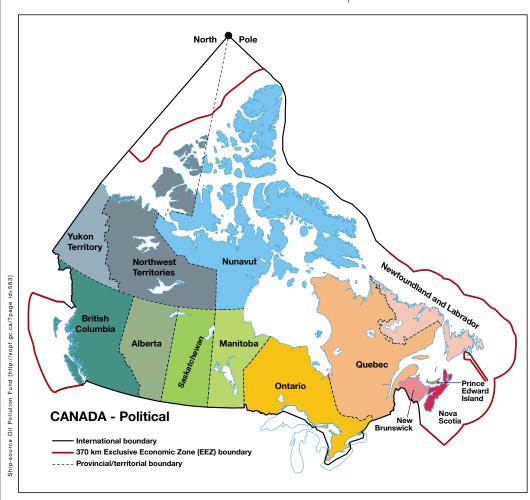


Figure 3: Canada's ocean estate.

close relationship with the United States that a nation of eighteen millions has been able to achieve so large a share of wealth, power and constructive influence."¹⁷

From a defence planning perspective, that relationship nevertheless comes at a cost in the form of strategic-level obligations. In 1938, Prime Minister Mackenzie King spoke directly to this:

We too, as a good and friendly neighbour, have our responsibilities. One of them is to see their country is made immune from possible invasion as we can reasonably be expected to make it, and, that should the occasion ever arise, enemy forces should not be able to make their way, either by land, sea or air, to the United States across Canadian territory.¹⁸

Prime Minister William Lyon Mackenzie King.

Twenty-five years later, Sutherland echoed this assessment: "...the price of Canadian national survival is a willingness to respect the security interests of the United States." By implication, therefore, Canada can never be perceived by Washington as either presenting or harbouring a danger to the US. Most often, it means aiding the US in continental defence, but Washington might also expect support and/or assistance overseas in dealing with national security challenges and threats. Regardless of what level of commitment is required, the imperative to respect "the security interests of the US" has not changed in the five decades since Sutherland. Indeed, it is increasingly salient in our time as Washington's sense of its own insecurity has grown in the wake of 9/11 and the revival of Great Power competition.

This strategic requirement has a maritime dimension in

Canada's home waters, namely that it is essential to prevent Canada's ocean estate from being used to conduct an attack upon the US. An inescapable geography dictates that "defence against help" - that is, obviating the need for the US to intervene unilaterally in our territory and/or waters has been a maxim in Canadian strategic thinking. Indeed, it is hard to imagine when it will ever lose its relevance.20 Therefore, controlling Canada's ocean estate has to be seen as a vital maritime strategic interest. By doing so and thereby making an effective contribution to continental defence and security, Canadian sovereignty vis-à-vis the United States is reinforced.

Lastly, it is vitally important that the country's prosperity and standard of living be protected as much as possible. Canadian exports of bulk commodities (i.e., oil, timber, ore, and agricultural goods) are overwhelmingly shipped by sea and, therefore, Ottawa has a strong interest in ensuring the security of international sea lanes for that trade to continue. There is, however, also a continental aspect that cannot be safely ignored. The economies of Canada and the US are tightly intertwined, as represented in trade, infrastructure, and transportation. Canadian prosperity requires continued access to the immense US economy. Nearly 45 percent of Canada's GDP is derived from international trade, but more significant is that most of that is generated by cross-border trade with the US.21 "Roughly three-quarters of [Canada's] exports of goods and services" go to the US, while only about eight percent go to the European Union and four percent to China (see Figure 4).22

and Archives Canada/C-027645

It is because of this level of connectedness that over the past three decades, a strong US economy has been a harbinger of prosperity and economic growth in Canada.23

	Country	Exports	Imports	
Trade – 47.	\$ billions			
adapted from Global Affairs Canada, Canada's State of and Investment Update 2016 (Ottawa: 2016), pp. 45 &	USA	395,458	362,716	
	European Union	39,444	52,942	
	Japan	10,107	10,894	
	China	21,452	38,898	
	India	4,498	2,929	
	Mexico	7,911	18,344	
	South Korea	4,219	6,153	
Data Trade	Rest of World	40,542	54,401	

Figure 4: Canada's trade (2015).

There is a crucial, if often overlooked, maritime dimension to the Canada-US trading relationship. An important foundation for national prosperity is the assurance that global commerce is able to access the world's oceans. Approximately 30 percent of

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US GDP is derived from international trade and, as a consequence of its economic ties to the US, Canada is indirectly dependent upon the global trading system.²⁴ It stands to reason that Canada's prosperity would be imperilled if the US faltered due to a disruption to the free movement of seaborne trade upon which American economic viability depends. And, as economic strength is a core component of national power, a less prosperous and confident US would increase the dangers facing this country.

2. Critical Strategic Interests

Immediately below those strategic interests that are considered vital are critical strategic interests. They are lower ranked because, while the existence of the state and/or society is not immediately endangered by their loss, the damage is so substantive as to often be considered incalculable. These interests are less universal than vital strategic interests and are, instead, more specific to individual countries. The defence of critical strategic interests naturally demands greater assessments by policy-makers as to whether and what scale of military force is appropriate to their protection, defence or advancement. Nevertheless, the nature of critical strategic interests means that failing to act when they are threatened could still be unacceptable to policy-makers, and probably the public-at-large. We can distill from a larger list of critical strategic interests those for which a maritime component is relatively easy to identify:

- Alliance commitments;
- Order and stability in regions of strategic importance to Canada;
- A rules-based international order; and,
- The protection and preservation of natural resources inside Canada's ocean estate.

Canada has used military power on a number of occasions in recent years to advance critical strategic interests. Recent examples of this include contributing to the NATO-led interventions in Kosovo (1999) and Libya (2013), participating in the stability operation in Afghanistan (2001-2011), supporting the multinational counter-terrorism operation in the Indian Ocean (2001-present), and reassuring NATO allies in the wake of Russia's seizure of Crimea and interference in eastern Ukraine (post-2014). Given the volume of these activities, it might seem that they are the most significant in defining the CAF's purpose. However, the ability during the past quarter century to devote so much attention to such operations has been possible only because vital strategic interests have not been threatened.

The fulfilment of alliance commitments that contribute directly to Canada's security and that of its allies is a critical strategic interest and has been so since at least the signing of the North Atlantic Treaty (1949). There are two reasons for this. The first and the most obvious is that alliances are generally constructed to augment national security through formal military agreements with like-minded countries. Membership in an alliance does, however, include a potential wrinkle in that those obligations might increase the range of dangers to which a country is exposed. Or

it might require the acquisition of capabilities

beyond what is needed for self-protection.²⁵ For example, in a highly institutionalised alliance such as NATO, force planning targets are allocated on the basis of threat/risk assessments that take a much broader perspective than that of any one member of the alliance. Throughout the Cold War, however, Canada's NATO obligations obviously also supported the country's vital interests. It is due to this overlap that Strong, Secure, Engaged identifies collective defence as a strategic interest.26

An additional reason for meeting alliance commitments is more intangible, but speaks to the significance of a country's reputation – a significant asset, particularly in times of strategic uncertainty. Canada's membership in NATO not only provides formal structures for the integration of a national military contribution both in peace and war. It also acts a force multiplier by facilitating Canada's ability to project power and influence - an important consideration for a country with relatively small armed forces. And, so long as the US remains a member of NATO, membership is a pillar of Canada's international reputation, not least in Washington. Membership also gives Canada access to various Alliance agencies and capabilities developed jointly at NATO (i.e., the Alliance Ground Surveillance, and the Maritime Multi-Mission Aircraft, programmes), as well as to other international forums (i.e., the OSCE) to which it might not otherwise have, and thereby helps bolster the nation's global influence.

NATO's collective defence obligations have always included an important maritime element, and this has had considerable influence upon Canadian defence policy. For example, early planning targets assigned to Canada by NATO were, in part, responsible for the RCN's development as a specialist anti-submarine warfare force.²⁷ That contribution to the Alliance deterrent during the Cold War confrontation with the Soviet Union complemented the need for North American (Canadian and US) land power to be safely transported in time of war across the North Atlantic. Following the demise of the USSR, the collective defence obligation has led to contributions to the Standing NATO Maritime Groups, support for NATO missions ashore, and, more recently, for the reassurance of allies and partners.

A second critical strategic interest rests in the promotion of stability in regions of strategic importance to Canada. By implication, this acknowledges that not all regions and countries are of equal strategic importance due, perhaps, to a combination of historical, economic or political considerations. It is, in part, for this reason that the Government of Canada has not deployed the CAF into every conflict environment, nor is there any

expectation that it would do so. Emphasising areas of strategic importance does not preclude acting on principle, but it does force policy-makers to distinguish between values and tangible interests.

There is a maritime element in an assessment of what regions of the globe are most important to Canada even if, as is most often the case, international crises and conflicts play out on land. This is because the movement of military assets and the prevention of similar

activity by an adversary can take place at sea. Therefore, it is frequently the case that land-based intervention to promote or impose regional stability requires seaborne support. This helps explain the RCN contribution to the international coalition in the Persian Gulf during the first Gulf War. Challenges to a region's stability often also have a maritime dimension. For example, disorder within the global maritime commons can restrict seaborne trade (and drive up marine shipping insurance rates) or might cause significant damage to undersea cables, both of which would generally endanger the global trading system. Instability, political tensions, and state fragility, including threats to key Sea Lines of Communication (SLOC) and maritime chokepoints, can threaten the interests of key allies and partners.

Third, Canada directly benefits from the international status quo. This interest has been upheld by successive defence policies and, as *Strong*, *Secure*, *Engaged* acknowledges, it continues to be critically important that the current rules-based order be maintained. ²⁸ This order is defined by a wide variety of international institutions (i.e., the United Nations), as well as international treaties, laws, and agreements. Taken together, they are designed

to foster stability and/or inject predictability into global affairs by constraining state behaviour, to offer mechanisms for the peaceful resolution of conflicts, and to mitigate the consequences of resort to armed force. Asserting this interest often also means having to confront those countries that do not agree with the current order.

A former Chief of the Maritime Staff, Vice-Admiral Dean McFadden, has argued that, "...among the most essential public goods of this globalized era is a regulated ocean commons." The international maritime order is particularly important to a status quo power such as Canada because the world's oceans require rules that define exactly what all states are *permitted to do* and what they are *prohibited from doing*. Without those rules, or with an alternate set of rules possibly based upon traditions distant to our own, the vast benefits accruing from the exploitation of the oceans might be distributed very differently. For Canada, the *UN Convention on the Law of the Sea* (UNCLOS) is a pillar of the status quo in the maritime domain forming the normative/legal framework within which many maritime issues are addressed by states. In effect since 1994, UNCLOS seeks to reconcile the traditional emphasis on the freedom of the seas to which all have

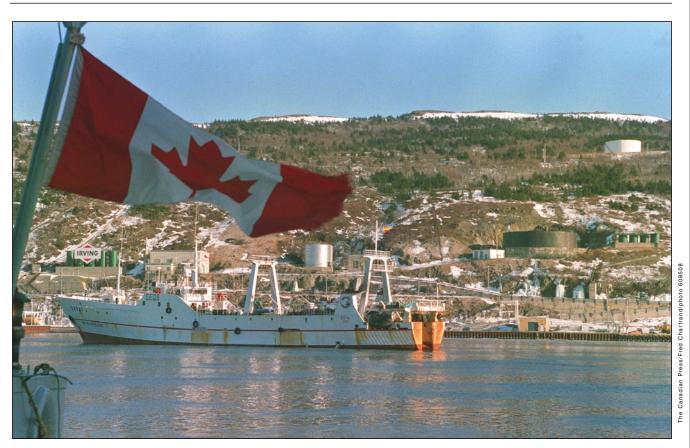
access with more recent claims made by countries to control or expand their ocean estates.³⁰ The order represented by that Convention provides an international legal framework that reinforces Canadian sovereignty in its ocean estate, including the Arctic, and it institutionalises Canadian authority for management of maritime resource exploitation within its EEZ. More generally, it contributes to predictability on the world's oceans. Ultimately, this helps to secure the commercial interests of those states, such as Canada and its leading trading

partners, heavily engaged in the globalised economy – including the United States, that has not yet ratified UNCLOS.

Finally, the protection of Canada's natural resources is critically important, both to the national economy, but also for the development of the country by future generations. There is a maritime dimension to this strategic interest off-shore in Canadian waters or on/beneath the seabed. Illegal exploitation of those resources (i.e., fish stocks, fossil fuels, and seabed minerals) would represent an infringement of the country's sovereignty. As ocean politics intensify in the coming decades, the exploitation of ocean resources will likely lead to an increase in confrontations at sea - and the possibility exists that intrusions might be backed by foreign governments.31 The so-called 1995 Turbot War, a fishing dispute between Canada and Spain about over-fishing on the Grand Banks just outside Canada's EEZ, is a case in point. This is of particular concern in the Arctic, where unexplored and untapped resources combine with increasing accessibility due to climate change against a backdrop of competing maritime claims. In such circumstances, it is conceivable that a resort to force to protect Canadian resources might one day be necessary.



HMCS Montréal sails past an iceberg in Arctic waters during Operation Nanook in the summer of 2017.



The Spanish fishing vessel *Estai* in St. John's harbour, Newfoundland, 12 March 1995. The vessel was seized by Canadian officials and brought into the harbour during the so-called Turbot War.



HMCS Halifax sails in the Caribbean Sea just outside Jacmel, Haiti for participation in Operation Hestia, 18 February 2010.

3. Substantial Strategic Interests

The third category of strategic interests can be referred to as Substantial Strategic Interests. Defending them might very well involve the use of armed force, but these interests are not vital or even critical to national survival or international stability. This does not mean that they are not important, only that their lower ranking affords greater flexibility to government decision-making. As a result, when looked at over many decades, one sees that substantial strategic interests rise and fall in the attention and resources allotted to them. Given limited resources and in times of great demand for military capabilities, these interests will likely be subordinated to more important vital and critical strategic interests. Conversely, in times of relative peace and security, countries may opt to employ military capabilities, and sometimes even deadly force, to protect, defend, or advance substantial interests. These sorts of missions might also appear to be more normative or value-laden. The number of this type of strategic interest is, therefore, potentially large and depends, in part, upon a variety of influences, including the outlook of the government of the day, public opinion and international developments. From among such a lengthy potential list, the most important of Canada's substantial strategic interests with a clear maritime component would likely include:

- a. The security of Canadians abroad;
- b. The alleviation of human suffering;
- International partnerships that are not part of a formal alliance; and,
- d. A viable maritime environment in which intentional damage is proscribed.

In the discussion of Canadian strategic interests, humanitarian concerns cannot be ignored. Human security has emerged as a substantial strategic interest for Canada, and this has become especially important as Canadians increasingly travel, work, and reside abroad. A rise in terrorist attacks and political unrest in different regions of the world would threaten the security and safety of Canadians abroad. Given the actions of other countries in rescuing their citizens abroad, as well as Canada's own recent behaviour (i.e., Operation *Lion* in Lebanon in 2006), it is conceivable that there would be an expectation by the Canadian government and/ or the public that Ottawa would do likewise.

Second, there is often a strong demand by Canadians, foreign governments, and world opinion, for advanced countries with the necessary capabilities to contribute to missions that alleviate human suffering in the face of humanitarian or natural disasters. In doing so, there is no question that there could very well be a maritime dimension to Canada's response. Due to limited and/

or damaged infrastructures, maritime access may be the only and/or safest, and most timely way to deliver assistance (i.e., Operation *Hestia* in Haiti in 2010). For Canada, responding to humanitarian concerns is frequently an obvious example where interests and values often overlap. And yet, the decision to act is not only informed by normative considerations. A by-product of humanitarian relief is that the country's international prestige might be greatly enhanced. Even if not explicitly factored into mission planning, growing Canada's soft power can advance other national interests.

Third, maintaining defence partnerships has always been a component of the Canadian strategic outlook. Although not as important as a formal alliance, these partnerships nonetheless increase Canada's international influence. They help build defence relationships that might prove useful in the future, frequently facilitate power projection (i.e., offsetting a lack of capabilities, or supporting the creation of overseas operational and support hubs) and foster greater situational awareness of global dynamics. In recent years, for example, the RCN has forged a strong partnership with the

Chilean Navy through naval talks, training, and exercises. This paid a valuable dividend when, in 2015, a *Mutual Logistic Support Arrangement* (MLSA) between the two countries allowed the RCN to use a Chilean resupply ship to support its Pacific Fleet in the absence of a Canadian AOR capability.

Lastly, Canada has declared a strategic interest in protecting the global environment, and, at sea, the maritime environment. Since 1993, DND provided annual aerial surveillance to the Department of Fisheries and Oceans Canada in support of international agreements aimed at deterring illegal, unregulated, and unreported fishing in the global maritime commons, including, for example, the UN moratorium on high seas driftnet fishing.

It is conceivable that the current understanding of this strategic interest could become more expansive. World opinion has already begun to see the oceans as a common global heritage. This has

been captured in the 1992 Rio Declaration on Environment and Development, to which Canada is a signatory. Unilateral decisions (including legislation) by individual states have given further expression to this perspective. The Turbot War is an example of this since Canada acted beyond the boundaries of its ocean estate to protect migratory fish stocks. Over time, as unsustainable exploitation of the oceans increases, it is possible that demands will arise for military power to protect the maritime environment beyond national boundaries. For Canada, it is possible that a

more interventionist approach to ecological defence could one day assume greater importance.³²

"Lastly, Canada has declared a strategic interest in protecting the global environment, and, at sea, the maritime environment."



HMCS Chicoutimi escorts Peoples Liberation Army (Navy) ships visiting Victoria on behalf of the Chinese military, 13 December 2016.

ID photo ET2016-0468-03 by Corporal Carbe Orellana

Conclusion

Strategic military planning is a difficult task, particularly when the international security environment is characterised, as it is now, by enormous uncertainty. In such a context, determining what will be needed in terms of military capability, as well as explaining those future requirements, and doing so in a way that is both convincing and easily accessible to policy-makers, only compounds the difficulty. Focussing upon strategic interests could, however, have a positive effect in addressing that challenge. Strategic interests highlight the purposes for which a country raises and maintains a military establishment – and draws attention to the range of missions that a country might reasonably expect its armed forces to be able to undertake. Moreover, the focus upon strategic

interests provides a means of assessing risk, both in terms of what adversaries might do, and as a result of one's own force planning decisions.

Arguably, therefore, strategic interests ought to be a core element in strategic military planning. Employing a triage approach, and ranking strategic interests so that they fall into one of three broad categories – *vital*, *critical and substantial* – allows an assessment of the relative importance of each interest, and, in some instances, their interconnectedness and contradictions. An awareness of the differences ought to be an important input for the prioritised assignment of defence resources and should inform decisions about future capabilities.



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Carl von Clausewitz.

War Never Changes: An Alternative Practical Model of War

by Ryan Kastrukoff

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Introduction

n his treatise *On War*, penned in the early-19th Century, the Prussian general and military theorist Carl von Clausewitz commented that the "...degree of force that must be used against the enemy depends on the scale of political demands on either side." This underpins the theory that will be advanced herein. Each belligerent in

war exerts themselves to a degree and in a manner defined by their intentions. Furthermore, the motivations that have the greatest effect are those of the soldiers and populace that are called upon to support the war. These motivations can be categorized and placed upon a spectrum, and they define the level of exertion the belligerent is willing to undertake. War never changes because what motivates people to wage war does not change. By understanding these motivations, we can determine the leverage points required to cease hostilities sooner, and in so doing, hopefully reduce the negative consequences of war.

The contemporary spectrum of war keeps changing seemingly with each new conflict, creating new terms to define itself, including gray zone, ambiguous, irregular, hybrid, limited- conventional, and theatre-conventional, among others.² In 2006, the Oxford historian Hew Strachan asked:

If we are to identify whether war is changing, and – if it is – how those changes affect international relations, we need to know first what war is. One of the cen-

tral challenges confronting international relations today is that we do not really know what a war is and what it is not. The consequences of our confusion would seem absurd, were they not so profoundly dangerous.³

This article proposes a *spectrum* of war with three *categories* of war that can be validated with reference to all military history. The key shift from previous spectrums is defining

war not in terms of *how* it is fought as the current military strategic culture espouses, but instead, by defining war in terms of *why* it is fought. The ultimate intent of the theory is to provide predictions and directions to those prosecuting current and future wars.

The first category is national resource-driven war common to Imperial expansion efforts placed on the far left of the spectrum

(see Figure 1). The second category is placed at the far right of the spectrum and follows an existential mandate to destroy or enslave outsiders, and it is common to ideological, religious, and

cultural wars. The third category connects the two extremes, and is a personal resource-driven war common to wars of independence and class. This article will define each category, then will clarify how the categories connect and interact. Finally, an example and some predictions are made with respect to current conflicts.

National Resource War (Military War)

This is conventional war. One state starts a war with another state by a declaration in words or actions. The goal of National Resource Wars is to create a new resource balance. The podcasting historian Mike Duncan highlights how the Roman Empire,⁴ the Spanish Conquistadors, and other empires have historically expanded with force to control

new resources.5

"In these conflicts.

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Throughout this category, nations will take as many resources as possible. Extended hostilities however do not profit the state. The ancient strategist Sun Tzu noted: "... there is no instance of a country having benefited from prolonged warfare." Quickly completed wars of conquest can be worth the risk and many rising empires have used this type of war to great economic effect. Ultimately, this war will end once a new profit balance has been struck, for better or for worse. As the conflict progresses, the negative economic effects increase quickly and tend to pressure engaged governments for a resolution. Eventually, both sides will have to acknowledge the unprofitability of further conflict, and peace can be struck. The 'shock and awe' strategy has value here as it highlights the likelihood of an unprofitable outcome, which may decide the fight itself is unprofitable.

Once these conflicts end, stability between belligerents can be improved by increasing the economic ties between them. Post-Second World War US-Japan relations, and the European Union, both followed this model, ultimately decreasing the likelihood of hostilities, due to the significant economic ties that now bind them.

Each individual soldier in these wars has a minimal level of personal engagement. The soldiers are professionals and their key motivators are the avoidance of death and the acquisition of personal capital in the form of fame, rank, or perhaps, loot. In their more extreme versions, these conflicts use paid mercenaries. Not all soldiers in any conflict have the same motivation. Herein, we are looking at the average motivation of the group. These motivations become most apparent when the army is wet and cold, or when there is insufficient food or pay for extended periods.

In these conflicts, classic manoeuvre warfare is valid, and technology provides force multipliers. These are the



Painting of Sun Tzu, China Military Museum, Beijing.

conflicts that national militaries are designed to fight. The mindset and processes of militaries have developed over centuries to win these conflicts by parsing war as a matter of attacking and holding ground. It is similar to a game of capture the flag, where once one side has captured the flag, both sides acknowledge that the game is over. This is the type of war that Clausewitz described, and for this type of war, his insights have great value. Because these wars are the reason standing militaries were created, we can also categorize them as Military Wars. Since the close of hostilities in the First World War, international conflicts have been farther right on the spectrum than Military Wars.

Cultural War

Next, we will 'jump to the opposite end of the spectrum.' Merriam-Webster defines culture as the customary beliefs, social forms, and material traits of a group. Our definition therefore includes national, religious, tribal, and other ideologically-defined groups that are at war.

Cultural Wars are the most dangerous type of conflict as they can abandon self-interest. In contrast, Military Wars can literally become a quantitative calculation; a formula that highlights when a war is no longer worth fighting, and a peace is the economical, logical, and best solution for all. Military Wars are a negative-sum game when protracted, but in short bursts, they approach zero-sum. In contrast, Cultural Wars are wars of atrocity. They are, in their extreme, wars of genocide and the only quantitative 'victory' is when the opposing belligerent is completely wiped out. This is at least an order of magnitude more than the negative-sum game, and it never approaches zero-sum. Extreme Cultural Wars can, over time, entangle the entire population as combatants, since one side is willing to wipe out the majority of their own side to ensure the other side loses more. This is the anti-logic conflict

where one cannot plan for the adversary to make moves in their best interest. This is the conflict of the suicide bomber and the slaughter of non-combatants. Fortunately, there remains an element of predictability, albeit irrational, once motivations are known.

Cultural Wars start with personal ambition, but to gain 'buyin' from the populace, the movement is attached to perceived oppression or historical slight. Unfortunately, the number of people capable of starting a Cultural War is vastly larger than the number of people that can start a Military War. Heads of State, or those with significant political power can push a nation into a Military War. However, anyone with enough charisma, regardless of social position, can start a Cultural War. These wars are based upon the worst aspects of humanity, and they drive people to turn their fear, shame, despair, and all manner of negative emotions into action. 'Us' versus 'Them'... What defines 'Us' and what defines 'Them' changes as required for the purposes of the sect leaders. Nazis, ISIL, Crusaders, and participants in countless other conflicts were due to the extreme conception of 'Us' versus 'Them.' These wars are not new, and they are a barometer of the feelings of a public. A downtrodden population is more likely to find solace in a strong group, where they are the 'Us,' and there is a definite 'Them' to blame for all hardships.

A Military War can devolve into a Cultural War. The oft-quoted political theorist Niccolo Machiavelli noted that: "...however strong you may be in respect of your army, it is essential that in entering a new Province you should have the good will of its inhabitants." When this is the case, a Military War can end and everyone can move on. If, however, a conquering army cannot maintain the good will of its new inhabitants, the necessary negative conditions can develop to produce cultural rifts. If we assume that the First World War was a Military War, then post-war Germany included enough hardship to allow a few charismatic leaders to



Islamic State of Iraq and the Levant (ISIL) fighters travel heavily armed across a desert in the back of pickup trucks.

use the old cultural divisions to start a predominantly Cultural War shortly thereafter. The motivation of the individual soldier in Cultural Wars is an existential mandate to make sure the other side loses. Machiavelli highlights that "when States are acquired in a country differing in language, usages, and laws, difficulties multiply, and great good fortune, as well as address, is needed to overcome them." These wars will not be 'won' with standing military forces. If one's military is strong enough to handle the inevitable shift to a war of attrition, then they may prevent you from losing for a time. However, victory in these battles is not achieved through manoeuvre warfare.

The only way for a military to defeat a culture is to wipe it out completely, but genocide is both immoral and impractical. There is normally no profit gained in these wars. There is simply 'Us' and 'Them.' And for 'Us' to win, then 'They' must perish. Religious extremism has been a useful way to convince masses of people to 'go down this road.' If, for example, you can convince people that their

everlasting soul will be better off dying now for a cause, suddenly, the requirement for selfless sacrifice turns into a requirement for selfishness, and it is much easier to be selfish than to be selfless. If these wars are so easy to start and so hard to stop, how have we as the human race not utterly destroyed ourselves by now? To simplify the answer, it amounts to a normal distribution of personal opinions where the extreme positions are held by a minority. The Overton window¹² theorizes that there is a block of opinions that the public will accept. Generally, extreme positions are outside the window, and they are written off as fringe politics. However, under certain conditions the window can shift far enough for extreme positions to become acceptable to a populace. Extreme political views that are accepted by a populace are an

important pre-condition for Cultural Wars to flourish. An alternative solution to genocide therefore is to shift the Overton window away from the extremist position and remove the support it provides. Machiavelli suggests one such method by sending colonies into the new land to provide a stabilizing influence on the region.¹³ Alternatively, supporting the moderates *within* an adversary community could shift the window away from extremes. Practically, this implies that sanctioning and isolating of

rogue nations, such as North Korea, is counter-productive, and instead, suggests more mixing with the international community. Ultimately, the best way to win this manner of war is to persuade the majority of the adversary populace that the cultures are not sufficiently different to warrant violent actions.

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"Once hostilities have

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quickly as possible."

North Korean leader Kim Jong Un reviews as troops and equipment parade through Kim II Sung Square in a show of military might on the eve of the 2018 Winter Olympics in Pyeongchang, South Korea.

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Once hostilities have ended, it is imperative that voluntary cultural ties be strengthened as quickly as possible. Involuntary cultural assimilation can have the opposite effect, as evidenced by the Canadian case of First Nations residential schooling. ¹⁴ Cultural ties can take many forms, exemplified by Canadian multi-culturalism, the US melting pot, and certain kinds of colonization. However the method, cultural rapprochement is required to maintain peace following Cultural Wars, just as economic rapprochement is required following Military Wars.

There are many more pieces to explore in this category, and all relate to determining exactly *why* these conflicts occur. Exactly what are the definitions of 'Us' and 'Them' being used, and what are the arguments that convince so many people that they are an 'Us,' and why they must fight against 'Them.' The insights gained from these investigations can provide the tactical direction to successfully engage and win these Cultural Wars.

Personal Resource War (Policy War)

The third category is a transition area between the extremes that can be called Personal Resource Wars, or Policy Wars, although the more common description for these conflicts is Revolution. The average motivation of the soldier is still the key factor in determining where on the spectrum the conflict

will rest. During revolutions, the goal is to improve the status quo of the citizen soldiers. This could be due to a desire to abolish slavery, as was the case in the later stages of the Haitian revolution, 15 to avoid new taxes or trade restrictions, as in the case of the American, French, and English Revolutions, 16 or to remove an occupying force, exemplified by Mao Tse Tung's Chinese communist revolution. The revolutionary armies of Policy Wars differ from the standing armies of Military Wars in that they are not fought by professional armies. Instead, they are fought with citizen soldiers. Since revolutionaries do not generally have a professional standing army to call upon initially, Policy Wars often begin with one side resorting to variations of guerrilla warfare. Mao Tse Tung states explicitly that there is "...no reason to consider guerrilla warfare separately from national policy."17 It is important to note that these same tactics can also be used in Cultural Wars, and with respect to action alone, they can be indistinguishable. The distinguishing features between them comes from individual soldier motivation, and it is this motivation that will define the path to victory.

To rally the citizen soldiers to action, high-minded ideals are often brought forward through propaganda, including references to liberty and equality. Machiavelli notes that when these groups rebel:

[I]t can always screen itself under the name of liberty and its ancient laws, which no length of time, nor any benefits conferred will ever cause it to forget; and do what you will, and take what care you may, unless the inhabitants be scattered and dispersed, this name, and the old order of things, will never cease to be remembered, but will at once be turned against you whenever misfortune overtakes you, as when Pisa rose against the Florentines after a hundred years of servitude.¹⁸

As Mao Tse Tung noted: "...because guerrilla warfare basically derives from the masses and is supported by them, it can neither exist nor flourish if it separates itself from their sympathies and cooperation."19 These wars end when the desire of the populace to return to their daily lives outweighs their desire to gain concessions from their government. This lends itself to a strategy that increases the basic noncombat hardships upon the individual soldier, including temperature extremes, lack of food or pay, combined with governmental policy shifts granting some of the desired concessions, either to the revolutionary leadership for short-term gains, or to the populace for longterm gains. Strategically, fighting should be kept to a minimum, since both sides are often from the same nation and the negative impacts of battles are felt two-fold, regardless of who wins. Tactically, the most useful plans include a vigorous information operations campaign intended to highlight concessions made while



Portrait of Niccolo Machiavelli (1469-1527).



Mao Tse Tung (1893-1976) addressing a meeting.

also creating a rift between the soldiers and their leaders.

Post-conflict management for a Policy War is more of the same. Policy will *need to shift* and remain shifted to prevent further rebellion. Not all concessions must be granted to the revolutionary leadership, but enough are required to re-balance the scales for the citizen soldiers such that the hardships of daily life are preferable to the hardships of revolutionary fighting.

This category of wars is called Policy Wars to highlight the cause of the conflict and the source of its ultimate conclusion. Ill-conceived policies of governments are what leads to these conflicts, and the rectification of those policies, not the use of arms, is the best solution to this manner of conflict.

Motivation-Based Spectrum of Conflict

The three categories mentioned thus far serve as signposts on a spectrum of conflict. In this section, we will look broadly at how the transitions work from

Starts With:	National Economic & Territorial concerns	Personal Economic & Land concerns	Present Oppression/ Perceived Historical Slight
Tactic to Employ:	Rational Maneuver Warfare with Armies in the Field	Information Operations and Precision Strike	Minimal Force until adversary mobilizes in the field
Motivation of Soldier:	Wealth & Avoid Death (Professional Soldier)	Improved Daily Life (Citizen Soldier)	Existential Mandate (Citizens)
Spectrum of Conflict: Imperial Resource/Military Personnal Resource/Policy Cultural			
Strategy to Employ:	Shock and Awe Military Campaign	Minimal military engagement, policy changes to re-engage populace	Cultural Persuasion and Assimilation
End by:	Economic advantage lost for both sides	Populace desire to return to daily life	Annihilation (rare) OR Alienation of extremists by moderates
Post Conflict Management:	Increase economic ties with adversaries	Increase political ties with adversaries	Increase cultural ties with adversaries

Figure 1: Tabular view of motivation-based spectrum of conflict.

one end-to-end, showing the flow and logic that connect the categories. We will briefly sub-categorize each section and will limit our focus to a few key areas. Figure 1 is a tabular depiction of some key points.

The farthest left of the spectrum is sub-categorized as Imperial

Mercenary Wars. In these wars, there is no interest desired or required from the population at large, and war is purely a politico-economic contest to increase wealth and power. The soldiers fighting this kind of conflict are professional mercenaries who have no attachment to the side for which they fight. Some recent examples include US-contracted soldiers that operate in the oil-rich areas of the Middle East. These are the wars of the ruling elite that do not raise the passions of the populace. Next to Imperial Mercenary Wars we find Imperial

Wars. These are very similar in intent to the Imperial Mercenary Wars, and again, are primarily wars of the ruling elite that do not necessarily resonate with the civilian population. The key difference is that herein they have transitioned from pure mercenaries to the national military doing the fighting, because it is their job to do so. The American side of the war in Vietnam is an example of an Imperial War, since the national military was used. However, the public at large was not particularly convinced of the need for war, and it did not fully support conscription. The farthest

right sub-category of Military Wars are wars again fought by the national military, but as suggested earlier, now the populace is sufficiently engaged to support conscription. The start of the war remains heavily influenced by the ruling elite, but there is enough public approval to support national levies. The First World War is a good example of this manner of Conscription War.

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When sub-categorizing Policy Wars, we find that the number and dissonance of the policies in question are key factors. On the left of this region are cases when only a few policies need to change, exemplified by the English Revolution of the mid-17th Century. In this case, the motivation was only to reform the tax system, and not (initially) to overthrow the monarchy. Slightly farther right of this would reside a group that wants independence, often due to requested tax and trade reforms, as was

the case with the American Revolution of the late-18th Century and the Latin-American Revolutions of the early-19th Century. ²¹ Finally, at the far right of Policy Wars we see primarily class conflict, such as the early stages of the French and Haitian Revolutions of the late-18th Century. What distinguishes these conflicts from Cultural Wars is that the conflict ends when the government is *replaced*, vice when the *ideology shifts*. The Haitian Revolution rests on the border line of Policy and Cultural Wars, since initially, it was a trade and tax revolt, but throughout the conflict, it slipped into



The Paris Commune storm the Tuileries Palace on 10 August 1792. Painting by Jean Duplessis-Bertaux.

ictorial Press Ltd/Alamy

an ideological war against slavery.²² This also demonstrates the inclination of the spectrum towards the right, and how extended conflicts tend to 'slide right' over time.

When sub-categorizing Cultural Wars, we find that the desired end state of a belligerent is the key factor. On the left side are the ideological wars where once the adversary is convinced of the 'error' of their ways, they can continue normal life. Such cases often present as religious wars, wherein once they have been converted to the 'proper' ideology, there is no more conflict. While there are a number of examples of conflicts briefly inhabiting this sub-category, it is a very unstable solution that often degrades farther right on the spectrum, as was the case in the later stages of both the French and Haitian Revolutions.²³ The center sub-category is occupied by Enslavement Wars, where once the 'master' race has dominated, the conflict ends and the adversaries can/may survive in subjugation. Colonial wars are often Enslavement Wars. Historically, Nazi Germany and some Islamic extremist groups passed through this stage briefly before they ended at the far right of the spectrum in a sub-category called Genocidal Wars. In this extreme region, the goal is to wipe out the adversary at all costs. Google the keywords 'past genocide' and you will be inundated with examples of this sub-category of conflict.

The length of the conflict is a major factor in how far it will 'slide right,' and where subsequent conflicts will materialize. Clausewitz notes:

If war is an act of force, the emotions cannot fail to be involved. War may not spring from them, but they will still affect it to some degree, and the extent to which they do so will depend not on the level of civilization but on how important the conflicting interests are and how long their conflict lasts.²⁴

Clausewitz also writes:

If the enemy is to be coerced you must put him in a situation that is even more unpleasant than the sacrifice you call on him to make. The hardships of that situation must not of course be merely transient – at least not in appearance. Otherwise the enemy would not give in but would wait for things to improve. Any change that might be brought about by continuing hostilities must then, at least in theory, be of a kind to bring the enemy still greater disadvantages.²⁵

The goal, therefore, is to target the weakness in the motivation of the combatants and shake their resolve. In Military Wars, this resolve is shaken through defeat on the field and through the inability of a belligerent to field an army. In Policy Wars, this resolve is shaken by removing offending policies. In Cultural Wars, this resolve is shaken by isolating the extremists from the population and removing the cultural divide that are a precursor to hostilities.

Cross-Category Conflict

Multiple factions can fight different kinds of wars simultaneously. To clarify this point, we will use a mildly-hypothetical scenario. Nation Alpha has recently been ceded from Empire Bravo. Nation Alpha's geographical boundaries include a number of tribal groups that historically are not friends. The region is of strategic international interest, due to its natural resources and trade routes. One day, Empire Bravo invades and annexes part of Nation Alpha and conflict begins.

Clausewitz states:

"When conflicts are not

in the same category,

one side may declare

victory while the other

side has barely begun

to fight."

[T]he political object – the original motive for the war – will thus determine both the military objective to be reached and the amount of effort it requires... The same political object can elicit differing reactions from different peoples, and even from the same people at different times... The nature of those forces therefore calls for study... Between two peoples and two states there can be such tensions, such a mass of inflammable material, that the slightest quarrel can produce a wholly disproportionate effect – a real explosion.²⁶

Additionally, there can be more than two belligerents and they need not be states. Nation Alpha is fighting a Policy War

to maintain local control of tax and trade, in effect, a war of independence. Empire Bravo is fighting a Military War for control of resources. But it does not stop there... Allies of Nation Alpha will come to their defence fighting an Imperialist Military War. Meanwhile, segments of Nation Alpha who prefer Empire Bravo are fighting a Policy War against their own Nation Alpha. Yet other segments are fighting a Cultural War also against parts of Nation Alpha, due to the historical conflicts between the regional tribes. Therefore, at the outset

of this one conflict, we see all categories of wars being fought simultaneously. This begs the question, if one single conflict can include all categories of war, then of what practical value is this categorization of wars?

When conflicts are not in the same category, one side may declare victory while the other side has barely begun to fight. As Clausewitz writes: "...the defeated state often considers the outcome merely as a transitory evil, for which a remedy may still be found in political conditions at some later date."²⁷ These battles at cross purposes can easily confuse the 'victor,' and over time, drag them into defeat. Generally, whoever is farther right on the spectrum defines the conflict and controls the declaration of victory. This highlights why it is easier to drag conflicts towards the right of the spectrum. For those who will not admit defeat but are unable to maintain an army in the field, they can simply 'slide right down the spectrum,' such that having an army in the field is no longer required. Mao Tse Tung noted: "...guerrilla warfare has qualities and objectives peculiar to itself. It is a weapon that

a nation inferior in arms and military equipment may employ against a more powerful aggressor nation."28 He also highlights the motivation of the soldiers as an important factor in the prosecution of war, saying: "...the antiwar feeling now manifested by

the Japanese people, a feeling that is shared by the junior officers and, more extensively, by the soldiers of the invading army...[makes Japan] inadequate and insufficient to maintain her in protracted warfare."29 The US diplomat Henry Kissinger furthered the point, stating: "...the conventional army loses if it does not win. The guerrilla wins if he does not lose."30 Thus again, we are vexed by the question, if one conflict can include so many categories of war, what is the point of the spectrum? The answer is that armed with this knowledge of motivations, we can 'divide and conquer.'

much of a Cultural War but the Policy War fought with trade embargos is known."

"It is unknown how exists with North Korea,

Our next goal is to win any Policy Wars. This needs very little in the way of military force and is primarily won through diplomacy and re-engaging disenchanted segments of the population. Since the policies causing the conflict are likely known at

> the outbreak of hostilities, this resolution can be progressing simultaneously while armies are fighting in the field. Once these policies are modified, the impetus for a Policy War is removed and now victory can be declared and political rapprochement can begin. But again, the conflict is not yet over...

> Our last goal is to win any Cultural Wars. This is the most volatile form of warfare, and it requires the most finesse. Some military action may be required. However, these actions

should be minimized and handled carefully by the local forces. As Sun Tzu warned: "... [there] are roads which must not be followed, armies which must not be attacked, towns which must not be besieged, positions which must not be contested, commands of the sovereign which must not be obeyed."32 The specific road to victory now depends upon the specific cultural differences causing the conflict. It is important to highlight a key point in any negotiation; the goals of the adversaries may not be mutually exclusive. In whatever fashion practical, the goal here is to cull out more and more of the radicals, so that the violence decreases over time, allowing for cultural rapprochement. This phase will be time consuming. It requires finesse and the least amount of external physical intervention possible.

In this manner, the spectrum of conflict, along with information with respect to who is fighting and why, provides a roadmap for the practical steps required to prosecute conflict. While all categories of wars can and should be fought at the same time in the manner described earlier, it is worth noting that, in general, the conflicts farthest left on the spectrum will end first, while those on the right will take more time. The extreme right case of genocide is an exception to the largely 'hands-off' approach for Cultural Wars. If the geography is sufficient to separate the adversaries with an enforced neutral zone, then genocide could be thwarted in similar fashion to current United Nations processes. If, however an enforceable neutral zone is not possible, then those under threat of genocide must be evacuated and taken in as refugee citizens, providing opportunities for cultural rapprochement globally.

Sun Tzu writes:

If you know the enemy and know yourself, you need not fear the result of a hundred battles. If you know yourselves, but not the enemy, for every victory gained you will also suffer a defeat. If you know neither the enemy nor yourself, you will succumb in every battle.³¹

We can directly relate this to our example. If you know neither the enemy nor yourself, then you as an ally of Nation Alpha, will move your own forces into the region, occupy vital points, and skirmish with all those who fight alongside Empire Bravo. By fighting all adversaries in the same manner, you are making martyrs of those fighting a Cultural War, you are becoming the oppressor to those fighting a Policy War, and as soon as the transition from field armies to guerrillas occur, you will be harassed indefinitely and will lose the support of your own populace. In this way, you will (probably) succumb in every battle. If, however, you know yourself, and that your populace is only interested in supporting a short-term military action, then you will have an exit plan and will maintain your own nation's support. In such cases, however, you are still making martyrs and becoming an oppressor. Therefore, with every victory gained, you will also suffer a defeat later at the hands of insurgents. Finally, if you know the enemy and know yourself, then you can plan out your actions early in the hostilities, as will be described below.

Here is where the spectrum allows us to 'divide and conquer.' First, fighting on foreign soil, we know there is a limited window to use our military and we therefore plan to keep our forces in the country for a minimum time with a pre-planned exit strategy. We keep our forces deployed only long enough to defeat the adversary while they remain an army in the field, our military goal in this Military War is not stabilization. As soon as the adversary switches to guerrilla warfare, we remove our military. In this way, we achieve victory in the Military War. But the conflict is not yet over...

Testable Hypotheses

he scenario advanced developed above has already ■ identified some key factors that apply to the recent conflicts in Ukraine, Syria, Iraq, and Afghanistan. Therefore, the recommended actions are the testable hypotheses.

Another testable hypothesis relates to the ongoing conflict with North Korea. With no militaries in the field, this conflict is not a Military War. What we should do next depends largely upon the unknown motivations of the North Korean populace. Therefore,



Ukrainian fighters rest after returning from the front line in Shyrokine, 7 March 2015

the solution is to interact with North Korea as much as possible to gauge their motivations and to factor into follow-on actions. This is in opposition to current international sanctions on North Korea (and Iran). It is unknown how much of a Cultural War exists with North Korea, but the Policy War fought with trade embargos is known. To resolve the conflict, we need to alter our policy and allow for economic ties to increase. Then, if it turns out there is also a Cultural War, we have some economic ties that create space for a cultural rapprochement. The relationship between China and the West follows a similar path. However, the Chinese style of government is not considered ideal to many in the West. Nonetheless, the continued economic interaction has allowed both sides to modify their positions and start the political rapprochement, albeit incredibly slowly. Large technological companies, such as Google and Facebook, for a time gained market access to China, permitting Chinese culture to slide [somewhat] towards the West.³³ To gain this access however, Western companies have had to modify their procedures permitting Western culture to slide [somewhat] towards that of China. If we allow North Korea to become a member of the international trade community, we open up all manner of opportunities for economic, political, and cultural rapprochement. These connections will create more opportunities for the international community to interact with the populace of North Korea, and will make it increasingly difficult for an extreme political regime to maintain their dominance. In short, economic sanctions and military brinksmanship have not worked against North Korea. The theory presented herein highlights some reasons why these options would not work and also offers an alternative solution, namely, inclusionism.

Conclusion

ao Tse Tung writes: "...the ancients said, 'Tai Shan is a great mountain because it does not scorn the merest handful of dirt." The same concept works in reverse, where to move a mountain we start by moving small stones. By knowing what motivates groups to fight together gives us the knowledge to break them apart, stop them, and create enduring peace.

Many of the individual ideas presented herein are not new, and their wisdom has been highlighted throughout the ages by many great political theorists. What *is* new is defining the spectrum of war, based upon motivations, and also by advancing the practical solutions the theory offers. Sun Tzu concludes:

[T]o fight and conquer in all your battles is not supreme excellence; supreme excellence consists in breaking the enemy's resistance without fighting...Thus the highest form of generalship is to balk [hinder] the enemy's plans. The next best is to prevent the junction of the

enemy's forces. The next in order is to attack the enemy's army in the field. The worst policy of all is to besiege walled cities.³⁵

For us to balk the enemy's plans we must know what those plans are. To know those plans and the intent behind those plans requires us to understand not *how* the adversary plans to engage,

but *why* the adversary is engaging at all. Armed with this knowledge, we can determine the *how* of the conflict to come, and can be appropriately prepared to win. War never changes. But understanding why wars occur will help to minimize the negative effects and, over time, may allow us to succeed in changing war.



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A grand military parade is held in Xilingol, Inner Mongolia, China to celebrate the 90th anniversary of the founding of the Chinese People's Liberation Army, 30 July 2017.



Command Chief Petty Officer, Royal Canadian Navy, Chief Petty Officer First Class Michel Vigneault (foreground) speaks to Chiefs and Petty Officers during a town hall with Commander, Royal Canadian Navy, Vice-Admiral Ron Lloyd (background) on board HMCS *Vancouver* during the Rim of the Pacific exercise, 18 July 2018.

Non-Commissioned Members as Transformational Leaders: Socialization of a Corps

by Alena Mondelli

Chief Petty Officer First Class (CPO1) Alena Mondelli, MMM, CD, BA, MA, is currently the Coxswain aboard HMCS Toronto. This article began as a paper and has evolved to become a part of her overall leadership and work in showcasing the dynamic evolution of the Non-Commissioned Member within the Canadian Armed Forces.

Introduction

ince the early-2000s, the Canadian Armed Forces (CAF) has been in constant change. Even before the publication of *Duty with Honour: The Profession of Arms in Canada*, the role of the Non-Commissioned Member (NCM) began to evolve in reaction to CAF organizational change. The uncertainty of modern day warfare and operations, coupled with growing leadership responsibility and an increasing knowledge base of technical and institutional information, began the process of creating a highly-capable NCM with the ability to engage at the operational and strategic levels of leadership.¹ With the publication of *The Canadian Forces Non-Commissioned*

Members in the 21st Century (NCM Corps 2020), an institutional acknowledgement by the CAF of the changing role of the NCM as "true professionals" within the Profession of Arms (POA) was declared. Since the introduction of NCM Corps 2020, professional development in the form of technical training and higher education, education in CAF values, military ethos, and transformational leadership, have all contributed to the evolution of NCMs as professionals and transformational leaders within a changing CAF. To this day, the change process is ongoing. It takes many years for large-scale organizational change to be socialized and accepted within an organization's culture. NCMs who understand and accept the change management process, and have embraced transformational leadership, are instruments of organizational socialization within an evolving professional NCM Corps.

To explore how NCMs, as transformational leaders, influence the socialization of change within the NCM Corps, it is important to discuss how the NCM has evolved as a professional within the Profession of Arms. Along with this discussion will be an exploration of leadership within the CAF, followed by

insight with respect to how transformational leaders influence socialization within an organization.

The Evolution of the NCM as a Leader

Traditionally, the role of decision making was held with the Officer Corps, and the applied technical role of leadership was entrusted with the NCM Corps.⁴ In 2003, the CAF intro-

duced *Duty with Honour*. It was the first in a series of CAF leadership manuals produced by the Canadian Defence Academy (CDA) in response to an array of factors, such as the Somalia Affair, a changing post-Cold War security environment, an uncertainty of the role of the CAF by Canadians, and the necessity of military ethos and leadership reform within the CAF.⁵ The doctrinal manuals were created to define leadership within the Profession of Arms, and to provide institutional guidance to leaders at all levels within the CAF with respect to how to lead as a member of the military.⁶ Of

significant importance was the identification of who constitutes a professional within a profession of arms. The NCM Corps, along with the Officer Corps, collectively carry out their leadership roles as *professionals* within the CAF: a distinction not made with respect to the NCM Corps until *Duty with Honour.*⁷ With a defined identity as a professional within the POA, the NCM has become an essential component of Canada's military capability and integral to the effectiveness of the CAF.⁸

Along with providing NCMs with a defined identity, *Duty with Honour* distinguishes a "fundamental division of responsibility in the [POA] between Officers and NCMs," based upon the competencies of authority and responsibility. Officers have the authority of command and the responsibility to lead subordinates, while NCMs have the authority to execute the responsibilities laid out in Queen's Regulation and Orders (QR&Os) for NCMs to "promote the welfare, efficiency and good discipline of all who are subordinate to them." It can then be stated that within the POA, Officers are commanders and leaders and NCMs are effective and

efficient task managers.11 Duty with Honour further acknowledges a key element to the Officer and NCM relationship: roles and responsibilities will evolve as changes in warfare and operations shift the leadership environment.¹² Officers will be required to delegate a greater degree of their authority to their NCMs with the potential to eventually share some authority and responsibility. 13 As demonstrated by the Second Battalion Royal Vingt-deuxième Regiment Battle Group in 2009, this prediction has since become reality in how counterinsurgency operations were conducted in Afghanistan. Battle Group command teams had to agree to "delegate and decentralize leadership to NCMs in order to give them greater flexibility and speed of action"14 for NCMs to carry out their missions. No longer is the decision-making role of leadership held with the Officer Corps and the applied, technical role of leadership held with the NCM Corps. The roles have evolved to allow for shared and distributed authority and responsibility between the two Corps and further strengthens the identity of NCMs being professionals who "apply this expertise competently and objectively in the accomplishment of their missions" within the POA.

The unpredictable nature of non-traditional asymmetric operations has placed a greater reliance on the autonomy of the NCM as a leader. NCMs are being given increased responsibility in a variety of operations where their actions have an impact

tactically and operationally. ¹⁶ The NCM must adapt not only *physically*, but *theoretically* to changes within their operational environment to elicit a reasoned response within an unpredictable situation. ¹⁷ This principle is a paradigm shift, and cultural change, from the traditional role of the NCM as being solely dependent upon the authority of the Officer Corps as they must now, at times, rely upon their own decision-making authority and responsibility. This relates to how NCMs, as leaders, can communicate and influence the socialization of this shift, and it shall be covered later in this article.

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Transformational Leadership

In conjunction with defining the Profession of Arms in Canada, the CAF produced doctrinal guidance with respect to military professionalism and leadership within the CAF. Membership in the POA comes with the intrinsic responsibility to lead with the values, beliefs, and norms that are the foundation of POA within the CAF. Briefly outlined within Leadership in the Canadian Forces: Doctrine, published shortly after Duty with Honour, is an introduction to the CAF view of leadership. The Doctrine further states how CAF leadership manuals will provide guidance to senior leaders in the development of the next generation of CAF personnel regarding their ability to be effective leaders. 19

The framework for the development of CAF personnel is with the Canadian Forces Professional Development System (CFPDS). Depicted in Figure 1, the CFPDS is defined as being,

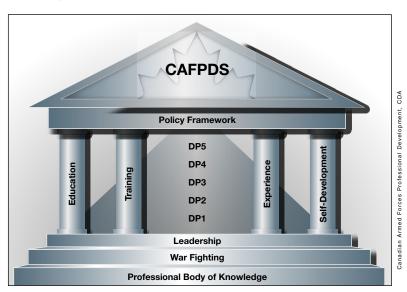


Figure 1: Canadian Forces professional development system.

"...a career – long, comprehensive, integrated and sequential development process of education, training, self-development, and experience." Encompassed within the purpose of CFPDS is the intellectual development of CAF personnel to acquire an ample Professional Body of Knowledge necessary for effective leadership throughout a CAF member's career.

Professional Military Education (PME) is what provides a Professional Body of Knowledge to all members of the CAF

throughout the various developmental periods (DP) of one's career.²¹ The NCM, as a professional within the POA, is not immune in acquiring a Professional Body of Knowledge. In the 13 years since the introduction of *Duty with Honour*, NCMs have been educated in a CAF leadership curriculum as they progress through each DP. A foundation in leadership theories around transactional and transformational leadership, and how those leadership styles impact overall CAF effectiveness, is first introduced to NCMs at DP2 by attending the Primary Leadership Qualification (PLQ). PME, including transformational leadership

and the expectations for NCMs to lead with it, is further expanded upon as NCMs progress in rank.²²

Transactional leadership was historically employed by CAF military leaders. Defined as, "...the economic exchange of skill and labour for a salary, benefits and other inducements offered to satisfy basic material needs."²³ It is a leadership style that employs an exchange framework of reward and punishment. Transactional leadership can be easy to apply and has short-term success.²⁴ However, should the style be abused by leaders, the perception of control and manipulation associated with a system of reward and punishment creates an environment of presumed inequity and mistrust against leaders and the organization as a whole. Therefore, the CAF has determined transactional leadership, on

its own, is not conducive to achieving the desired behaviours necessary for effective leadership and followership.²⁵ When used in conjunction with transformational leadership, the mix of transformational-transactional leadership can be an effective style, depending upon the shifting needs of a situation.

Transformational leadership made its mainstream appearance in CAF leadership lexicon with the publication of *Doctrine* published shortly after *Duty with Honour*. Prior to its introduction, there was very little known or understood about the leadership concept. ²⁶ Transformational leadership is built upon the foundation of relationship within leadership²⁷ and is, "...influence based on shared core values and mutual commitment and trust between a leader and [a follower], and

intended to effect significant or radical improvement in individual, group, or system capabilities."²⁸

Based upon the work of leadership theorist Dr. Bernard Bass, transformational leadership consists of four components a transformational leader will employ: idealized influence, individualized consideration, inspirational motivation, and intellectual stimulation.²⁹ Within a CAF context, the four components are defined as: *idealized influence* defines behaviours where the leader acts

as a role model, cultivating trust and respect in the followers; *individual consideration* is the relationship between the leader and the follower where the leader can focus on followers' needs for growth and achievement; *inspirational motivation* is where the leader presents a vision, sets high standards, and challenges followers to set goals; and *intellectual stimulation* happens when leaders promote the development of future leaders by challenging followers to think for themselves.³⁰

With a focus upon subordinate loyalty, trust, respect towards superiors, and motiva-

tion, transformational leadership has been instrumental in the paradigm shift from rules-based to values-based leadership within the CAF, particularly around ensuring member well-being and commitment.³¹ This is achieved by various behaviours leaders can use to influence their subordinates through different situations. As shown in Figure 2, transformational leadership requires a leader to be facilitative and supportive³² in their overall approach. These types of leader influence behaviours are inclusive and collaborative, and will create an environment conducive to the building of loyalty, trust, and ultimately, motivation. Transformational leaders inspire, motivate, and have the potential to change the culture within their sphere of influence.³³ Through their awareness and personal leadership, transformational leaders set the conditions through their application of relationship, values-based leadership,

"Transformational leadership with the CAF is based upon a much larger system of organizational values and the influential behaviours."

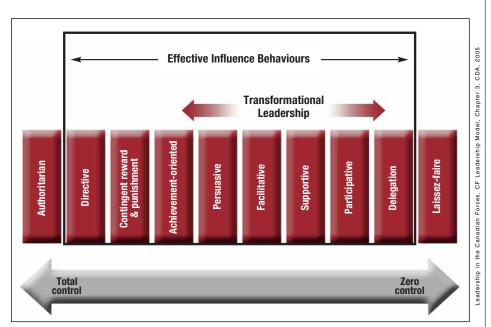


Figure 2: Spectrum of leader influence behaviours.



Colonel Chris Mckenna (right) and CWO Dan Baulne (left) Task Force Commander and Chief Warrant Officer for Operation *Presence – Mali*, respectively, in front of a Canadian CH-147F *Chinook* after its arrival at Camp Castor in Gao, Mali, 15 July 2018.

to shift old beliefs and behaviour patterns towards a mindset more favorable towards the leadership paradigm shift, and thus, they become the catalyst for the shift.³⁴

Transformational leadership within the CAF is based upon a much larger system of organizational values and the influential behaviours.³⁵ Values-based leadership within the CAF context is based upon leaders using core CAF values to guide them in the decision process. With a center grounded in military ethos, ³⁶ the CF Effectiveness Framework demonstrates why a leader must be cognizant of how their decisions impact systems internally and externally to the situation, their subordinates, and ultimately, to mission success.37 As briefly noted, how a leader uses values-based leadership to lead within the CAF is demonstrated by Figure 2, a Spectrum of Leader Influence Behaviours.³⁸ The behaviours are how leaders influence and communicate their intent to others, and they range from a leader who has total control: who is an authoritarian, to zero-control: laisse-faire. Of the eight behaviours, not including authoritarian and laisse-faire, the optimal behaviours for transformational leadership include, persuasive, facilitative, supportive, and participative influence behaviours.³⁹ The relationship-based behaviours that "... [inspire and empower] followers to perform effectively on their own"40 encompass Bass' four components described earlier with respect to effective transformational leadership.

With its quality to effect change by the very nature of its use, leading with transformational leadership will influence a change mechanism within a unit by a leader. Traditionally within the CAF, it has been the Officer Corps that has been identified as the cohort to lead change. As NCMs embrace transformational leadership and take ownership of their leadership abilities to influence followers through relationships and member well-being, and the awareness and management of internal and external factors to their unit or organization, the realization of their impact to effect change and influence mission success will begin to emerge within the NCM culture. NCMs can begin to identify themselves as effective professionals within the POA who lead with transformational leadership and who could potentially share, to a point, authority and responsibility with the Officer Corps.

What is essential to the overall change management process, regardless of rank, is an awareness by the leader to let go of old ideologies and approaches, and to guide and lead through transformational leadership.⁴² The nature of working within a hierarchical organization will naturally allow for the downward flow of influence from senior leaders to more junior personnel. However, a relationship focused, values-based organization also allows for more junior voices and concerns to have an influence. NCMs who adopt transformational leadership will consider concerns from more junior personnel when implementing a

commander's intent. This small change in behaviour, switching from a transactional approach to a participative approach, will facilitate the implementation of change, and it will be visible to everyone directly influenced by it. Those who choose to emulate the behaviour, regardless of rank, will become the momentum of the change process. However, for NCMs to successfully influence each other, they must first realize their potential to lead through change as transformational leaders.⁴³

As stated earlier, large-scale organizational change, in this case, a culture shift in the role and leadership of NCMs, can take a long time to be accepted, as it "...requires interventions at all levels of organization – whole system, team, relationships and individuals." NCMs who understand and accept the change management process, and have embraced transformational lead-

ership, will be instrumental in influencing socialization to their peers and followers the values, norms, and beliefs associated with being a member of the POA.⁴⁵

Influencing Socialization

S ocialization, or assimilation, is a process by which employees adapt to an organization's culture. 46 From the moment a person begins the recruitment process in joining the CAF, there are socialization processes occurring which slowly aligns the individual's rules, norms and expectations with that of the values-base of the CAF. Through a variety of rituals, ceremonies and rites of passages, such as the rigours of

Basic Recruit Training, the new recruit begins to identify as belonging to the CAF.⁴⁷ Socialization is also necessary when an organization goes through a process of organizational change. Complex organizational change where there is a change in ideology, such as a paradigm shift from rules-based to valuesbased leadership or the identification of NCMs as professionals within the POA, requires modification to the organizational culture.48 Change is communicated and orchestrated through various policy changes and education and training programs in an attempt to replace the old culture with that of the new.⁴⁹ During this period, the emergence of the transformational leadership and follower empowerment are essential to the success of change management.⁵⁰ The relationship-based nature of transformational leadership, coupled with leader alignment in organization values, provide the influence base to lead employees through organizational change.⁵¹

To discuss socialization and self-identity within an organization, it is also important to examine how individuals self-identify within various groups within a large organization like the CAF. A social group can be defined as where "the individuals concerned define themselves and are defined by others as members of a group." The NCM Corps, in essence, is a complex social group within the CAF. *Duty with Honour* further identifies the NCM Corps as professionals within the POA. Despite the institutional army-centric notion of "soldier first", the NCM Corps is made of various social groups where membership and self-identification are further defined by the service branch they serve under as either Navy, Army, Air Force, or Special Operations. NCM social groups

can then be broken down further by rank divisions between junior NCMs, MS/MCPL and below, and senior NCMs, PO2/SGT and above. It is clear to see, with just this simple breakdown, the importance for leaders to lead with a shared core organizational values base. Within the CAF, military ethos, which encompass CAF values, is what "binds the profession" and acts as a "unifying force" in integrating all the various social groups into one institutional CAF identity. NCMs not only self-identify as their occupation, rank, and service element, they must also self-identify as being a professional within the NCM Corps. The complexity and array of social groups creates a dynamic organizational culture within the CAF.

With the dynamic change environment occurring operationally and structurally within the CAF since the early 2000s, in

"The methods

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combination with the various social groups NCMs belong to, it can be deduced there is an atmosphere of uncertainty about the identity of the NCM Corps and what it means to be a professional within the Profession of Arms. This is especially evident for the more junior NCM who does not have the institutional development and expertise to cognize organizational change on their own. As stated earlier, NCMs who have embraced transformational leadership and understand organizational change are ideal instruments for socialization during periods of change and uncertainty within the CAF. As individuals within the NCM Corps, they "... start to see change as a tool that can be used to become something different."55,56 Their role of empowering followers and creating a more

social environment for self-identification, or group-identification, within the organization aligns followers to the values, norms, and beliefs of the organization and helps to mitigate the uncertainty.⁵⁷

The methods transformational leaders use to influence followers in organizational socialization are limited only by their imaginations and the circumstances within their unit or organization. An informal mentorship relationship between a Departmental Chief and a Division Petty Officer in a shipboard environment might not be as effective as semi-formal group information sessions with respect to change management between Logisticians in a supply warehouse. Ultimately, transformational leaders will challenge and inspire their followers to use new methods and mindsets to approach problems in creative ways, and will do so through shared core CAF values, mutual commitment, and trust. Socialization will occur as leadership inspires.

Further Discussion to Explore

During the writing of this article, it became clear to the author that further discussions on topics, such as NCM education and its effectiveness within the CAF, and the evolving relationship between the NCM and Officer Corps and its impact upon operational effectiveness, could provide further insight to the topics that were explored. Of particular interest, it became evident for the author that isolating the NCM, although beneficial for the means of this thesis, does not provide the whole picture of how organizational change has been socialized within the CAF. Understanding the Officer



Chief Warrant Officer Alain Guimond, 4 Canadian Division Sergeant Major, watches live fire exercises during Exercise Rugged Bear, 11 June 2014, in Wainwright Alberta.

Corps has its own unique social groups, further exploration and comparison as to how the Officer and NCM Corps adapt to becoming professionals within the POA would be beneficial in understanding change within the CAF and the effectiveness of the socialization of those changes.

The scope of this article was primarily limited by the unavailability of information pertaining to NCMs. Other than several peer-review articles and doctrinal publications, information on the topic is scarce. A search was expanded to other nations' Armed Forces to determine if similar research had been conducted or if information was available. Unfortunately, there is not very much information pertaining to enlisted members. Assumptions were based upon the relationship between CAF doctrine, peer-review articles on CAF NCMs, research surrounding numerous Officer Corps, and civilian corporate leadership practices. These sources validate the necessity for further research and exploration into the overall effectiveness of NCMs within an Armed Force. NCMs are employed within high level institutional and strategic level positions. Along with following commander's intent, their role has become participatory within creating commander's intent and implementing change that is felt down to the lowest ranking NCM. The influence and role of the NCM has expanded and further understanding with respect to how their evolution is impacting the CAF as a whole is necessary for the development of future NCMs. *Institutional Leader 2030*, the follow-on publication to *NCM Corps 2020*, is to be released soon, and will be the latest direction that will propel the NCM even further into the future.

Conclusion

The role of the NCM has changed. Gone are the traditional bonds that once held the NCM at the tactical level in a predominantly-technical role. As the operational climate, warfare, and culture-in-general changed, so too did the role of the NCM to meet those changing needs. In turn, NCM Corps 2020 was the institutional driving force that propelled the NCM into an educated and trained member of the CAF, and a professional within the POA. As NCMs embraced shifting leadership paradigms and adopted transformational leadership, their influence contributed, and continues to contribute, to the socialization of the NCM Corps with the organizational change that has been ongoing for almost two decades.



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A CC-130 Hercules carrying supplies for Operation Presence - Mali lands at the airfield in Gao, Mali, 10 July 2018.



Cyber army soldier.

Invasive Augmentation Technology in Canadian Defence Policy

by James M. Murray

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Introduction

umans have always tried to better themselves through the use of technology. Whether it be the ancient discovery of the wheel or the modern development of battery-powered smartphones, the human species sets itself apart from the rest by its ability to harness the raw ingredients of nature to achieve an unnatural quality of life. Many of these technologies exist apart from the human form, but some have had the express intent of improving our natural constitution in one capacity or another. This realm of technology is known as personal augmentation, and recent examples range from the use of

dextroamphetamines by military pilots, to the daily consumption of caffeine or tobacco. Personal augmentation consists of technologies covering a wide range of enhancements to human physiology and psychology. Infantry officer and Army force developer Major Max Michaud-Shields typifies these enhancements into four major provinces, physiomechanical, cognitive, sensorial, and metabolic. Physiomechanical technologies are described as those which "increase a user's strength, mobility, or protection," and range from simple enhancements such as knee braces to the load-bearing exoskeletons currently in development by the US Defense Advanced Research Projects Agency (DARPA).1 Cognitive technologies improve regular psychological capacities, and improve the acuity of the user.2 Examples of these technologies include Modafinil and amphetamines. Sensorial augmentations increase perception, allowing people to identify the otherwise obscure, and include thermal or infrared optics.³ Finally, metabolic enhancements improve the users "endurance, requirement for food and sleep, and their health."4



Modafinil or Modalet tablets.



A modular prosthetic limb with more than 100 sensors.

Throughout history, personal augmentations have generally, with some exception, been non-invasive. This type of augmentation is described as having no lasting impact upon a subject's ability to pursue a regular life without social stigma based upon such augmentations,5 nor do they physically alter the human form. In contrast, invasive technology refers to augmentations which do the opposite, common examples of which include cochlear implants, pacemakers, and prosthetic limbs. Non-invasive technologies have been popular for thousands of years, and contemporary computer technology has yet to surpass human cognition, physiology, and operation. It is predicted however, that in the very near future this will change. Michaud-Shields contends that, within 15-20 years, strides in power generation technology will allow for prosthetics which are not only desirable to replace human physiology, but preferable to it altogether.⁶ Shields makes specific reference to the use of prosthetics for soldiers in combat applications. In striking similarity, Dr. Andres Vaccari of the National Scientific and Research Council in Buenos Aires claims that by the year 2030, humans will become the weakest point in any given humanmachine system.⁷ Thus, human technology will soon surpass the physiological and psychological capacities of humans themselves, and could make invasive technology more and more appealing for use in both military and civilian contexts.8

Importantly, the Canadian Department of National Defence (DND) has yet to create any official policy on its stance towards invasive augmentations, although the dawn of such technology is nearly upon us. It is exceedingly important that this topic is discussed and decided upon as soon as possible, as the introduction of invasive technology into global militaries and civilian populations will create both existential threats to Canada's military forces from rival nations, as well as several socio-political issues within the Canadian Armed Forces (CAF) itself.

This article will offer a literature review on the topic of personal augmentation (PA), then analyze three different possible policy options which could be pursued by the DND with respect to such technology through the use of strategic evaluation. Ultimately, it will be argued that the DND should pursue limited adoption of invasive augmentation technology. This option will retain the effectiveness and relevance of the CAF in the face of changing global military trends, while reducing the impact such technologies will make on the structure and institutions of the Forces. Furthermore, this middle-ground option will give Canada flexibility in future international military regimes.

Literature Review

applications is still a future concept, no one can be sure exactly what realities the human species will be faced with in this regard. However, several scholars have discussed the possible benefits, as well as the integrational, ethical, and structural issues associated with the adoption of invasive personal augmentation. The debate between the use, or the abandonment, of invasive personal augmentation technology is largely a subsection of the much broader, lofty, and philosophical debate between conservationists and transhumanists.



A wounded soldier wearing battery-powered prosthetic legs.

Therefore, this literature review will draw from key scholars of both discourses.

When it comes to the adoption of invasive technologies, it is important to understand the many risks involved. Dr. Stéfanie von Hlatky (Queen's University) and Major H.C. Breede (Royal Military College of Canada) emphasize that such technology is, as of yet, not fully understood, and poses severe physical and mental health risks to soldiers who may be imbued with such augmentation.9 Moreover, invasive technology, until it is embraced by global populations, will render social stigma on those augmented.¹⁰ Such stigma may further alienate postcontemporary Canadian soldiers from everyday civilians, and exacerbate existing mental health issues among said soldiers.11 Therefore, technology pursued should be as un-invasive and reversible as possible in order to maintain happiness within the ranks of the CAF.12 Furthermore, Michaud-Shields raises the important risks of integration. The use of invasive PA would pose fundamental risk to the contemporary structure of the CAF, some soldiers having such augmentations, and some not.13

With respect to the question of morality, Andres Vaccari also has apprehensions about personal augmentation. In his work he raises several metaphysical and ethical questions regarding the mixing of biology and mechanical systems, stressing the need to maintain moral agency and responsibility for such creations. ¹⁴ Dr. Alex Leveringhaus of Oxford University makes similar arguments about the ability of augmentations to possibly effect the natural inhibitions of soldiers. In his view, every action must be taken to ensure that possible future augmentations do not affect the "moral agency" of modified soldiers. ¹⁵ However, in contrast, Dr. Ryan Tonkens, who teaches bioethics at Monash University,

expresses the belief that augmentations have a huge moral potential based on the presupposition that war is inherently unethical and unnatural. Following this, because of the fact that "war should not happen," any technology that protects soldiers from its harm may easily be considered ethical. This is not without exceptions, in the same light as von Hlatky and Breede's article, Tonkens believes all augmentations should pass some sort of theoretical test in order to ensure that they are "humanizing" rather than "dehumanizing." Essentially this would ensure the costs of an augmentation do not outweigh its benefits. Furthermore, augmentations could be created with the express goal of improving the moral behavior of soldiers, creating the opportunity to alleviate the horrors of war on not only the augmented force, but also the force in opposition. However, this would admittedly be difficult to achieve without compromising military necessity.

Another ethical issue arises when considering the use of invasive technologies in surgical procedures. This issue is brought to light in the findings of Dr. Katarina Hutchinson's and Dr. Wendy Rogers' work, philosophers who have studied ethical medical applications, when they discuss the morality of innovative surgical procedures. It is without question that as invasive technologies become more and more advanced, so too will their capacity to save lives in dire circumstances via various implants. In such situations military necessity may compromise the informed consent of the wounded, or informed consent may not be appropriately ascertained.²⁰ Furthermore, how far should surgeons go in order to save someone's life in extreme cases of injury? Saving someone's life using invasive technology may be accompanied by such an increase in "morbidity and mortality" of the patient that some, including the patient, might find it unacceptable.21 Somewhat similarly to Tonkens' 'theoretical test,' Hutchinson and Rogers

support the application of certain research standards that a given technology must pass in order to be utilized in situations where consent is impossible.²²

Many scholars, falling into the 'transhumanist' camp, consider personal augmentation, both invasive and non-invasive, as an inevitable path that humanity will follow one way or another. To scholars like Dr. Simon Young (McGill University), the human mind is the steersman of the body, an unworthy vessel which will decay and die against the wishes of the mind.²³ The American futurist Ray Kurzweil likewise claims that our human intelligence will drive

us towards greater efficiencies via the utilization of mergers with newly-created forms of computation and artificial intelligence.²⁴ To Kurzweil, this building of intellectual capacity is nothing but a new form of human progress, which has exponentially grown over the last few centuries. It is this building of intellectual capacity through integration with machines which will allow us to overcome greater and greater challenges presented to us by the environment.²⁵

Department of National Defence in regards to new technologies are well defined, at least nominally."

"The goals of the

Michaud-Shields and Dr. Stephen Lilley

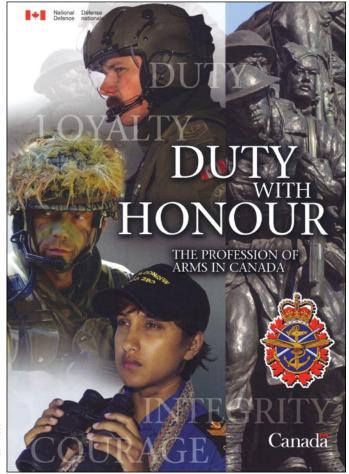
of Sacred Heart University Connecticut both make references to a certain inevitability of invasive personal augmentation technology in general society. Michaud-Shields references tattoos as a type of invasive augmentation that permanently alters a person's aesthetic, and thus there is no reason to believe that some would not be willing to imbue themselves with technologies rendering considerable advantages for the price of minor aesthetic alterations. Lilley furthermore suggests that while the process might be one of slow incremental change, it is likely that consumers will begin to adopt mechanical or computational augmentations that are largely "safe, reliable, and reversible." However, there will likely also exist a black market for more illicit and risky augmentations. It is almost without a doubt that both of these markets will be driven by "advertising/marketing campaigns, novel social movements, social competition, peer pressure, and strident politics." Dr. Armin Krishnan, a professor of political science

at East Carolina University, argues that even if government forces do not choose to adopt extensive personal augmentation technologies, Private Military Contractors (PMCs) certainly will.³⁰ This will be a dangerous eventuality, as augmented PMCs might become more effective soldiers than regular forces, increasing the usage of PMCs worldwide while decreasing the military accountability and moral responsibility of states at war.³¹ Perhaps even more dangerous, particularly to Canadian national security, would be a future where Canada and other NATO nations ignored invasive augmen-

tation while unscrupulous rival powers like China actively pursued it.³² This would give China or other rivals a considerable advantage over Western militaries, creating significant security threats due to resulting Canadian and NATO military obsolescence.³³

Method

The goals of the Department of National Defence with respect to new technologies are well defined, at least nominally. 'Duty with Honour,' a publication released by the DND, sees a successful future of the CAF as one in which the profession of defence continually develops a "higher order of understanding and knowledge of new forms of conflict."34 Furthermore, continued interoperability with Canada's close allies, the most important being the United States, is of the utmost importance.35 Finally, operational capability must be maintained in the face of changes in technology, geopolitical factors, and socio-cultural dynamics through "strategic guidance" and management. 36 These three major goals will be defined as doctrinal intelligence, interoperability, and organizational effectiveness respectively. Each of these goals contributes to the end state of the Department of National Defence, which is, "...a professional, operationally effective military that enjoys the trust and confidence of Canadians." With the major goals and end state of the DND defined, this article will now analyze three specific policy options regarding the adoption of invasive personal augmentation technology using a strategic evaluation. Each policy will be explained in detail, then examined, based upon their respective capacities to fulfill the three goals laid out by the Canadian Government using several subject areas of analysis. These subject areas are: (1) main actions, instruments, and characteristics, (2) expected benefits and losses, (3) effort, requirements, and costs, (4) constraints, (5) encouraging signs and warning signals, (6) flexibility, (7) public support, (8) assumptions, and (9) a final appraisal.³⁷ A strategic evaluation was chosen for its ability to effectively contemplate policy based upon several factors that are, as of yet, highly theoretical, by examining how such factors contribute to the long-term



CDA Press

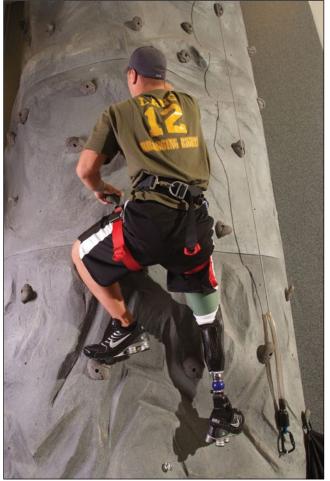
strategic goals of DND. It should be noted that each of the following policy options are long-term strategies, possibly taking decades to come to fruition.

Analysis

Policy Option A: Do Not Adopt Invasive Personal Augmentation Technology

- (1) This policy is the continuation of the status quo, circa 2018, of Canada's military with respect to augmentation technology. Military institutions will not be altered to accommodate augmented soldiers. Support programs for soldiers with augmentation will not be developed, and furthermore, the Canadian Government will not pursue research into the development or use of invasive augmentation technology.
- (2) There are numerous material benefits to this policy. It is the cheapest of the three options as there is no cost associated with the development of invasive augmentation technologies, nor the creation of institutions to accommodate them. It may be the most salient option to the contemporary public as well, as research and implementation into the field of invasive personal augmentation could be, at this time, considered morbid by a majority of the Canadian population. There are no immediate losses incurred by this policy option, but it could cause several problems over the coming years, depending upon the direction taken by foreign actors in the field of invasive personal augmentation. Depending upon that direction, this policy has the potential to fail or succeed in all three of DND's major goals, namely, doctrinal intelligence, interoperability, and organizational effectiveness. If the international regime can effectively contain and condemn the use of invasive augmentation technology, this policy is by far the best option. Canada would suffer no penalties based upon a lack of knowledge with respect to invasively augmented warfare, need not fear a loss in interoperability and trust between itself and close allies, and would not be subject to any loss in the effectiveness of its military organization relative to other state actors. If, however, the international regime opens the 'Pandora's box' of invasive technology, Canada may be forced to reevaluate its policy on the matter, or face the risk of military obsolescence. This obsolescence could come in the form of a lack of strategic understanding of the use of invasively augmented soldiers, the possible loss of confidence of allied forces in joint operations, and the loss of effectiveness due to the tactical superiority of rival nations.
- (3) Nil
- (4) Nil
- (5) If this policy is pursued, an encouraging sign would be the widespread disapproval of invasive technology from the Canadian public. More important than public opinion, however, would be a tacit or codified agreement in the international community to limit or ban the use of invasive personal augmentation in warfare. Warning signals would include anything that challenges an invasive augmentation-free international regime. This could be the adoption of such technology by a rival or friendly nation, or its widespread proliferation through the global private economy.
- (6) This policy option is neither particularly flexible nor inflexible. Policy can always be revisited and changed according to the international agenda, and thus, choosing not to pursue any sort of invasive augmentation technologies affords Canada

- the opportunity to 'sit back and wait,' reevaluating its position as necessary. However, procurement and development cycles can take more than a decade to implement. If Canada chooses to wait too long, the Canadian Military might find itself technologically left behind as a result.
- (7) This policy would not require the support of the public for the foreseeable future as it represents the contemporary status quo. However, this may change with time if invasive augmentations develop to render such a military advantage that the public feels threatened by their absence in the Canadian Armed Forces.
- (8) The assumption made by this policy is that invasive augmentation technologies will neither become adopted by foreign militaries, nor make a large impact in civilian markets. This may be because most people are simply too uneasy about the implementation of such technology, or it could also be because invasive technologies have not to date become considerably more effective than non-invasive alternatives.
- (9) This policy has the potential of achieving DND's goals, but requires the international system to behave in a very specific way in order to achieve them. It is the cheapest, but the ultimate goals of the government, as defined, make no mention of financial limits in achieving such goals. As this policy essentially risks each of the DND's major goals, it is therefore risky in its pursuit. Furthermore, it is dangerous to use this policy as part of a grand strategy to wait and see how Canada's allies and rivals react to invasive augmentation



US soldier with a prosthetic leg learns to climb a rock wall again after injuries sustained during the Iraq war.

Michael Ventura/Alamy Stock Photo/B2DW7N

technology. This is exacerbated by Canada's infamously slow procurement system, especially when considering such new technologies as invasive augmentations.

Policy Option B: Limited Pursuit of Invasive Augmentation Technology

- (1) This policy option will necessitate minor changes for the contemporary Canadian military, based upon the near-future
 - implications of invasive augmentation. First and foremost, it will mean government-mandated research and procurement of such technologies. It will, furthermore, make such technologies available for soldiers once they are deemed safe and fit-for-service. Under this policy, the government will not coerce soldiers into accepting invasive technologies, but it would have the ultimate goal of creating a new 'invasively augmented' unit, which would draw its strength through applications from special and regular force personnel. To support this unit, steps will be taken to develop service and support

networks for augmented soldiers in order to ameliorate the unique health and social issues by which they would be faced.

- (2) The benefits and losses of this policy option are at the 'middle of the road' between policy options A and C. The first major benefit of this option is the fact that Canadian high command will be able to deploy and use a regiment of invasively augmented soldiers in concert with the rest of the CAF. This will serve to improve CAF understanding of invasively augmented soldiers, identifying their benefits and shortcomings through actual use and improving doctrinal intelligence. This policy option also ensures that interoperability with allies will be maintained whether or not they choose to adopt augmented soldiers. Moreover, DND will ensure the effectiveness of the CAF in tactical situations by ensuring that the state has a force of soldiers with the latest technology to
 - face similarly-equipped rivals. Obvious drawbacks come in the form of a relatively greater cost than Policy Option A, as well as an awkward period of military restructure that may take years to find the proper balance with respect to organizational implementations.
- (3) The net cost of procurement, implementation, and support of invasively augmented soldiers is not yet known, and similarly, it may take some time to actually develop functional technology that is both safe and more beneficial than non-invasive augmentations.
- (4) Constraints come in two forms. The first form is the newness of the technology and the feasibility associated with such newness. Early development of functional invasive technologies

could be extremely arduous, as such technologies would have to pass rigorous testing and oversight. The second form of restraint might present itself through the public, which may not support the research and development of invasive technologies. Similarly, the public may accept the research of such technology, but not the implementation on any scale.

(5)(6) As this policy represents the middle ground, it is the most flexible in terms of its ability to adapt to international

"The second form of

restraint may present

itself in the public,

who may not support

the research and

development of invasive

technologies."

tides. Thus, if the international community avoids the use of invasive augmentations, Policy B can be quickly repealed without major consequences to the integrity of the Canadian Armed Forces. Likewise, if the international community moves towards their use, Canada is 'ahead of the game' in terms of research and development, and could consider expanding to Policy Option C with an already-solid foundation, should the world move in that direction.

(7) Public support for invasive augmentation technology is expected to increase slowly over the passage of time.³⁸ Thus, this

policy risks a contemporary lack of support. It may be pragmatic, however, to push this policy in order to achieve the benefits as soon as is practicable for Canada. To that end, the technology could be adopted as soon as the public deems invasive augmentation tolerable. The fact that the implementation of invasive augmentation would be voluntary could make it more palatable to the public in the short term.

- (8) This policy assumes nothing about the future, opting to remain flexible and relevant no matter what is the consensus on invasive augmentation.
- (9) This policy is a particularly robust option. It has the potential to fulfill the three major goals of the Department regardless of the direction the world moves toward in regards to invasive augmentation. Furthermore, Policy B can be expanded



A soldier with a prosthetic leg training for a parachute jump.

National Geographic Creative/Alamy Stock Photo/C27XA6

or regressed to Policy C and A respectively, based upon these changes.

Policy Option C: Full Pursuit of Invasive Augmentation Technology

- (1) This Policy represents an aggressive stance towards the implementation of invasive technology. Research and development of such technology would be of paramount importance to the CAF and should begin forthwith. The Canadian Armed Forces would similarly be completely overhauled in order to accommodate a regular force based around the use of invasive technology. Extensive service and support structures would be implemented with the express goal of improving the functionality and health of soldiers imbued with imbedded augmentations. When invasive augmentations are ready for implementation, soldiers will be required to sign new contracts accepting the possibility of invasive augmentation being issued to them, and refusal could mean component transfers, or release.
- (2) Benefits would stem from the early use and mastery of invasive augmentations. If such technologies are the way of the future, Canada could potentially become a leader in their global development. The Canadian Armed Forces would become, soldier-for-soldier, unmatched on the world stage in the short term, and military leaders would gain a peerless understanding of the maintenance and use of invasively augmented soldiers. Furthermore, if Canada's allies choose to pursue such technology, this will enhance mutual trust and joint operability.
- (3) The requirements and costs of this policy option would surely be tremendous. Augmentations would be provided to as many soldiers as possible, and military institutions will need to be completely ready to support this transition. Immense effort would be required to reformat the bureaucracy of the Department of National Defence in order to accommodate invasive augmentations.
- (4) Constraints to Policy Option C are similar to those faced by Policy Option B, but are considerably more acute. Furthermore, the military itself may resist this policy at this stage of global affairs and human culture, as a large number of soldiers may simply refuse to sign new contracts. There is a high probability the public would be against the mass implementation of inva
 - sive augmentations, and the government could face significant backlash as a result. Mass implementation strategies may be entirely premature as well, considering the feasibility of invasive augmentation is still largely unknown.
- (5) Encouraging signs and warning signals are opposite to those presented in Policy Option A. Encouraging signs would see global and/or allied moves towards the pursuit of invasive technologies. However, if these technologies are avoided by the global community, Canada may be seen as a morbid and unethical nation.
- (6) This option suffers from severe flexibility issues. The adoption of this policy will begin significant changes to the doctrine and structure of the Canadian Armed Forces that will be increasingly arduous to rescind over the passage of time. If the international community does not change in favour of invasive personal augmentation, Canada will need to regress

- to former policies if it wishes to avoid considerable stigma. The mass adoption of invasive technology would make this a rigorous process.
- (7) Public support for this policy is expected to be extremely low for the foreseeable future. Moreover, an extreme policy such as this could face active opposition from several sectors of Canadian society, including the military itself, if augmentations prove themselves to be too morbid.
- (8) This policy assumes that invasive augmentation will become a natural part of human society in the future. Thus, international actors will quickly move towards the development and implementation of such technology as it becomes available.
- (9) This policy is not recommended, at least not in the contemporary period. The policy would have little support from Canadians or from Canada's allies. While it would ultimately ensure that DND achieves its three major goals, the costs of this policy would be too great to bear by modern Canadian society. Importantly, this policy should be revisited as time goes on to ensure Canada does not fall behind in terms of military capabilities. Furthermore, Canadians would likely be more willing to accept this policy if invasive augmentations become widespread in civilian markets.

Conclusion

"Invasive augmentation

is upon us whether

or not we choose

to accept it."

I nvasive augmentation is upon us, whether or not we Lecture characteristic characteristics characteristics to accept it. As such technologies become more and more effective, it is inevitable that the unscrupulous will use them to their advantage. To many scholars, invasive augmentations are nothing more than the natural next step for mankind. Therefore, for the sake of pragmatism, Canada must arm itself with the knowledge of such technologies, and even consider their uses. It is prudent to take steps toward a limited implementation strategy, in which invasive technologies are researched, developed, and perhaps implemented on a small scale. This should prove the most flexible option in

> dealing with an international community as of yet uncertain with respect to the use of invasive augmentation. Likewise, this will keep the Canadian Armed Forces prepared for more eventualities in an international context, ensuring effectiveness, state-of-theart military doctrine, and interoperability with allies who may be drawn to invasive technology.

It is not without certain apprehensions that this recommendation is advised. There are many shortcomings to this proposal. Many of these shortcomings stem from the fact that invasive technology that is preferable for combat applications does not yet exist. Thus, the cost and time commitment of implementing and supporting such technology cannot yet be quantified. Furthermore, it is as yet unknown to what degree such technology may be reversible, although it might be safe to assume that reversibility will increase given development time. Lastly, only the future can tell how our citizens will react to the introduction of invasive technologies. It may take significantly longer for them to become mainstream than many scholars propose, and thus, significantly extend the time it might take for the latter two policies described to become palatable.





Futuristic army sniper.

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Over the Top, Neuville-Vitasse, 1918, by Lieutenant Alfred Theodore Joseph Bastien.

November 11th in Canada (From 1919 to the Present): The History of a Commemoration

by Mourad Djebabla-Brun

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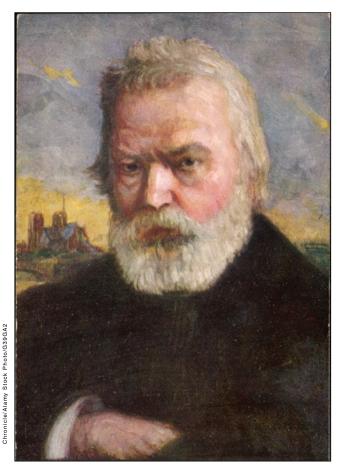
very year on November 11th, we honour the troops who have lost their lives and who, through their past combat, have upheld the ideals that Canada defends. We also honour the men and women who, through their current sacrifices, are writing Canada's military history.

Paying tribute in this way, by holding high the torch every November 11th, is a relatively recent tradition that is just shy of 100 years old. It was the trauma that resulted from the First World War's widespread carnage and the need for an entire generation to give meaning to the lives cut short at the front that led to the creation of this commemoration. It is a time when we stop our hectic daily lives for a minute on a specific day every year and remember, as Victor Hugo said in his poem "Hymne" that [translation] "[t]hose who for their country gave their lives should hear the prayers of many at their grave."

Remembrance Day, as November 11th is referred to in Canada, has a whole history behind it – one that reflects the political evolution of the country and the relationship that Canadians have with their veterans and troops. In Quebec, it is also a history marked by the tensions of 1917–1918. Remembrance Day is more than just a commemoration: its history is closely tied to the history of Canada in the 20th Century – one of sacrifice, assertion and conflict.

This article invites the reader to delve into the past and uncover the origins of November 11th, from the time it was designated in 1919, until it formally became Remembrance Day during the 1930s. It will explore how the history of November 11th reflects Canada's military commitments on the international stage throughout the 20th Century and the start of the 21st Century. Those commitments influenced the commemorative discourse and the way that the commemoration was perceived by Canadians through the decades.

It is important, first of all, to properly understand what a commemoration is. Even if, in reality, a commemorated act is rooted in the past, historians often choose to distance themselves in their approach. History and commemoration only have the past in common – each takes its own path in providing an account of the events.



French novelist Victor Hugo in old age (1802-1885).

History, as it is written by historians, is intended to be the most accurate account possible of the past, in all its complexity. Thus, the key foundation of a historian's work are historical sources produced by various contributors to a given history.

Commemoration, by contrast, moves away from the realm of history and into that of remembrance: the motto "Lest We Forget" is the very foundation of commemoration, with the "We" being both collective and individual. The term 'commemoration' includes the notion of something that is 'common' or shared: to commemorate is to share in remembering the past. That sharing takes place on a number of levels: family, occupation, nation, and so on and so forth. To remember is to activate one's memory, both privately as individuals and collectively as a group.

Remembrance can be seen as a way of forging a more personal relationship with the past – it takes into account experiences and events gone by, but it is also a way of *using* the past. It makes it possible to use certain elements of the past to shape an identity, at both an individual and collective level.

Commemorating is therefore never uncomplicated. There is an intention – an agenda – that leverages the past. "Lest We Forget" also involves forgetting: the past is remembered based

upon how we want it to be *generally*, rather than how it actually was *specifically*. It is therefore through that lens that we must examine November 11th. November 11th may be rooted in the history of the First World War (1914–1918), but as a collective act of remembrance, it is also part of a larger agenda.

In the beginning, the impetus for having a commemorative ceremony was closely tied to the First World War and the human impact of that conflict. An article from Montreal's *La Presse* newspaper dated 11 November 1918 makes it possible to better understand the origins of the November 11th ceremonies, and why the men and women who lived through the First World War needed them. The *La Presse* article describes the scene in Montreal on 11 November 1918 when it was announced that Germany had signed the Armistice:

[translation] In front of McGill University, a stage was erected where the university dignitaries and military representatives assembled [...]. One of the more poignant moments involved an elderly woman who was dressed in black and wearing a white armband, a sign of military mourning. As a regiment of Canadian soldiers passed, she stood up on her tiptoes and, brandishing a flag, began shouting a joyful cry of victory. [...] Suddenly, her shouts turned to sobs, and all she could say over and over was, "Poor boys! Poor boys!" No doubt, in the glory of the present moment, before her tear-clouded eyes, the vision of a loved one had appeared, struggling in the throes of agony that was noble, yes, but oh, how cruel.²

What is interesting about this article is that it articulates, all on its own, the complexity of November 11th observances for the First World War generation: they felt joy at having vanquished the enemy, but heartbreak at having lost troops and loved ones.

They felt joy at having vanquished the enemy – between 1914 and 1918, Canada, as a dominion of the British Empire, was brought into the conflict by London. Through voluntary service,

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Canada sent 450,000 men to fight overseas in the Canadian Corps. The names of the battles – Ypres in 1915, Vimy in 1917, and Amiens in 1918 – emerged as proof of the invaluable role of Canadian soldiers.

As of 1917, with the Imperial Conference in London, the Canadian government supported its claims for more autonomy within the British Empire regarding how its men had fought at the front alongside the major European powers. Pride at being on the winning side and pride at the maturity that it had acquired on the battlefield in the eyes of Europe: that is how

one might describe the first approach to the Canadian experience in the First World War.

The spectre of death nevertheless casts a long shadow and feeds the sadness of loss: 60,000 Canadians died in the First World War – 60,000 men from a country that was still young, with a population of barely seven million people. The trauma caused by that bloodshed scarred a generation. How could this great loss of life be recognized? November 11th, as a commemorative



King George V visiting a soldier's grave on the Western Front.

day, was aimed at taking families' grief out of the private sphere so that they could all rally around the same activity: remembering. The death of soldiers during the First World War was to be understood as something noble – as the ultimate sacrifice for the greater community.

However, in Canada's case, it remained unclear what this 'community' was. In 1918, there was a great amount of ambiguity surrounding that question, which was reflected in how the November 11th ceremony came into being. The first time that November 11th was observed in Canada, in 1919, it was on the initiative of the British sovereign, King George V.

Great Britain emerged from the First World War enfeebled, both economically and with respect to its image within its own empire. During the hostilities, London had shown its weaknesses, as it had had to rely significantly upon its colonies during the war for men, provisions, and equipment. Within the Empire, the colonies were well aware of the sacrifices that they had made for Mother England. In exchange, they asked to be shown more consideration or even to be given more autonomy: in India, support for Gandhi's movement had taken off; in Australia, the authorities had set their sights on taking over the defence of the Australian territory; and in Canada, the government had wanted to play a role in peace negotiations and upon the post-war international stage. Such was also the case for France and its own colonial empire, as the First World War had stoked the fires of indigenous nationalist movements.

It was thus against that backdrop that King George V – with the aim of preserving imperial cohesion and perhaps attempting to return to pre-1914 when London was the heart of the Empire – addressed the colonies and dominions in 1919. On 8 November 1919, he sent them a message inviting them to observe two minutes of silence in honour of the soldiers of the British Empire who had died in the war. He said:

To all my People: Tuesday next, 11 November is the first anniversary of the Armistice, which stayed the world-wide carnage of the four preceding years and marked the victory of Right and Freedom. I believe that my people in every part of the Empire fervently wish to perpetuate the memory of the Great Deliverance, and of those who have laid down their lives to achieve it. To afford an opportunity for the universal expression of this feeling, it is my desire and hope that at the hour when the Armistice came into force, the eleventh hour of the eleventh day of the eleventh month, there may be for the brief space of two minutes, a complete suspension of all our normal activities. [...] we shall all gladly interrupt our business and pleasure, whatever it may be, and unite in this simple service of Silence and Remembrance.³

Silence and remembrance: a funereal tone hangs over this invitation, and grief still weighs heavily. It is important to understand that, even though Canada and the British Empire were among the victorious Allies, the victory achieved in 1918 was not in and of itself being celebrated. It was on account of the cost of that victory in human lives that an entire generation felt

the need to gather, as was described in this La Presse newspaper article from 1924:

[translation] Today, when we commemorate the Armistice, we think fondly of "those who for their country gave their lives," as Hugo says, but we no longer appear to be celebrating a victory. It is a sort of pilgrimage that we undertake to remember "our glorious dead," but nothing more.4

The dead – those victims for whom the First World War was supposed to be the war to end all wars – became the guarantors of the post-war generation. In 1919, several monuments were under construction, including

one in NotreDame-de-Grâce in Montreal, but most Canadian cities did not have one. Beyond religious services in churches,

11 November 1919 consisted, in the public sphere, of a pause in activities for two minutes of silence, as described an article in

Le Devoir from 11 November 1919:

"The dead - those victims for whom the First World War was supposed to be the war to end all wars became the guarantors of the post-war generation."

[translation] As soon as the factory whistles announced the hour of the rite, work was momentarily brought to a standstill. In the big bank offices, all typing came to a halt. Shop employees even stopped their bustling, and everyone had time to reflect on the fact that a year had passed since the Armistice that ended the world war.5

The same scene was repeated on 11 November 1920, as the King once again invited everyone to observe two minutes of

silence. In 1919 and 1920, the November 11th commemoration can therefore be placed within an imperial context: the two

> minutes of silence were observed in Canada in accordance with the British sovereign's wishes. This imperial aspect of remembering the Canadian troops of the First World War was underscored when, on 11 November 1920, the British government decided to bury the body of an unknown British soldier in Westminster Abbey who would serve as a focal point for the grief felt by all the families in the British Empire.

> The Canada of 1920 was no longer the Canada of 1914, as can be seen from a La Presse article that came out when the unknown American soldier was buried in Washington, D.C., on 11 November 1921. The article asked: [translation] "Our own [unknown soldier] will continue to lie four feet underground in France. Will we ever exhume him?"6 It was only in 2000 that the unknown Canadian soldier was buried in Ottawa, at the foot of the federal capital monument dedicated to those who died, as the country moved into the 21st Century.

> The Canadian identity evolved in the 1920s as the imperial mindset was gradually abandoned in favour of a more nationalistic approach. A national Canadian discourse emerged concerning the dead of the First World War, supported in large part by the veterans of that war. These men, from across the country, had managed to raise Canada's esteem as far as Europe was concerned. The role that the veterans played was all the more important, given their numbers. They were a source of pressure that led the Canadian Parliament, in 1921, to declare that November 11th would become Armistice Day across Canada. From then on, everywhere in Canada, ceremonies would be organized on the first Monday of the week of November 11th.7

> Nevertheless, that 1921 law had one shortcoming: it meant that November 11th was celebrated at the same time as Canadian Thanksgiving. At the end of the 1920s, the veterans exerted political pressure so that November 11th would be recognized as its own day of commemoration dedicated to those who had died in the Great War. In the face of criticism, in 1931, the Canadian Parliament bowed to pressure from veterans and passed legislation



Cenotaph in Ottawa with the Tomb of the Unknown Soldier.



Unveiling Vimy Ridge Monument, 1936, by Mr. Georges Bertin Scott.

regarding Remembrance Day. From then on, every November 11th would be devoted to remembering the fallen soldiers.⁸

In accordance with – and even in support of – Canada's political claims as they related to London and on the international stage, an increasingly nationalistic approach was taken to the November 11th commemoration in the 1920s, as was summarized in a *La Presse* article from 1920:

[translation] We need a great amount of resilience – even more than other nations, perhaps – to sustain us in our enormous undertaking to develop our young country. Let us look to our glorious dead. Their memory will give us the strength and encouragement we need to never give up.9

Thus, the country was starting to move away from an imperialistic mindset in order to adopt a more nationalistic one, but a dual approach remained in the 1920s: imperialism and Canadian nationalism still seemed capable of coexisting. The tipping point had not yet been reached, as was evident in the speech made by the mayor of Montreal on 11 November 1924, on the occasion of the unveiling of the city's cenotaph:

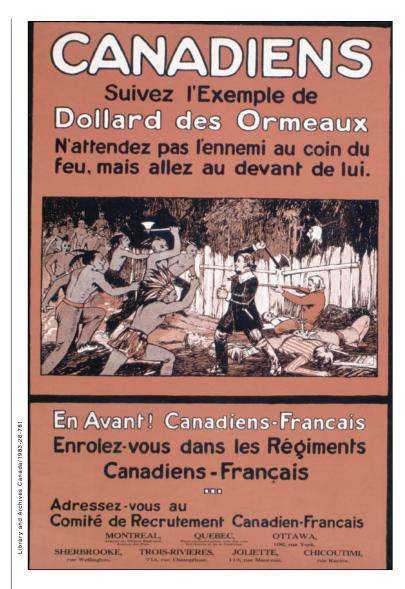
Be assured that the people of Montreal will ever cherish the memory of those who fell that they may live and enjoy the benefits of civilization and liberty, under the good of old British Flag.¹⁰

Particularly beginning in the 1930s, the scale tipped more and more in favour of a nationalistic Canadian approach, notably in an era when, as a result of the *Statute of Westminster* in 1931, Canada became an autonomous nation within what would thenceforth be known as the British Commonwealth.

In the 1920s and 930s, the speeches given on November 11th highlighted the Canadian soldiers of the First World War from a nationalistic perspective, painting veterans as the guardians of Canadian values. The apex of that approach was no doubt the unveiling of the Canadian National Vimy Memorial in

France in 1936.¹¹ The Canadians who died in combat and the veterans were officially defined as the foundation of the young Canadian nation.

Here, it is important to discuss the willful forgetting of November 11th's "Lest We Forget." In taking on a nationalistic tone, November 11th omitted a whole chapter of the troubled Canadian experience during the years 1914–1918: conscription. The 1917–1918 conscription, during which Canadians were forced to enlist because there were not enough volunteer recruits to maintain the strength of the Canadian Corps at the front, gave rise to tensions from one end of the country to the other, particularly among bluecollar workers and farmers. In May



1918, farmers from Ontario and Quebec marched on Ottawa to force the Prime Minister to hear their case and exempt them as a group; in Montréal, workers protested, often violently; in the city of Québec, on 1 April 1918, the Army had to fire to disperse the crowd of anti-conscription protestors, and four people were

killed. The clashes that took place in Québec were, of course, compounded by the cultural state of affairs. Conscription exacerbated the existing tensions between French and English Canadians concerning the recruiting that had taken place in 1914–1917.¹²

In 1919, the November 11th commemoration made no mention of the conscription crisis that had occurred in the country, focusing only upon the front and the sacrifice of the Canadian troops overseas. In Quebec, the main consequence of that memorial censorship was that French Canadians turned their backs on the November 11th ceremony. Because they did not recognize themselves in it, they fell back on a past that they found more honest

"In 1919, the November 11th commemoration made no mention of the conscription crisis that had occurred in the country, focusing only upon the front and the sacrifice of the Canadian troops overseas."

and evocative: that of New France and its heroes, such as Dollard-Des-Ormeaux, whose legacy was rapidly growing at the time.¹³

In 1923, while the cities on the island of Montréal with a majority of English Canadian residents were building or had already created monuments to the people who had died in the First World War, a project was submitted to the Montréal city council by the Canadian Club. Frustrated with the way that Montréalers had failed to honour their dead, the members of this Canadian patriotic association decided to take things into their own hands. 14 On 11 November 1924, thanks to a fundraiser organized by the Canadian Club, the Montréal cenotaph was inaugurated and presented to the City of Montréal. 15

In the 1920s and 1930s, the influence of veterans increased during the November 11th ceremonies, which were held first in churches, and then progressively at war memorials. The monuments were erected through local initiatives and, for the communities, they became a testament to their sacrifice and their contribution to the Great War. As the November 11th ceremonies began to be held around the war memorials, the commemorative liturgy took on a more concrete shape during the 1920s, progressively adopting the format that we know today in Canada:

- "O Canada" or "Maple Leaf Forever" (the national part of the tribute).
- Prayer (the religious part of the tribute).
- The "Last Post" (a reminder of the fallen's military association).
- The minute of silence (enabling a more personal relationship with the fallen).
- The "Reveille" (a reminder of the fallen's military association).
- The laying of flowers (the corporate, collective, widows' tribute).
- "God Save the King" (the imperial, constitutional part).
 - Veterans' parade (the link between the fallen and the brothers and sisters in arms).

If the First World War was supposed to be 'the war to end all wars,' the Second World War disrupted the November 11th ceremony, as the focus slowly shifted from the veterans of the 1914–1918 conflict to those of the Second World War. During the years 1939–1945, the November 11th ceremony became a veritable platform for the Canadian war effort against Nazi Germany. For example, on 11 November 1939, after the ceremony at the Montréal cenotaph, 6,000 First World War veterans took part in the traditional veterans' parade and were joined by 9,000 current soldiers. *Le Devoir* reported the following: [translation] "[...] this





Armistice Day, Dorchester Square, Montréal, 11 November 1937.

year, the parades will not only be made up of those who have served but of those who will serve – mobilized soldiers will be joining the veterans." ¹⁶

The soldiers of the Second World War could look to the dead of 1914–1918 to try and find a lineage of heroism. Within the context of the November 11th ceremony, the men of the Great War were a benchmark of bravery. During the war years, the November 11th discourse concerning the fallen took on a softer tone. After the increasingly-pacifist approaches adopted during the interwar period in response to the rise of bellicose Nazism in Europe during the 1930s, there was a more mobilizing discourse during the Second World War: the

dead of yesteryear, through their example, were now the guarantors of the soldiers in the face of Nazism. The themes of victory and duty thus served to accentuate the approach taken regarding those who had died in 1914–1918. In other words, during the years 1939–1945, November 11th took on the aspect of a kind of blessing of the young soldiers by their elders, to commune with those who had come before them before going to face enemy fire themselves. Thus, the inevitable blending of the two conflicts.

The Great War progressively lost its specificity, particularly when the first Canadians were killed in the Second World War. On

11 November 1943, at the Montréal cenotaph, a *La Presse* article noted the following: [translation] "[H]ere and there in the gathered crowd were women dressed in black, either grieving a recent death that had been announced in an official telegram or grieving an older one, crying for a husband or son who had been killed [in 1914–18]."¹⁷

As a result of the Second World War, veterans also lost their monopoly with respect to heroism. Although they were able to serve as an example to the new recruits, the Canadian soldiers of 1939–1945 then went on to write

their own new pages of Canadian military history and present the public with heroes whom they found to be more relevant. For example, in Montréal, during the ceremony on 11 November 1942, the newspaper *L'Évènement* noted the following:

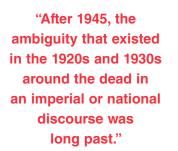
[translation] At the Dominion Square cenotaph, Verdunborn Pilot Officer George Beurling, the Canadian hero of Malta, attended the wreath-laying ceremony while

still limping from injuries he had sustained in battles over Malta [...]. 18

The Second World War also transformed the November 11th ceremony into a platform for propaganda speeches aimed at mobilizing Canadians with respect to the war effort. In the case of French Canadians, that involved highlighting cultural ties by promoting a free France led by General de Gaulle. On 11 November 1940, a *La Presse* journalist wrote the following concerning the ceremony held at the Montréal cenotaph:

[translation] A wreath that could not go unnoticed, particularly by our French Canadians, was the one laid by Dr. William Vignal, General de Gaulle's representative in Montreal. It was in the shape of the Cross of Lorraine, the emblem adopted by the General, and bore the inscription, "For a free France."

After 1945, the ambiguity that existed in the 1920s and 1930s around the dead in an imperial or national discourse was long past. When it came to the Second World War, the fallen soldiers were definitely Canadian. The November 11th ceremony from then on was a national Canadian ceremony. This evolution occurred during the post-1945 period, when Canada wanted to assert its own identity as separate from Great Britain's, specifically as a distinct nation that had made its own contribution to the Second World War. Bear in mind that it was after 1945 that Canada adopted its own passport, nationality, and flag, and redefined itself forevermore as its own country on the international stage.





Pilot Officer George "Buzz" Beurling on a public relations tour of Canada, 1942.



D-Day - The Assault (Canadians Landing at Juno Beach, 6 June 1944), by Captain Orville Norman Fisher.

The speech that the alderman of Outremont gave on the island of Montréal on 10 November 1946, in front of the city's war memorial, provides a good summary of the new November 11th approach during the post-war period:

[translation] The dead whose memory we are honouring here today remain quite indifferent to our presence, our floral tributes and our expressions of gratitude. They are dead. They were young, and they hoped to experience the joys of existence [...]. But they are dead. They agreed to take on a terrible duty, for civilization, for the Canadian homeland, for everyone who lives in Canada today [...].²⁰

Three things stand out in this speech: the weight of death, the value of death, and, most of all, the Canadian aspect of the tribute. It is an approach that to this day characterizes the November 11th ceremony in Canada. It is definitely a communal memorial ceremony and a way of commemorating soldiers of past conflicts, but they are soldiers who died for noble values, defending their own people and country, Canada. Without developing into pacifism, the November 11th commemoration honours the fallen by reminding people of the national value of their sacrifice. Over

the years, new conflicts have been added to the war memorials, sometimes after a great amount of pressure from veterans, such as with respect to the Korean War of 1951–1953.

The evolving meaning of November 11th has had other consequences. Because of the growing number of veterans and soldiers killed in combat to be honoured, during the 1950s, the November 11th ceremony in Canada progressively became a commemoration that was specific to military families: a commemoration that was uniquely military in nature. That is what a *La Presse* journalist noted during the ceremony at the Montréal cenotaph on 11 November 1949:

[translation] Perhaps, probably as a result of the leading role that military units play in commemorative ceremonies, there is a tendency to consider Armistice Day as a ceremony that is rather military in nature – a ceremony in which civilians, if not superfluous, play only a secondary role.²¹

As such, the general public progressively turned away from the ceremony, a trend that accelerated during the 1960s and



Canadian soldiers on patrol through a poppy field in Afghanistan, 2008

1970s when the young people of the period began to question the generations that had come before them and their values, which they viewed as conservative; in addition, there was a prevailing sense of pacifism in the face of conflicts such as the Vietnam War. All of that had an impact upon the commemoration of November 11th, in reflection of the evolution with respect to how the Canadian Armed Forces were employed in the world.

The period from the 1960s to the 1990s was an era of peace-keeping operations. The commemorative discourse therefore changed. It went from one that honoured only past sacrifices during world conflicts to one that embraced new values that were a reflection of Canada and its peacekeepers on the international stage, with the focus being upon the defence of universal values and the weakest members of society.

Then, in the 1980s and 1990s, there was a drop in the number of November 11th ceremonies. The veterans of the world conflicts and the widows, who had been so present up to that point, were slowly disappearing. The generational change resulted in a period of stagnation for the commemoration of November 11th in the 1990s, all the more so given that the ceremonies remained in the hands of soldiers and families honouring their own.

The commemorative frenzy surrounding the 50th anniversary of the Normandy Landings in 1994, and the 50th anniversary of the end of the Second World War in 1995, fostered a certain amount

of public interest in military history. That was particularly true in Quebec, where Francophone historians published works and organized conferences highlighting the contribution of French Canadians to the world wars.²² Quebec was (re)discovering its place in the history of the world wars, and all of that had an impact upon the November 11th ceremony.

Starting on 11 November 1998, Montréal became the backdrop for two solitudes of commemoration. On the one hand, the traditional Canadian ceremony at the Montréal cenotaph continued to be held, as it had since the 1920s. On the other hand, another commemorative ceremony was being organized by an association advocating for Quebec independence, the Société Saint-Jean-Baptiste de Montréal (SSJBM), under the leadership of the organization's president. On 11 November 1998, the SSJBM began holding a commemorative ceremony at the Cross of Sacrifice in the military square of the Mount Royal/Notre-Damedes-Neiges cemeteries in Montréal. The organization thereby sought to first and foremost separate the memory of Quebec soldiers from the national Canadian dialectic that had prevailed since the interwar period.²³ The honoured soldiers' commitment was then reread and reinterpreted as that of [translation] "the freedom and independence of the people." After the failure of the 1995 independence referendum, this approach made it possible to more safely integrate the figure of the Quebecois soldier into the political and ideological scheme promoted by the SSJBM. That strictly Quebecois November 11th ceremony was small in the

beginning but grew over time and has been able to establish itself as a full-fledged ceremony. Today, it brings together numerous Quebec veterans and dignitaries, such as representatives from consulates in Montréal.

For the years 2000 to 2010, the events of 11 September 2001, the war in Afghanistan, and the threat of asymmetric warfare and terrorism that could strike each and every one of us, once again gave more visibility and a common meaning within Canadian society to the action and sacrifice of troops in defending society. That was very evident in Montréal on 11 November 2001 - the commemorative discourse had just taken on broader dimensions. From then on, it was no longer simply Canadian troops who were being honoured; it was also all of the victims of groups challenging both the universal values that Canada defends and the very foundation of democracy. The year 2001 renewed the appeal of November 11th

ceremonies for Canadians. The conflict in Afghanistan also led Canadians to come together, every November 11th, to appreciate the sacrifice of Canadian soldiers. In addition, when soldiers were killed during the attacks in SaintJeansurRichelieu and Ottawa in 2014, it was around the war memorials – the gathering places of November 11th – that crowds and authorities spontaneously

congregated.²⁴ November 11th has thus given civilians and soldiers a chance to meet annually and has given Canadians a chance to express their appreciation for the armed forces and for those who

have given their lives for them. Of course, we must acknowledge the work done since the start of the 2000s by Veterans Affairs Canada to ensure that the torch of remembrance is passed to a new generation of Canadians by inviting schoolchildren to participate in November 11th ceremonies.

Beginning in 2014, with the launch of commemorative activities surrounding the centennial of the First World War, Remembrance Day also provided an opportunity to rediscover the national Canadian discourse of the interwar period. The First World War was interpreted, according to Stephen Harper, the Canadian prime minister at the time, as having been [translation] "foundational to the Canadian nation." In April 2017, on the centennial

of the 'mythical' Battle of Vimy Ridge, Prime Minister Justin Trudeau revived the national and Canadian significance of the sacrifices made overseas by saying, notably, that, "It is by their sacrifice that Canada became an independent signatory to the Treaty of Versailles. In that sense, Canada was born here." For the authorities, it was a way of reminding Canadians of the pillars



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Vimy Ridge 90th anniversary, 2007



The Cenotaph, Ottawa.

of modern society that rest upon the sacrifice of Canadian troops; 11 November 2018 should be the culmination of this discourse in Canada.

Today, November 11th is the date upon which civilians and soldiers gather together across Canada in a common place, at the war memorials, to take a minute of silence to both collectively and individually honour the memory of those who gave what was most dear to them – their lives, their youth, and their health – so that their fellow citizens could live in a better world. That is what November 11th means today, that is to say, it is the passing of the

torch of remembrance so that we do not break faith with those who have died, as John McCrae's poem implores.

That being said, it is important to remain vigilant, as memory is by no means immutable: it evolves with time according to the concerns of each new generation. That was demonstrated in Quebec on 11 November 2017 when some people wore white poppies and vandals scrawled anti-military graffiti on a war memorial in Montréal.²⁷ Still today, the November 11th commemoration in Canada is very much laden with significance.

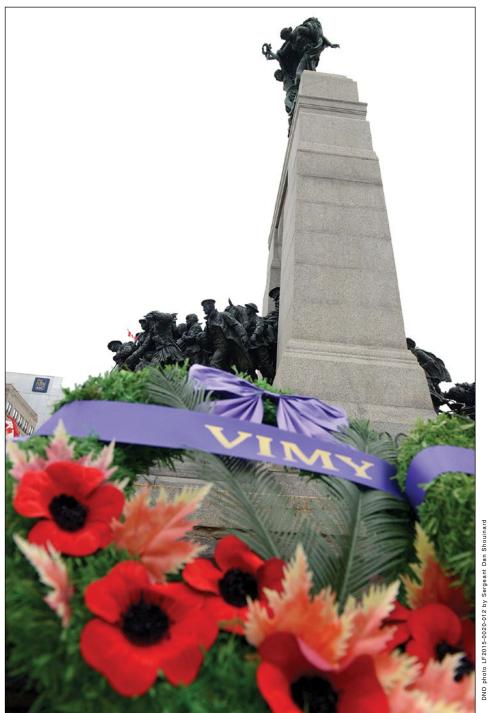


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A Vimy wreath lies at the base of the Cenotaph in Ottawa on the occasion of the 98^{th} anniversary of the battle, 9 April 2015.

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A CF-18 from Canadian Air Task Force Lithuania on patrol as part of the NATO Air Policing Block 36 during Operation Reassurance, 20 November 2014.

"Making Sausage": RCAF Doctrine 2005-2016

by Allan English

Introduction

o paraphrase an old saying, "If you like doctrine and sausages, you should never watch either one being made." The adage captures the essence of the idea that making doctrine is a messy process that, if seen, could put you off from ever reading it again. This brief article argues that, like many other Western doctrine processes, recent Royal Canadian Air Force (RCAF) doctrine has been made more like sausage than the rational doctrine process described in writings on the topic. I will focus on the period 2005-2016 here, as this era saw the RCAF engage in a doctrine process, not yet well documented, that effected a major change in both the content and process of writing its doctrine, and that epitomized "making sausage."

Doctrine in Theory and Practice

To begin, I would like to examine what doctrine should be in theory compared to what is produced in practice, and then called doctrine. Ideally, "military doctrine is comprised of principles, theories and policies, accepted as valid and reliable, which offer military forces good chances for success ... [it is an] accumulation of knowledge which is gained primarily from the study and analysis of experience. As such, doctrine reflects what works best." I use this definition from the much-maligned capstone air doctrine publication Out of the Sun (1997), because it reflects what we taught at the Canadian Forces College (CFC) in the Aerospace Studies Department when I was Co-Chair there from 2001 to 2005, and it explains the essence of good doctrine – a constant interplay of theory

and analysis of experience on operations (practice). Even when these precepts are followed, if it is to be widely read and applied, it must be "memorable," as I.B. Holley explained in his classic essay on US Air Force doctrine:

...the way we articulate doctrine is flawed...our doctrinal manuals consist largely of generalizations. They offer page after page of abstractions. Unfortunately, abstractions don't stick in the mind as well as real-life illustrations or historical examples. I contend that paying more attention to the format in which doctrine is presented will work toward a wider familiarity with doctrine by Air Force decision makers at all echelons.²

Currently, the RCAF and Canadian Armed Forces (CAF) approach to doctrine fits Holley's abstraction and generalization characterization. They define doctrine simply as the "fundamental principles by which military forces guide their actions in support of objectives." This definition reflects what might be called a faith-based view of military doctrine, in which it resembles religious doctrine as a statement of beliefs exhorting the faithful how to act without explaining why such actions are preferable to others. This view of military doctrine was captured by Henry L. Stimson, the US Secretary of War, 1940-1945, who said that during the Second World War, the US Navy Department, "...frequently seemed to retire from the realm of logic into a dim religious world in which Neptune was God, Mahan his prophet, and the United States Navy the only true Church." As I have written elsewhere, this feature of doctrine has been prominent in much of the late-20th and early-21st Century American military doctrinal debates with respect to how we should conceptualize the use of military forces in conflicts, with Operational Art, Network Centric Warfare and



Secretary of War Henry Stimson shakes hands with General Dwight D. Eisenhower in 1945.

Effects Based Operations being the articles of faith of the three major "churches," the US Army, the US Navy, and the US Air Force. 5 These debates were followed closely in Canadian defence circles, and the resulting US doctrine was frequently adopted by the CAF "second-hand" as a result of bureaucratic direction, with little-or- no modification for Canadian circumstances. One characteristic of American doctrine that did have some resonance in Canada was that it was often written by each service to support its case in budget wars with the other services. As described by General Anthony C. Zinni, US Marine Corps (retired), "We teach our [junior officers] to recognize that sister service as the enemy... we fight each other for money, programs, and weapon systems. We try to out-doctrine each other by putting pedantic little anal apertures...in doctrine centers...to ace out the other services and become the dominant service in some way...Interservice rivalry... [is] going to kill us if we don't find a better way to do business." Given the realities of doctrine writing, perhaps it is fortunate for those on the front line that doctrine actually has a weak or indirect effect upon the behaviour of armed forces in operations. Instead, how armed forces operate is "...more a function of their culture than of their doctrine."8

Canadian Air Force Doctrine before 2005

he history of Canadian air force doctrine is a chequered lacktriangleright one, and little has been published about it. Up until the end of the Second World War, the RCAF used Royal Air Force (RAF) doctrine in the absence of any desire or capability to create its own. From its establishment in 1943, the RCAF Staff College was a key institution in the development of Canadian air doctrine, but that ended with its closure in 1966 and the unification of the Canadian Armed Forces in 1968. Thereafter, air doctrine in Canada degenerated into the views of separate air warfare communities sometimes cobbled together into one volume with little coherence or consistency. The lack of coherent air force doctrine above the tactical level after 1968 also resulted in a series of ad hoc, expedient changes to the structure of Canada's air forces, resulting in disjointed, often dysfunctional, command and control arrangements. 9 The Chief of Air Staff (CAS) tried to rectify some of the air force's doctrinal shortcomings with the publication of Out of the Sun in 1997. However, it has been criticized because its content was "intellectually questionable," and it failed to explain the rationale for the existence of a Canadian air force.¹⁰



Lieutenant-General Ken Pennie during a visit to 19 Wing Comox in March 2004.

The nadir of postwar Canadian air doctrine came in 2005 when the CAS cancelled Out of the Sun without replacing it, only promising that new doctrine would be drafted. This led the CFC to decree that senior officer professional military education (PME) taught there would rely upon foreign aerospace doctrine, namely that of the US Air Force, as well as US Department of Defense joint air doctrine. Another outcome of this absence of Canadian aerospace doctrine, was that Canadian Forces (CF) joint doctrine became increasingly dominated by land-centric concepts, which were not always appropriate for aerospace forces. 11 Adding to air force doctrinal woes in 2005, was the overall state of the air force as described by the then-CAS, Lieutenant-General Ken Pennie, as being "...beyond the point where even constant dedication is sufficient to sustain the capabilities needed to meet assigned Defence tasks...Our Wings and Squadrons are too hollow to sustain the current tempo of operations."12

Canadian Air Force Doctrine 2005-2016

The establishment of the Canadian Forces Aerospace Warfare Centre (CFAWC) that year was intended to be part of air force renewal and transformation. Its creation was announced by Pennie in April 2005 and it was stood up by his successor, Lieutenant-General Steve Lucas, in October

2005. An air force spokesperson said CFAWC was being created in part to address the problems Pennie identified by providing, "...the air force with a doctrinal focal point for the development of new capabilities and the enhancement of existing ones... Consider it like a think tank for where the air force is, where it's going, and how it will get there in terms of our doctrine, fleets, equipment and resources..." This statement also hinted at future developments: "[CFAWC] will align the air force with the army and navy as the CF moves towards a more integrated force...consistent with the vision of the Chief of Defence Staff General Rick Hillier... It will allow us to work (more closely) with the army and navy...it's really important that what we are doing in the aerospace community is consistent with what the Chief of Defence Staff (has planned)."13 Current RCAF information on CFAWC reflects some of the original intent stating that it will act "...as a catalyst for air-power development and as a steward for air-power knowledge...to acquire the right capabilities and develop the appropriate doctrine to ensure an agile and integrated Air Force well into the future."14

CFAWC's first Commanding Officer, Colonel Jim Cottingham, serving as such from 2005 to 2008, took his doctrinal responsibilities seriously, and, given the wellknown deficiencies in air force doctrine, started to work on creating new doctrine. As a graduate of the US Air War College, Cottingham believed in the conventional doctrinal process described earlier, and he initiated it with alacrity. He contacted a number of people inside and outside of the air force to establish an informal working group which would provide CFAWC's staff with input to assist it in writing new doctrine. I was among those who were invited to be part of the working group, which corresponded and then met in Cornwall for two days in January 2006. The group included representatives from all the air force warfare communities and the Aerospace Studies Department at CFC. The result was consensus on and an outline of a new capstone air force

doctrine manual. While the product was similar in general content to past Canadian aerospace doctrine, the process was thought by those participating to be the manner in which future air force doctrine would be written, by allowing CFAWC to tap into various sources of expertise, based upon its mandate to conduct the necessary research, "...education, experimentation, simulation, lessons learned and conceptual development functions." Some of my colleagues and I provided feedback to CFAWC in March 2006 on a draft of the new manual, which was based upon the results of the Cornwall meeting. At that point, everything in the doctrine process seemed to be going according to CFAWC's stated mission and Cottingham's plans.

Soon thereafter, everything changed. Lucas, the new CAS, directed that the part of capstone manual related to air force "functions" would henceforth be based upon the Canadian Army "combat functions" of sense, shape, move, sustain, command. While the intent may have been to "align" the air force with Hillier's "Team Canada" transformation of the CAF, in retrospect, Hillier's transformation had many flaws, and initial air force enthusiasm, along with that of others, waned as the flaws became evident and as the transformation became "jarmy," i.e., land-centric approaches, covered with a veneer of jointness. ¹⁶



Canadian Forces Chief of the Defence Staff General Rick Hillier (right) in Afghanistan, October 2007.



A Canadian Forces CC-130J Hercules transport releasing Canadian jumpers during Exercise Orzel Alert in Poland, 5 May 2014.



Insertion and extraction training with an RCAF CH-147F Chinook helicopter, 15 July 2016.

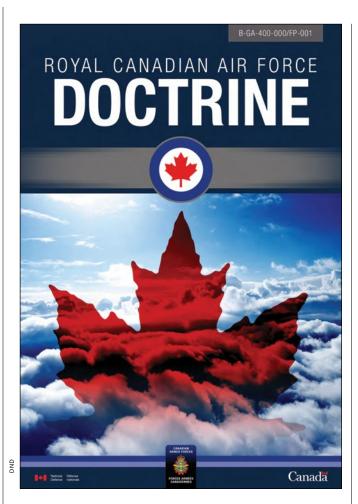
Aaron Jackson, whose doctoral dissertation and subsequent book examined aspects of CAF and RCAF doctrine, is among those commentators who view Lucas' direction in a positive light. Describing the army's combat functions as a product of an "advanced" army concept development process and "a fundamental component of the evolution of Canadian army conceptual thinking since 2001," he portrays "the decision to adapt an Army concept for use within Air Force doctrine" as allowing "Canadian air power to be located within a sound theoretical framework," and that the air force "appears to have been able to successfully tie the roles of its various communities into this broader conceptual model, thus avoiding the problem of acceptance that was encountered following the release of Out of the Sun." Jackson describes previous air force doctrine, consistent with that of other Western air forces, particularly US Air Force and RAF doctrine, as "too inflexible" for the CAF. Of equal or perhaps greater concern for those supporting Lucas' intervention was their belief that the lack of appropriate air doctrine had allowed the Army and Navy "...to make a politically better case for their service than the Air Force has" in Ottawa's budget wars.17

What Jackson and other commentators do not mention is that, at the time of their adoption by the air force, the terms sense, shape, move, sustain, and command were, according to the Director General Land Combat Development, "...not discrete in theory or in practice, but rather recognize broad areas of capability with significant overlap... [they] are artificial intellectual constructs that help in the definition and analysis of military capabilities." [Furthermore, by 2011, these "artificial intellectual constructs" had become something quite different. For example, in one joint

doctrine publication, a variation on them, "Command, Sense, Act, Shield, and Sustain," is called the "five main joint operational functions," and described as "the functional capabilities required by a JTF [Joint Task Force] in order to effectively employ forces." However, in yet another joint publication, they had become "six capability domains (Command, Sense, Act, Shield, Sustain, and Generate)," but no evidence or explanation is given in either publication to substantiate the differences in terminology. 20

Part of the reason for this lack of consistency in CAF joint doctrine can be found in a 2007 Chief of Review Services (CRS) report evaluating the state of CAF joint doctrine development. It concluded that joint doctrine had "serious deficiencies," including the lack of a rigorous joint doctrine process, a lack of "adequate training and professional education in joint doctrine and doctrine development," and that the existing "joint operational doctrine process will not meet the needs of CF operational units."21 This 2012 assessment of some US Army doctrine mirrors Holley's 1995 critique of US Air Force doctrine, and it sums up the state of much of CF joint doctrine then and now: "...it does not provide the necessary details. In content, it defaults to reasonable but timid generalities of little use to commanders and staff officers... [it] avoids nuanced discussion in favor of a numbing series of definitions, a taxonomy of operational functions and methods... which is the worst possible method of conveying the complexity of land operations."22

It appears that little has been done to address the CRS criticisms of Canadian doctrine, as one can see from the parts of RCAF doctrine describing the army functions concept in an



air force context. The original introduction of these functions by Lucas in 2006 was justified in the RCAF's capstone doctrine manual, Canadian Forces Aerospace Doctrine, with the statement: "A century of air warfare has demonstrated that all effective air forces, whether they are large or small, are capable of performing a number of specific functions. In Canada, these functions are: Sense, Shape, Move, Sustain, Command."23 Three years later, in the 2010 version of the capstone manual, "a century of air warfare" had apparently demonstrated that effective air forces perform six functions, namely "Command, Sense, Act, Shield, Sustain, and Generate."²⁴ No sources or analysis are provided in either version to support the validity of these different assertions. The latest version, published in 2016, affirms the same six functions as the 2010 version, but no longer uses 100 years of history to justify its choice of functions. Rather, they are presented as articles of faith to be accepted by believers.²⁵ Another one of its faith-based characteristics is that, unlike previous versions which provided few references to support the adoption of the functions, the latest version cites "scripture" (in the sense of authoritative texts considered to be central to a religion's practice or beliefs)²⁶ in support of its choices, i.e., joint doctrine and the Defence Terminology Bank (DTB). However, as with the other versions and joint doctrine, no principles, theories, or detailed analysis of operational experience are given to explain to readers the rationale behind the variety of specific functions.²⁷ One wonders if those responsible for RCAF

doctrine realized that much of the joint doctrine they cite, and its products in the DTB, was "significantly deficient." ²⁸

Conclusion

The RCAF doctrine development process 2005-2016 is another example of "making sausage." As we have seen, its product is not substantially different from that made by other "sausage factories," some of whose products the RCAF uses to craft its doctrine. Unfortunately, this limits its utility because, while this doctrine can be memorized and regurgitated by the unlucky few required to do so, like many of its predecessors, it lacks the principles, theories, and analysis of operational experience that would allow it to be studied, debated, and revised, based upon evidence.29 As they exist, these doctrinal products are not seen as particularly relevant by most, are read by few, and used by fewer still. Like much academic work in similarly esoteric subjects, they are "... published for an audience smaller than a successful cocktail party, and the rest falls still-born from the press, ignored by citizen and colleague alike."30

The early promise of CFAWC becoming the "doctrinal focal point" of the air force and acting as its "think tank" and "steward for air-power knowledge" was quickly dimmed when, less than a year after its creation, the CAS derailed the air force doctrine development process initiated by CFAWC by imposing Canadian Army "combat functions" on air force doctrine. The result has been ten years of CFAWC "reverse engineering" parts of air doctrine to conform to the Lucas' edict, while relying upon joint doctrine with "serious deficiencies." It might be disturbing to some that few in the RCAF doctrine world seemed to be aware that they were working with artificial intellectual constructs, not discrete combat functions, even as joint doctrine inexplicably transformed them into different guises, such as "five main joint operational functions" and "six capability domains." Perhaps more disturbing, at least to me, is that when I drew these facts to the attention of a group of senior air force officers during a 2012 seminar on command and control, the senior officer present declared: "You may be right, but we have gone too far down that road to turn back now." Whether that statement is accurate or not depends very much upon the actions of the air force leadership. If they are prepared to use CFAWC as it was originally intended as a "think tank" producing doctrine based on principles, theories, and professional practice supported by rigorous study and analysis, then RCAF doctrine might free itself from its self-imposed restraints. Otherwise, you might want to avert your eyes from the RCAF's doctrine making process.

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The Canadian Armed Forces Snowbirds fly over NASA's Kennedy Space Centre in Cape Canaveral, Florida, 9 May 2018.



Chicago Bears defense line up against the Atlanta Falcons offense during an NFL game, 10 September 2017.

Explaining Cultural Difference between Professional Organizations: A Sports Analogy to Start Further Discussion

by Caleb Walker

NFL teams are horrible at Rugby – and Rugby teams are horrible at American Football

n every great army mess – there are professional discussions of the following problem – what should we train to fight? Big or small wars? Counterinsurgencies or conventional fights? Can we be good at every spectrum of conflict? The intent of this article is to continue to spur that professional discussion. It describes 'why we are who we are.' I want all ranks in the Canadian Army to be able to use this article as a primer for further discussion. As we move away from Kandahar Afghanistan – its hard lessons, its tough fights – we need to keep discussing what makes a counterinsurgency different from other fights in which we may participate.

Why are armies that fight counterinsurgencies different to those that fight conventional wars? Simply put, it is because the highest level professionals – in whatever chosen profession – need to operate differently from those engaged in a different profession. The architect operates differently than a lawyer, and the physician operates very differently than the engineer. I will use a sports analogy to further illustrate the point:

Rugby Union and American Football played in the National Football League (NFL) are two different sports. The differences are in the equipment that the players wear or use; their skills and training; and lastly, the culture of the professional teams that make them successful. The 'culture' embraces the ideas, customs and behaviours of the particular team. It includes the 'way things get done around here,' and it is built by the underlying assumptions¹ of the team. The professional team culture is built over decades.

The culture or team 'personality' is different, not just between sports, but also between teams of the same sport. Each team has a different approach: to the media; the team's priorities; leadership within the team; discipline; and the relationship with the boss—the coach. The two sports are managed very differently on the field. Football has headsets allowing constant communication. The head coaches, assistant coaches, quarterback and a defensive captain are reacting to constant decisions on the sideline. In football, there is command and control on the field. In rugby,



'The Beast' Mtawarira breaking free from a maul during the Castle Larger Rugby Test between South Africa and Scotland, at Mbombela Stadium in Nelspruit, South Africa, 15 June 2013.

the coach stands on the side line – or sits in the stands – and provides specific direction. In the middle of the game, the rugby players are fighting their own battle. Decisions are made by the team Captain. The offense is arranged by the 'first-five.' The relationship is fundamentally different. The assumptions on who makes the decisions are different.

In football, players often talk about hurting the other team – not injuring their opponent – but physically dominating them. They want the other team to flinch. The linebackers want the quarterback to hear them coming and impede his decision making. It is a physically demanding contact sport. Rugby players want to dominate the other team as well. But they also want to create gaps and exhaust the defence. Rugby never stops and the players are constantly moving and adjusting to broken plays. They want to be faster, control the ball, possession and territory. The assumptions on how to win the game are different.

How long, if ever, would it take the best NFL team to win the World Cup in Rugby? The other way? The change would require a few steps: the first would be appropriate equipment so that a rugby player could be expected to take a tackle from a 260 pound NFL linebacker; the second might be a recruitment drive to get different talent into the team; the third is fitness, skills and a game plan that will work for the new sport; and one of the last aspects, that could take years or decades, would be to change the culture

of the team, the coaches, the management, and the fans in order to win in the new sport.

Could a team play both? Not professionally. There are several players that have the capacity to play aspects of each game well. They can even play multiple sports at the highest level. But they are gifted athletes. A professional team requires time to build its culture. The way they structure their meetings, make decisions, run practises, improve the team and interact with the coaches.

Would you ever make a Football team play professional Rugby? Probably not, but the Canadian Armed Forces – for a variety of reasons, and mostly out of its control – might be asked to participate in another professional role. We just need to remember, NFL teams are horrible at Rugby – and Rugby teams are horrible at American Football.

Introduction

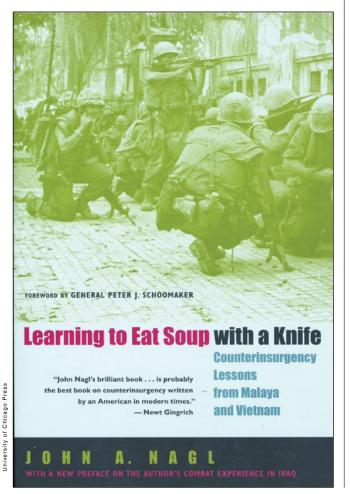
The Canadian Army is focused upon a conventional theatre of operations. The culture of an army that is focused upon a conventional war makes fighting a counterinsurgency very difficult. The scope of this article will be to discuss the culture of those two types of fighting. It will conclude that the Canadian Army cannot be expected to master the fight in

a counterinsurgency without a significant cultural change. And we cannot forget that a culture change takes time...

Organizational Culture

efining organizational culture is quite difficult as it is an abstract concept. The best the way to imagine culture is to use expert on organizational development Edgar Schein's description from *Organizational Culture and Leadership Defined*, in which he maintains that "...culture is to a group what personality or character is to an individual." We understand culture at the ethnic or national level, but we find it difficult to look at smaller groups and consider their culture. We understand that there is a cultural difference between people that live in Alberta and Afghanistan. We understand that the cultural difference between police officers and doctors. That is because their culture, behaviours and assumptions are very different. It is when the culture is more familiar, that we find it difficult to grasp the important differences.

To have a culture one needs shared experiences and assumptions. Schein believes that any organization that has a shared history has a culture. This culture is strengthened the longer the organization is together, and is further strengthened by the "emotional intensity" of the organizations shared experiences.³ National



militaries around the world have a culture. The longer that an organization exists, the more assumptions define its behaviours.

Culture is often associated with 'values,' and people ask if an organization has 'the right culture.' Schein believes that this is the wrong way to look at culture. There is no right or wrong culture. The culture will reflect how the organization achieves its goals and how it interacts with the environment. Culture is also often associated with behaviours, but that is also incorrect. Behaviours are the 'end product' of a culture. Culture is built from the assumptions that the group makes on how their organization is supposed to work. This article will discuss the behaviours of the different military forces and then discuss what assumptions or culture generates those behaviours.

Bottom Line up Front - A Counterinsurgency Army and a Conventional Army Are Different

he fact that it takes an army a long time to switch within the Spectrum of Conflict is broadly agreed upon. Soldier and distinguished academic Dr. John A. Nagl discusses the organizational cultural differences in his book, Learning to Eat Soup with a Knife. He believes that conventional and unconventional warfare are so different that, "...to succeed in one [it] will have great difficulty in fighting the other." The two armies have fundamentally- different organizational cultures that prioritize and mitigate different aspects of their organization. As Robert M. Cassidy, who holds a doctorate in strategy and irregular warfare, and teaches at Wesleyan University, stated in Back to the Street without Joy: Counterinsurgency Lessons from Vietnam and other Small Wars, the goal would be to "...not fight small wars with big-war methods."5 The two armies have different attitudes and assumptions around the application of combat. These assumptions are not complementary in either theatre.

In the early-2000s, while the Iraqi insurgency was escalating, the US Army questioned the effectiveness of its culture and attitudes in relevant operations. General David H. Petraeus wrote his manual on Counterinsurgency in 2006. He describes the conventional army's inclination to wage war on insurgents, and argues that armies need to overcome that inclination in order to be successful.6 There is an assumption that a conventional army will use offensive action and aggressively fight insurgents. This culture has been built out of an assumption that 'taking the fight to the enemy' is the only way to turn the tide on a counterinsurgency. General Petraeus uses examples from the last century, and makes the case that conventional armies tend to centralize decision making and apply too much force in a counterinsurgency. He argued in his manual that one cannot simply overwhelm the enemy with combat power. Rather, one needs to focus upon the local population. Brigadier Nigel Aylwin-Foster of the British Army reflected upon the coalition campaign in Iraq after 2003 and opined that although the US Army was "...indisputably the master of conventional warfighting," it was less proficient at the counterinsurgency they were waging. ⁷ He supported General Petraeus' argument that the organizational culture of the conventionally focused American Army was not suited to fighting a counterinsurgency.



General David Petraeus (left), Commander International Security Assistance Force (ISAF), and General Jon Vance, Commander Task Force Kandahar (TFK), survey/tour a newly-constructed checkpoint, 9 July 2010.

Culture for the Canadian Conventional Army

Since the Second World War, Canada's foreign policy has been that of "protection and projection." Canada has championed a non-interventionist strategy that respects the equality of states and state sovereignty. In the Cold War, Canada sought self-preservation and national protection. Those goals guided Canada towards participation in the North American Aerospace Defence Command (NORAD) and the North Atlantic Treaty Organization (NATO). Canada

tended to mitigate political tensions that "Ottawa feared would spark a Third World War." This ability to mediate the tensions between the most powerful states was not as important after the Cold War. After the Cold War, the Canadian Armed Forces have instead projected their power in order to gain influence.

In the 1990s, the Canadian government expected its army to operate across the Spectrum of Conflict. In 1994, Canada's training manual, *Training Canada's Army*, (see Figure 1) wanted the army to be prepared for *all* conflicts, from high-intensity missions – to low-intensity missions.

The manual, *Training Canada's Army*, contends that although Canada is frequently involved in conflict represented by View 2, it still has a standing requirement to be prepared for the higher intensity conflict represented by View 1. This document maintains that the effectiveness to engage in View 2 rests upon one's ability to demonstrate combat power in View 1. By the late-2000s, particularly after Canada's involvement in Afghanistan, the army recognized that it could not train for all Spectrums of Conflict. Instead, it needed to master a specific or niche area. By the early-2010s, the Canadian Army was focussing upon conventional

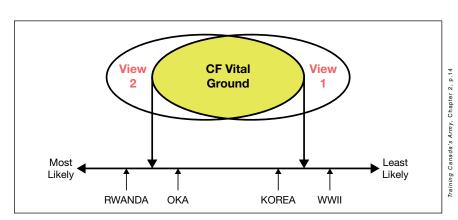


Figure 1 – The operational environment.10

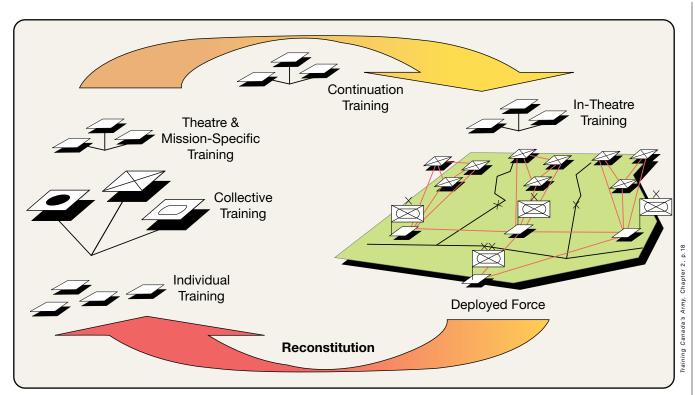


Figure 2: Training in the force generation cycle.11

Brigade operations, and in particular, the Brigade Fixed Defensive, Brigade Attack, Deliberate River Crossing and Mobile Defence. Canada has thus shaped its army on its competency to fight as a Brigade in a high-intensity conflict.

As described in Figure 2, the Canadian Army has a three-year training cycle wherein each of the three Brigades cycle through the following three phases: Support/Reconstitution, Training, and Operations. The Canadian Brigades train up to the Formation Level in a Divisional Context wherein the high readiness Brigade conducts a cumulative two-week exercise to test the Brigade against a live enemy force. The level of training ensures that the Brigade Headquarters can conduct live brigade group operations, including deep targeting, joint, and combined missions.

The Canadian Defence Policy, *Strong, Secure, Engaged* (2017), discusses the mandate to train at the Brigade Group level. It is recognized as the minimum level in order to prosecute joint campaigns where one can integrate other departments, nongovernmental organizations and coalition partners. These Brigade Groups must be able to provide "high-end war-fighting skills." ¹² The Defence Policy believes that a well-trained combat force can rapidly adapt to the lower-end operations, if required to do so.

The behaviours of the Canadian Conventional Army are as follows:

- 1. The Canadian Army Commands and Controls the mission and provides top-down direction in order to fight the enemy. The military culture is one of centralized command that provides overarching guidance;¹³
- 2. The Canadian Army will focus upon finding and destroying the enemy. It tends to conduct missions to break the enemy's decision cycle and initiative; ¹⁴ and

3. The Canadian Army has a pre-disposition to offensive operations and the focus is upon confronting issues head-on.¹⁵

Canada's military expects Command and Control from its leaders. Other organizations are more prepared to collaborate and cooperate. The military makes 'decisions,' while other organizations make 'recommendations.' The assumption of the Canadian Army is that an aggressive offensive attitude that takes the fight to the enemy is paramount. It believes that it must find and destroy the enemy to win the battle. The culture is formed from these assumptions.

Culture for Fighting a Counterinsurgency

It would be difficult to outline the perfect culture for a counterinsurgency force in a few paragraphs. Therefore, I will outline what I believe *does not work*, and use those beliefs as the basis for formulating guiding principles. Western militaries – ones that are governed by elected civilians – are expected to win wars in a swift and violent way.¹⁷ The army is simply a reflection of civil society. The civil society wants quick results and does not want to be engaged in a prolonged situation. When countries such as Canada deploy forces to fight in counterinsurgencies, they tend to conduct operations that seek to 'hunt down the insurgents.' However, a counterinsurgency force needs long-term solutions focused upon the local population.

The predisposition to conduct offensive operations is not just exemplified by the Canadian Army experience when it fought in Kandahar, Afghanistan. It was also an issue with the American military in Iraq. Of the 127 pacification operations the American Army conducted in Iraq between May 2003 and May 2005, most

were launched to find, fix, and strike insurgents. Only 6 percent of the operations were directed in supporting the local government. Patrolling often is focused upon a military objective and less upon interacting with the local people. A counterinsurgency force must assume that the people are the most important focal point of the conflict and consideration of them must be at the foundation or core of all operations.

The behaviours required of a counterinsurgency force are as follows:

- 1. Develop sound administration in the local area in order to meet the local requirements. 19 Focus upon the social, economic and political developmental need of the people with an integration of civilian activities. They must Coordinate and Cooperate with all stakeholders in the conflict. As discussed in the *Counterinsurgency* manual, it is about meeting "the local populace's fundamental needs;"²⁰
- (As General McCrystal, Commander of the International Security Assistance Force (ISAF) in Afghanistan from 2009 to 2010 stated, the strategy would be "...protection of the Afghan population over the killing of insurgents.")²¹ [The military must] operate with the lowest application of force and minimum loss of civilian life;²² and
- Develop the indigenous troops and deploy as many as practicable. Empower the local people to restore law and order.²³

The counterinsurgency force must assume that the local population is the most important aspect of the operation. All use of force, operations, and development must be focused upon building a stronger relationship with the local population. The counterinsurgency force must act as the overarching 'police force' that protects the population and develops the indigenous troops.

Conclusion

The culture of a Conventional Army is one of command and control, and of aggressive operations to destroy the enemy. The culture of a successful counterinsurgency force is one of coordination and collaboration, focusing upon protecting the population and developing the indigenous troops. These cultures are formed by the assumptions generated with respect to how they will win the conflict. Although both armies operate in a hostile environment, they are 'playing very different sports.' As expressed within the analogy, the cultures affect the way each team structures their meetings, makes decisions, runs training, improves the team and interacts with the stakeholders. The culture of the two armies requires years to change.

The Canadian Army, as with most Western armies, is expected to fight along the entire Spectrum of Conflict. This article has hopefully provided a quick study of why an army cannot simply change its equipment and rules of engagement – and expect success along the entire Spectrum of Conflict. Instead, it requires a different army. The Canadian Army has chosen to be proficient at the higher level of conflict in order to reduce the risk in the



General Stanley McChrystal during a field visit in Afghanistan, 30 March 2010.

DVIDS/Photo ID 266517

next major conflict. To be truly successful in a counterinsurgency, one needs to change the culture and assumptions. NFL teams are horrible at Rugby – and Rugby teams are horrible at Football. We must understand that there is a fundamental cultural difference between these different armies if we are going to prepare for different conflicts.

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Members of Operation Presence - Mali Force Protection discuss the plan to provide security in Gao, Mali, 17 July 2018.

DND photo



Canadian, Dutch, and German military members participate in a shortened version of the Nijmegen March at Camp Castor in Gao, Mali, 17 July 2018.

Projecting Human Rights: A Modern Take on Uniformity

by Kathryn Foss

Introduction

s an Artillery Officer with over 30 years of service in the Canadian Armed Forces (CAF), I can assure everyone that I truly understand the importance of history and necessity of uniforms within the military. Recent experience relating to my own gender identity and expectations regarding what is appropriate dress lead me to note how odd it is that at the same time as many modern militaries are trying to increase diversity and inclusivity through actions such as attracting women into operational occupations, that some of those same militaries are directly or indirectly taking other measures which hide that diversity.

Members of any armed service will understand that, "Military uniforms and all they symbolize, from brotherhood to the modern state's claim that it's clearly set-off representatives are the sole legitimate agents of violence." In relatively-modern times, formed armies have been dressed in manners which allow them to be clearly identified as distinct and separate from the non-combatants around them.

"The military uniform is a form of clothing with a particular symbolism and a long history and tradition. Even individual regiments may dress differently to reflect their history and reputation. The uniform reflects order and discipline, and calls for subordination by displaying a variety of insignia, including badges that indicate rank and emphasize the hierarchical structure of armies. It also calls for respect and fear and symbolizes strength and power: it includes features designed to make its wearer appear broader or taller, and thus to enhance the soldiers' stature in the eyes of comrades, civilians and the enemy. Finally, it helps to create an identity of appearance and an esprit de corps and is thereby conducive to the bonding process."²

Discussion

over the last century or so, the functionality of uniforms has morphed from mainly symbolic to assisting in/improving protection for the wearer. "Modern day military uniforms are much more simple and utilitarian in nature compared to their grand and decorative predecessors. U.S. Army soldiers

wear standard camouflage utilities for practically all purposes unless there is a dress parade or formal occasion where they will wear their full dress uniforms." This makes a lot of sense considering the view that "we train as we fight, and we fight as we train." Modern armed forces spend most of their time not at war, but in peacetime functions, acting simply as a deterrent. Operating and training, and being equipped as we would on operations, improves morale/effectiveness and also simplifies the logistical aspects of operating a military force.

The Army is a uniformed service where discipline is judged, in part, by the manner in which a soldier wears a prescribed uniform, as well as by the individual's appearance. Therefore, a neat and well-groomed appearance by all soldiers is fundamental to the army and contributes to building the pride and esprit essential to an effective military force. A vital ingredient of the Army's strength and military effectiveness is the pride and self-discipline that American soldiers bring to their Service through a conservative military image.⁴

I do not believe that there is much contention over the purpose and benefits of military uniforms. However, I believe that we must also consider who is wearing those uniforms, and what effect they have on the members wearing them.

So who wears those uniforms? Perhaps it is the view that as humans, the male of our species are biologically more inclined to be 'agents of violence' due to 'greater' strength, and where "... men seem to embrace their anger and use it to their advantage," so that for much of the past, only men have been soldiers. With this in mind, it can be understood that, for the most part, uniforms have been designed by men to be worn by men. Even from the perspective of economics, equipping an army should be done with maximum commonality of components, thereby limiting the procurement cost and limiting the complexity of the associated logistical support.

Historically, even before women were allowed to serve in the military, any woman who found herself in the service had to do so as a 'man,' wearing a man's uniform. However, eventually women found their way into military service, first in limited roles as part of special organizations, such as Britain's Women's Army Corps, then eventually into mainstream service in the frontline roles. At this point, so long as every soldier, sailor, or aviator could perform their common duties, it did not matter their gender. However, the contribution that women can now make to a military requires their specific uniform needs to be addressed. For example, "Today, with women accounting for 15.5% of the U.S. Army, the unisex military uniform is now being redesigned with the female figure in mind. This is primarily to reduce their risks of musculoskeletal disorders from ill-fitting armor, and therefore enhance their performance on the battlefield. Although this may alter the basic design of the military uniform, the basic functions of the gear still prevail."6

So, while it is understandable that there are great benefits to the commonality of uniforms for operational reasons, are we in fact looking for the same benefits for dress uniforms while in garrison or on parade? Contrary to popular belief, "...the dress uniform is a product of fine craftsmanship and design...it therefore comes as no surprise that the dress uniform continues to remain a symbol of military elegance and stature; similar to the combat attire, the dress uniform has also evolved to reflect the changes in taste and attitude of an era. Aside from offering comfort and practicality, these changes not only make the military uniform more handsome, they also elevate the garment as a hallmark of a respected profession. Personally, there could be no finer way to serve."⁷

The military uniform also has a part to play in the attraction of new personnel to the proud profession of arms as it allow militaries to show their composition through the public display of its members. As stated in the opening paragraph, it is hard to comprehend how some of those same militaries are operating in ways which hide inclusivity, resulting in decreasing recruitment. For example, the US Department of the Navy is "...taking deliberate steps to ensure that women become invisible in the ranks by forcing them to wear masculine dress uniforms."8 While some might find providing female-specific uniforms misogynistic or sexist, it was definitely not the case. "Without a doubt, military women wear the uniform with understandable pride. There is a longstanding history of women serving in the armed forces dating back to the Civil War, and undeniably, the uniform represents a symbol of many rich traditions. Over the years, the female military uniform has undergone significant changes but quintessentially, it remains classy in design, historically significant, and both practical and elegant at the same time." In other words, women have worn their uniforms with pride as it symbolizes both their dedication to serving their country at the same time as demonstrating that their service was done as a woman. The fact is, seeing is believing, "...by trying to hide female Sailors and Marines in formation [on parade] by putting them in male uniforms, it suggests that leaders are ashamed of women. Servicemen and women can be equal without having to wear the exact same uniform...The power of the female dress uniform items—skirts, heels, and the bucket cover—is that wearing them allows female sailors to present strength and femininity at the same time. This sends a silent message that you can serve your country without losing your identity as a woman. It demonstrates pride in our differences. And to those who can see women visibly represented in uniform, it reminds them that women serve: Girls can grow up to be sailors. "10

The question might arise as to how this reflects the current situation in the CAF. We already have no limitations on employment based upon gender, and we already have a binary set of uniforms for men and women. So, what can we do with differently with our current uniforms which would in any way increase operational effectiveness? As stated earlier, uniforms have a purpose of communicating to others a sense of strength, discipline, and control. At the same time, it has been presented that having distinct female uniforms allows the wearers to communicate those same traits, as well as a degree of femininity. We have allowed variations in our uniforms based upon national dress (Highland kilts), religion (Sikh turbans, Muslim hijabs), and ethnicity (aboriginal hair braids); most units of the CAF do not have all their personnel in the same environmental dress, so the concept of maintaining 'uniformity' has limited weight. Rather, all these portray and communicate diversity within the uniformed personnel of the CAF.



An inclusive work environment promotes diversity, which should be considered as a strength, or a 'force multiplier,' rather than as a conflict with uniformity. "We are stronger and more effective because our workforce includes individuals with backgrounds, characteristics, and attributes that reflect our Nation's rich diversity."11 Providing an inclusive environment, even within the military, does not equate to being a burden upon the organization. "Sometimes, workplaces have rules, policies, practices, and behaviours that apply equally to everyone, but can create barriers based upon an irrelevant group characteristic. Canadian human rights legislation recognizes that true equality means respect for people's different needs. In employment, this means valuing and accommodating differences so that all employees can work to the best of their ability. The 'duty to accommodate' requires employers to identify and eliminate rules that have a discriminatory impact. Accommodation means changing the rule or practice to incorporate alternative arrangements that eliminate the discriminatory barriers."12

Accommodations are normally denied only if the denial is based upon a Bona Fide Occupational Requirement (BFOR). "When a standard or rule is a BFOR, an employer is not expected to change it to accommodate an employee. However, to be as inclusive as possible, an employer should still explore whether some form of accommodation is possible...employers should no longer simply rely on an accommodation policy to respond to requests from individual employees who may be experiencing discrimination in the workplace. It means that employers should look closely at all their corporate programs and activities, including policies, practices, rules, standards, procurements and decisions

relating to real property, and do all they can to eliminate potential discriminatory barriers within them."¹³ The modernization of personal equipment and dress has demonstrated that "uniformity" is not a BFOR, that the CAF is as capable (potentially more capable) despite our not looking exactly the same.

If the CAF truly embraces inclusivity and diversity with the goal of allowing our members to reach their maximum potential, then the CAF should embrace measures which contribute towards this goal, while at the same time not causing an undue hardship upon the system. For example, "...when gay people remain in the closet, they are 10% less productive than when they feel able to be themselves...yet 41% of American LGBT workers remain closeted at work."14 Similarly, "...there is a growing number of trans people who are beginning to change their outward appearances to reflect their gender identity. This physical change might, but does not always, involve medical treatment. Either way, the effects are overwhelmingly positive. Transitioning improves trans(gender) people's mental health...Not having to stress about hiding your true identity allows trans employees to focus and enjoy their work more. Traits such as optimism, happiness and self-esteem enhanced by transitioning can enable trans(gender) employees to overcome challenges at work and to perceive their job as more fulfilling and satisfying. A positive mood might induce trans(gender) people to spend more of their time on more creative tasks, thereby improving their performance."15

With the passing of Bill C-16 in 2017, the CAF are obligated to treat and manage its personnel fairly and not to discriminate based upon gender identity and gender expression. While the vast





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majority of CAF members' needs fall conveniently within the historical 'binary' definitions (binary means exclusively male or female), not all the population is able to fit neatly within these social norms. Even a member of the CAF should be free to express their gender without fear of contravening the orders, regulations, and policies to which all members are subject, provided that doing so neither makes those members breach Universality of Service, nor imposes undue hardship upon the Department.

Within the arsenal available to foster inclusion and diversity is a fully-stocked clothing system. However, the CAF is also hindered by the binary nature of policies, information systems, infrastructure, and so on. Most facilities are not equipped or funded to provide clothing or accommodation outside the binary construct. It is understood that significant thought and effort will need to be expended in order to evaluate the costs and benefits associated with embracing a non-gendered approach to personnel support/ management. Recent discussions regarding cost-neutral personnel support enhancements led Director for Human Rights and Integration within the Ministry for European Affairs and Equality to conclude, "...that the best option would be for a workplace to make all 'gendered' options available to all individuals for them to wear what they feel most comfortable in...he would opt for having more than one option, and would remove the 'male' and 'female' categories on the uniforms (to) remove any unnecessary differentiation. A workplace could, for example, make all options available to the individual, and it will be up to the employee to pick and choose what suits them best."16

Even though the events were in no way connected, the US Army's efforts to design and introduce the "Army Combat Uniform (ACU) - Alternate," a uniform meant to address the problems women face with the unisex ACU, eventually found a broader potential application. "It's really about preferences. We want to frame the launch of this uniform to be available to all soldiers. This uniform will benefit every soldier. There are some men who'll feel their appearance is a little more professional."17 If we take a step back and analyze the process and results of the ACU - Alternate development, we should be able to draw a conclusion as to why the process was needed at all. A typical response would be as simple as, "...women have different body shapes than men, so we need to consider that." An unbiased and genderless view might be useful as the analysis would draw a conclusion that, "...military members have different body shapes, so we need to consider that." Although it is understood that the cause of the majority of the body shape differences is as a result of gendered biological physical characteristics, the shape differences are not exclusive to the binary genders.

This is an important distinction, where we consider gender as part of the analysis, but at the same time we consider whether gender is a defining factor during the end-to-end process. The Government of Canada has implemented a decision-making process called "Gender-Based Analysis Plus," or GBA+. GBA+ enables the government to respond to the specific needs and circumstances of groups and populations that are affected by its

activities, and DND has accepted the use of this tool. "First and foremost, (National) Defence is committed to using GBA+ analysis in its full range of programs and services that support and care for Canadian Armed Forces personnel. This is critical to ensure that we can meet the requirements of a diverse and multicultural workforce across Canada." Applying GBA+ to equipment and support programs, such as operational clothing and uniforms, would lead us to deduce *prior to acquisition* the same lessons that the US Army learned *after implementation*.

Hopefully, it can be understood that when analyzing the use of uniforms within the CAF, there are many factors to consider. We know that how we use uniforms has taken into consideration: history, safety, gender, religion, cultural particularities, cost, and biology, to name a few factors. Should we not also consider diversity and quality of life? Uniforms should be worn in a manner in which CAF members can feel comfortable and reach their maximum potential, all the while projecting a professional appearance that supports a positive, diverse, and inclusive work environment. Is this not an honourable and laudable goal? Therefore, although Bill C-16 requires CAF compliance in protecting gender identity and gender expression, it would appear to be a good 'business practice' to allow such a simple thing as a uniform to be worn by members in such a way as to increase attraction/ recruitment and productivity, and decrease health care costs from improved quality of life (i.e., less sick leave or medication for anxiety or depression).

But would such a practice cause undue hardship to the Crown? The CAF's clothing procurement and distribution systems are well-designed, using real-time information to analyze member requests and adjusting stock levels to ensure adequate additional resources are available when needed. Logically, allowing members to choose which style of clothing items would not burden the CAF, as there would be no additional demand to these support systems. For a very long time, these resources have been limited in their allocation to entitlements based upon the application of a binary criteria of biological sex. Whether uniforms were to be allocated based upon a single common set with no differences aside from height and body dimensions, or an open system where individual items are allocated to address the characteristics of the wearer (not limited only to their sex, but to include gender identity/expression), member needs would not increase.

In some respects, making uniforms gender-neutral could support member gender expression, and decrease system complexity. For example, is there a reason in having tunic and shirt buttons or pant zippers close in a different direction based on gender? If not, then all pants and shirts could appear the same. Similarly, there is no formal or anatomical reason to limit the wearing of a skirt to female members. It would no longer be necessary to track whether an individual item is for men or women, and it would be worn by any member which it fits. At the same time as uniforms lose their gendered nature, significant portions of dress regulations should be reassessed and be made neutral. Canadian society already accepts women wearing suits and ties, and men

Army Combat Uniform – Alternate

This 2010 graphic shows a breakdown of proposed changes to combat uniform design to better fit female soldiers. In March, the uniform was approved for use by both sexes. Soldier will decide whether to wear the ACU or the ACU-A.

Items not shown

- Removed drawstring/ added elastic waistband
- Shortened button fly
- Repositioned pockets on lower leg and cargo
- Material on each side of the shoulder blades taken in to conform to the narrower female back, allowing greater freedom of movement



- A Shoulder width narrowed
- B Rank insignia moved above the breast
- C Adjusted sleeve length and width
- Repositioned elbow patches
- Repositioned pencil and sleeve pockets
- Adjusted the cut of the material to conform to a woman's chest, hip, and waist size
- G Longer length front and back
- H Adjusted hip to waist ratio
- Adjusted the front and back rise to fit the female body
- J Repositioned knee patches

ration taken from US Program Executive Office Soldier

US Army combat uniform - alternate.

The base female IOTV provides several fit improvements for the female Soldier while providing the same high level of ballistic protection against conventional fragmenting munitions and 9mm handgun rounds that is provided by the standard IOTV. Rifle threat protection is provided when hard armor torso and side plate inserts are used.

Legacy IOTV non gender specific sizes (11)

XS, SM, MD, MD-Long, LG, LG-Long, XL, XL-Long, 2XL, 3XL, 4XL

Front torso plate insertion

Additional

cummerbund adjustability

..... Darting for more secure fit

Yoke and collar

for compatibility

with a hair bun

assembly designed

Shorter length to better fit female torso

8 new female sizes

XS, SM, SM-Long, MD, MD-Long, LG, LG-Long, XL

US Female Improved Tactical Outer Vest (FIOTV) Legacy.

S Product Manager Soldier Protective Equipment, Female So Histives and Rody Armor Undete 20 March 2018 with long hair and earrings. Provided CAF members follow the standards set for each area of dress, each member should be free to express their identity using all available dress options, ending the assigning of dress by gender, and allowing personnel equal access to all items.

Conclusion

The CAF is at an important juncture in its continuing need to adjust to the world around it, and there are options. We could undo all our advancements and accommodations, removing all differences to dress, no matter their history or justification, placing operational requirements and uniformity above maximizing the potential of our personnel. However, by promoting the diversity of dress of our members, we are in fact projecting our *adherence to* and *valuing of* human rights. We should move from the uniformity of appearance to the uniform application of personnel respect and support. In doing so, there is no undue hardship to the Crown. However, as

outlined above, the CAF would benefit with improved attraction/retention and morale through the increased respect of human rights and individual identity.

Major Kathryn Foss, CD, BSc, MEng, has been an Artillery Officer since she joined the Canadian Forces in 1987, and she completed her Master's degree in Computer Engineering at the Royal Military College of Canada in 1999. She has served with the Air Defence artillery community, followed by 14 years in Army equipment acquisition. Major Foss is currently serving as the Formal Inquiries section head within Director General Military Careers, as well as being the policy analyst for "Terms of Service." She has been through a significant life journey over the past few years, which has given her front-line experience in the areas of diversity, inclusion, and gender identity, making her sought after as a speaker in these areas, as well as that of workplace accommodations.





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A Canadian Armed Forces flight engineer surveys the wildfires in British Columbia from on board A CH-147 Chinook helicopter as part of Operation Lentus, 12 July 2017.

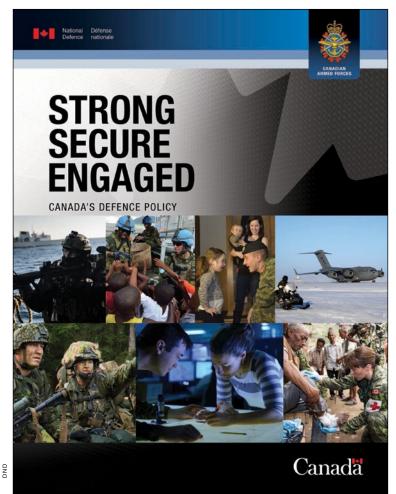
The Canadian Armed Forces and Humanitarian Assistance and Disaster Relief (HADR)

by Martin Shadwick

he Trudeau government's 2017 policy statement on defence, Strong, Secure, Engaged, observed, correctly, that the roles and missions of Canada's armed forces have "traditionally been characterized in geographic terms, with distinct lines drawn between domestic, continental, and international responsibilities. The Canadian Armed Forces' commitment to defending Canada and the broader North American continent and contributing to international peace and security will be stronger than ever. However, making sharp distinctions among the missions that fulfill these roles is becoming less and less relevant in the new security environment. The rise of borderless challenges, such as terrorism and cyber-attack, the increasingly-strong connection between global stability and domestic security and prosperity, and the fact that the Canadian Armed Forces is as likely to support broader whole-of-government efforts abroad as it is at home, mean that its three traditional roles are becoming more and more intertwined." To that end, the policy document identified "eight new core missions" for Canada's armed forces, including the provision of "...assistance to civil authorities and non-governmental partners in responding to international and domestic disasters or major emergencies."

As "natural disasters and weather-related emergencies grow in frequency and severity," noted the policy statement, "they will bring with them an increasing need for Canadian Armed Forces support. At home, the Canadian Armed Forces stands ready to respond to requests from civil authorities in cases where their capacity to respond has been overwhelmed. Similarly, humanitarian assistance and disaster relief abroad remain a priority for the Government of Canada and the Canadian Armed Forces is ready to assist as required, supporting other government departments, international aid organizations, and local governments during international emergency response. The Canadian Armed Forces Disaster Assistance Response Team [DART] will be critical to this effort."

Synergies directly or indirectly relevant to humanitarian assistance and disaster relief are also apparent in several of the other "core missions," including but not confined to those built around contributions to "international peace operations and stabilization missions with the United Nations, NATO and other multilateral partners;" assistance "to civil authorities and law enforcement, including counter-terrorism, in support of national security and the security of Canadians abroad;" and search and rescue.



The inclusion of HADR as one of the "eight new core missions" of Canada's armed forces was, at least in part, a natural outgrowth of the policy document's analyses of the changing security environment, the changing nature of conflict, and the challenge posed by climate change. The latter, noted Strong, Secure, Engaged, "...has emerged as a security challenge that knows no borders." The "increased frequency, severity and magnitude of extreme weather events all over the world—one of the most immediate and visible results of climate change -will likely continue to generate humanitarian crises. The effects of climate change can also aggravate existing vulnerabilities, such as weak governance, and increase resource scarcity, which, in turn, heightens tensions and forces migrations." At home, "climate change, combined with advancements in technology, is leading to an increasingly accessible Arctic. A decade ago, few states or firms had the ability to operate in the Arctic. Today, state and commercial actors from around the world seek to share in the longer term benefits of an accessible Arctic. Over time, this interest is expected to generate a corresponding rise in commercial interest, research and tourism in and around Canada's northern territory. This rise in activity will also bring increased safety and security demands related to search and rescue and natural or man-made disasters to which Canada must be ready to respond." Given "...the devastating effects of climate change", the policy document concluded that, "Canada must bolster its ability to respond to severe weather events and other natural disasters, both at home and abroad."



A Royal Canadian Air Force CP-140 Aurora launches out of 4 Wing Cold Lake during Exercise Maple Flag, 7 June 2016.

Strong, Secure, Engaged placed HADR among the mission sets of the RCN, the RCAF and the Canadian Army, adding in the later case that "...highly trained, versatile and well-equipped combat forces can rapidly adapt to humanitarian assistance, disaster relief or peace operations." Although its list of future service-specific and joint capital investments did not specifically address HADR requirements, many of those investments—such as the RCN's Protecteur-class Joint Support Ships, the RCAF's new transport and multi-mission surveillance aircraft (i.e., the eventual successors to the CC-150 Polaris and CP-140 Aurora) and the army's new communications, power generation, and advanced water purification systems—are clearly relevant to Humanitarian Assistance and Disaster Relief.

The HADR and HADR-related pronouncements of *Strong*, *Secure*, *Engaged* produced no discernable public, media, or other pushback. This is not surprising. Military involvement in humanitarian assistance and disaster relief has for many decades enjoyed very high levels of support in Canadian public opinion polling. Most Canadians believe climate change is real, and most acknowledge at least some of the deeply troubling short- and long-term consequences of climate change. Few Canadians are ideologically, philosophically, or politically opposed to military involvement in humanitarian assistance and disaster relief, although, that said, some academics and peace activists have on occasion expressed reservations over the potential 'militarization' of humanitarian assistance and disaster relief. The substantial Canadian military response to the Haitian earthquake of 2010, for example, was seen by some academics to have nefarious neo-colonial objectives,

while others have expressed concern that assigning too many 'domestic' roles, such as disaster relief, to Canada's armed forces could contribute to the 'militarization' of Canadian society. Others, including some emergency and disaster management practitioners and NGOs and IOs, have more practical objections to the expansion of the military's role in humanitarian assistance and disaster relief. Still others have promoted new HADR options, such as a Canadian counterpart to Germany's largely volunteer Federal Agency for Technical Relief [THW]. (For additional information on the THW, see Eva Cohen's 2017 analyses in *esprit de corps*). The appearance of new players would, almost inevitably, reduce the level of HADR activity by the Canadian Armed Forces.

Canada's armed forces have had commendable HADR successes in the past, both domestically and internationally, particularly given numerous equipment, personnel, and financial constraints, and, at times, not insignificant inter- and intragovernmental wrangling. In his memoirs, for example, Pierre Trudeau-era Minister of Agriculture Eugene Whelan criticized the Department of External Affairs and other Ottawa actors for blocking his proposal to utilize Canada's armed forces for a large-scale famine relief operation in Ethiopia during the mid-1980s. On the international front, HADR operations have ranged from late war and early post-war starvation-relief efforts in the Netherlands, to post-earthquake assistance in Peru in 1970 (notably by the Caribou transports of No. 424 squadron), in Italy in 1976 (primarily drawing resources from 4 CMBG in southern Germany), and Haiti in 2010 (utilizing an impressive tri-service mix of resources) to multiple hurricane relief operations in the southern United States



Corporal Petra Sutton, a member of the Mobile Medical Team, examines a little boy from Tom Gato, Haiti, during Operation Hestia, 12 January 2010.

and more recent hurricane-relief efforts in the Caribbean (2017). That HADR has never been cost-free was amply demonstrated in November 1945 when one of two transport-configured B-17s from the RCAF's No. 168 (Heavy Transport) Squadron crashed in Germany while en route to Warsaw with penicillin and other urgently-required medical supplies. The crew of five was killed, including Sergeant Edwin Erwin Phillips of Montréal, one of the early Black members of the RCAF.

Post-Second World War examples of HADR on the home front include the massive military response to flooding in southern Manitoba in 1950 (as Desmond Morton has observed, soldiers "...virtually took charge of an inundated Winnipeg"), Hurricane Hazel in Toronto in 1954, the Saguenay and Red River floods of 1996 and 1997, the so-called "Ice Storm of the Century" in Quebec and eastern Ontario in 1998, Hurricane Igor in Newfoundland and Labrador in 2010, and support of fire fighting and evacuation operations in Fort McMurrray in 2016. This is not to suggest that military resources were or are automatically deployed to all domestic crises and disasters, particularly given the preeminence of the provinces in emergency management. The Mississauga Ontario train derailment of 1979, wherein the derailment of a freight train carrying a particularly toxic brew of volatile chemicals prompted the evacuation of 200,000 people—itself a well-lauded accomplishment—but drew a surprisingly-modest military response, in part because of an embarrassing and regrettable breakdown in communications between the relevant agencies and actors of the federal and, notably, the provincial, governments.

This breakdown went essentially unnoticed by the media and the public. On the other hand, the spate of floods and ice storms in the late-1990s prompted timely, massive, and successful military involvement—and prodigious media coverage – thereby helping to restore public confidence in a military institution battered by fallout from the Somalia scandal.

The military capabilities available, or potentially available, to operationalize the HADR aspirations of the 2017 defence policy statement present a mixed picture. On the 'air' side, the CC-177A Globemaster introduced an entirely new order of HADR capability to the RCAF, albeit within the constraints of a comparatively compact five-aircraft fleet. The Hercules fleet, for more than 50 years the aerial backbone of Canada's domestic and international HADR capabilities, is now anchored by 17 CC-130Js, but, as legacy H-models in the SAR and tanker-transport sub-fleets—both of which have contributed to HADR—are phased out in the coming years, Canada's Hercules fleet will shrink to its smallest size since the 1960s. The CC-130J is an impressive airlifter, but even a modest increase in the size of the fleet—not just for HADR—could prove useful. The HADR potential of the well-equipped *Chinooks* is just beginning to be tapped, while the Cyclone maritime helicopter, now on its first operational deployment, offers HADR capabilities well in advance of those found on the stalwart Sea King. As Colonel (Ret'd) Ernie Cable has observed, the Cyclone offers a higher cruise speed, a greater radius of action, double the hook or slinging capacity of the Sea King, a substantially improved power-to-weight ratio, a larger cabin, and a rear ramp. In addition,



Personnel of the Canadian Army clearing away debris in Toronto during the aftermath of Hurricane Hazel, November 1954.

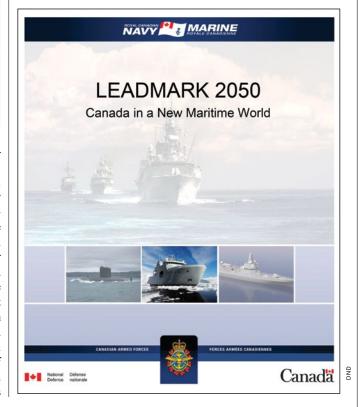
"...the exceptional increase in radar and electro-optical sensor resolution will enable the *Cyclone* to better locate survivors or lost individuals and to map terrain features to assess the impact of disasters such as floods, earthquakes and forest fires and provide information for future actions."

Country/ Region	Year	Nature	Remarks
Jamaica	2007	Hurricane	First RCAF C-17 HADR operation
Burma	2008	Cyclone	
United States	2008	Hurricane	First use of 2008 US-Canada Civil Assistance Plan
Haiti	2010	Earthquake	Includes airlift of DART
Libya	2011	Conflict	Non-Combatant Evacuation
Philippines	2013	Typhoon	Includes airlift of DART
Sierra Leone	2014	Ebola Outbreak	Includes airlift of UK personnel and equipment
Nepal	2015	Earthquake	Includes airlift of DART
Caribbean	2017	Hurricane	Includes airlift of French equipment and supplies to Guadeloupe

RCAF Globemaster international HADR operations, 2007-2017.

For the RCN, the declining availability and then the disposal of the two original *Protecteur*-class replenishment ships seriously blunted Canada's maritime HADR capabilities. Their intended successors, the *new Protecteur*-class—a Seapsan-built variant of the German *Berlin*-class support ship—will offer a Role 2/3 medical facility, the ability to accommodate 50+ TEUs, the "...potential for containerized payloads according to mission requirements" (i.e., the electrical and other utilities necessary to support removable medical or other specialized modules) and other HADR-relevant features. The MV *Asterix*, now in service as a leased, interim replenishment ship after a swift conversion by Chantier Davie, also offers an HADR capability. Indeed, Chantier Davie has drawn special attention to the current and aspirational HADR features of the ship, including two heavy cranes, a large medical facility, an internal vehicle bay, Mexeflote compatibility, shore connections

to provide power and desalinated water for humanitarian operations, and an intriguing containerized storage area. The broader debate between those who would cancel the pricy Protecteur-class in favour of a second Asterix-type conversion, proceed with the Protecteur-class but retain on lease (or purchase) the Asterix, or purchase three *Protecteur*-class vessels is vitally important, but, from an HADR perspective, the core problem is that neither the Protecteur-class nor the Asterix can match the HADR capabilities offered by the genuinely multi-role Joint Support Ship as originally envisaged. This, in part, explains the ongoing interest in various quarters whenever a potentially suitable foreign vessel becomes available (i.e., the British Largs Bay and Ocean, and the French Mistral-class vessels originally built for Russia). It is intriguing, in this regard, that the RCN's Canada in a New Maritime World: Leadmark 2050, published in 2016, suggested that "...among the more immediate platform priorities in the pre-2035 period is the requirement to broaden the fleet's ability and flexibility to conduct operations ashore, across a range of [peace-support missions] in relatively permissive environments, including humanitarian assistance and disaster relief..." A "purpose-converted" vessel acquired through an "innovative public/private partnership," this "peace support ship" would include a "substantial" sealift capacity, a range of ship/shore connectors (i.e., helicopters and landing craft), a joint headquarters, a civil-military coordination centre, medical and dental facilities and accommodations for evacuees. Such a ship, posits Leadmark 2050, "would likely be among the most heavily- used assets in the future Canadian Armed Forces inventory," and "...likely emerge as the principal Canadian Armed Forces defence diplomacy asset." Intriguing, to be sure, particularly



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if other capabilities, such as underway replenishment, could also be satisfactorily accommodated.

The forthcoming *Harry DeWolf*-class Arctic and Offshore Patrol vessels will bring additional HADR capabilities to the fleet, although the full impact of assorted capability walk backs remains to be seen. The *Halifax*-class frigates still have a useful role to play in HADR—particularly when a *Cyclone* is embarked—but their ultimate successor will likely have even more to offer, given the global proliferation of multi-role mission bays in frigate-type warships.

For the Army, the 2017 defence policy statement identified a substantial list of new or modernized equipment—ranging from armoured combat support vehicles to logistics vehicles, heavy engineer equipment, light utility vehicles, all-terrain vehicles and tracked semi-amphibious utility vehicles to communications, power generation and water purification systems—that are, to varying degrees, relevant to humanitarian assistance and disaster relief. Timely deliveries, and due consideration for HADR requirements, are clearly important. The Multi-Purpose Engineer Vehicle (MPEV) that currently equips the Disaster Assistance Response Team, for example, is an intriguing piece of kit, but a more readily supportable commercial-off-the-shelf backhoe/front-end loader would be preferable in the locales and operating conditions to which the DART deploys. (For an intriguing evaluation of the options available for the enhancement of the Disaster Assistance Response

Team, see Lieutenant-Colonel Claire Bramma, "A Response to Climate Change: Evolving the Business of the Disaster Assistance Response Team (DART)," in *Canadian Military Journal*, Vol 16, No 4, Autumn 2016).

How much of the new or modernized equipment will find its way to the Army Reserve remains to be seen. In its Spring 2016 report, the Office of the Auditor General reviewed the use of the Army Reserve for fighting floods and forest fires between 2013 and 2015, and found "...many instances of key equipment lacking, such as reconnaissance vehicles, command posts, and communications equipment." Although the policy statement's "new vision for the reserve force" rightly included light urban search and rescue, one wonders if a more expansive vision anchored in a further enhancement of the Army Reserve's HADR role is required. One participant in Ottawa's 2016 defence policy consultation exercise, for example, suggested that some reserve units be re-roled as Combat Engineer Regiments, thereby generating skill sets useful at home (i.e., disaster relief), overseas (i.e., disaster relief and peace support operations), and in combat operations. A more expansive vision would not mean transforming the Army Reserve into a purely HADR entity - that would not serve the broader national interest and could fuel a 21st Century version of the recruitment and morale issues that emerged in the 1950s after a high priority was attached to the Militia's nuclear-age "national survival" role—but it would take account of the Army Reserve's broad geographic footprint and community presence.



An RCAF CH-148 Cyclone helicopter flies over the Mediterranean Sea after taking off from HMCS Ville de Québec during Operation Reassurance, 11 August 2018.



A 417 Combat Support Squadron helicopter and crew survey the damage created by wildfires in the Fort McMurray area, 4 May 2016.

Assessments of Canada's HADR-relevant military capabilities, while pivotal, only scratch the surface of the broader humanitarian assistance and disaster relief landscape. The area is something of a minefield, perhaps more so in Canada than in many other countries, embracing federal-provincial relations, civilmilitary relations (i.e., the military's relationship with provincial governments and their emergency management agencies, and, on the international stage, the military's relationship with such actors as the Red Cross and Doctors Without Borders/Médecins Sans Frontières—both of whom argued during the 2016 public consultations that there are practical, legal, and philosophical barriers to an expanded military role in HADR), public expectations of the military's HADR capacity, and the military's own attitudes to such roles as humanitarian assistance and disaster relief. These are complex. Done in moderation, the military recognizes that such roles as HADR offer useful training, enhanced morale, and a strengthened bond between Canadians and their armed forces. Too much HADR-type activity, on the other hand, could threaten core combat capabilities, military professionalism, and the fundamental military raison d'être of the Canadian Armed Forces. Whether the 2017 defence policy document's wrapping of HADR in a security veneer alters military perceptions of HADR remains to be seen.

Canadians, weaned on a steady American media and social media diet of "...the National Guard has been called in," often have unrealistically-high expectations of how fast, and how effectively, Canada's compact and far-flung military can respond to emergency situations. Moreover, as Chief Political Writer Campbell Clark has noted in the Globe and Mail, there is a familiar pattern to disaster relief in Canada: "Municipalities and first responders, such as police and fire departments, get overwhelmed; well-meaning volunteers pour out to help, but often don't know what to do; a small provincial emergency-response team tries to coordinate, but is overloaded; the army is called in, but it's late in the game [emphasis added], and they're thin on the ground." The international variant of unrealistic expectations surfaced in the Caribbean during the 2017 hurricane season when some Canadians and Canadian media outlets slammed Ottawa for an allegedly-low HADR response in general, and a slow emergency evacuation of Canadians in particular—perhaps forgetting that the admittedly-impressive European response was in part mandated by constitutional and related obligations in the region. The Canadian military response was, in fact, larger than many supposed, involving two Hercules, a Globemaster, an Aurora (for aerial imagery gathering) and a Challenger, HMCS St. John's with an embarked Sea King helicopter, the delivery of large quantities of food, fresh water and other humanitarian cargo, the airlift of more than 300 evacuees, and the clearing of debris and assistance during the restoration of water and power sources.

Another pivotal issue, the sometimes-problematic civilmilitary relationship in HADR, has been usefully explored in a number of venues, including "The Military and Disaster Management: A Canadian Perspective on the Issue" (David Etkin, Kenneth McBey and Cliff Trollope, 2010). The study notes that "... there are two perspectives on the role of military involvement in disasters—one that it is a model that should be followed to a greater extent, and another that expresses serious concerns regarding the effectiveness of militarizing disaster management." Various "...academic critiques have identified potential problems related to good cooperation between military and civilian cultures. Without doubt they exist, but these barriers are likely to be country and culturally specific, and within Canada are far outweighed by the advantages gained from the integration of the [Canadian Armed Forces] into the disaster management cycle. The key to effective cooperation is to ensure ongoing planning, liaison, coordination and needs assessment between civilian and military officials, and sensitivity to different cultures, in order to determine the

most appropriate fit and most effective supplemental uses of the military in emergency and disaster situations." This study offered an essentially-optimistic appraisal of the prospects for military involvement in domestic disaster relief operations, but its finding that some critiques reflected "...a potentially simplistic and biased view of the military" should continue to give one pause.

While concurring with the central thrust of *Strong, Secure, Engaged* regarding the shifting security environment, climate change, and the prospects for an enhanced HADR role for the Canadian Armed Forces—apart from an almost obligatory caveat about a potential gap between HADR commitments and aspirations and HADR capabilities—perhaps the key takeaway is the need for Canada, in full whole-of-government(s) and stakeholder consultation mode, to craft a holistic and comprehensive national vision or doctrine for humanitarian assistance and disaster relief.

Martin Shadwick has taught Canadian defence policy at York University for many years. He is a former editor of Canadian Defence Quarterly, and he is the resident Defence Commentator for the Canadian Military Journal.





HMCS St. John's departs Halifax, Nova Scotia on Operation Renaissance to assist in humanitarian relief efforts following Hurricane Irma, 7 September 2017.

The Uses and Abuses of History

by Margaret MacMillan

Toronto: Penguin Canada, 2008

194 pages, \$16.00

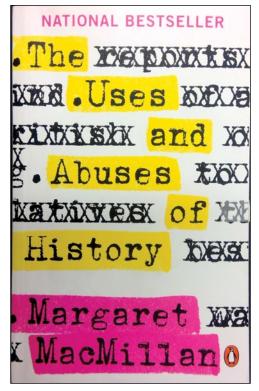
ISBN: 978-0-14-305478-8

Reviewed by James Pierotti

hen the world is complicated and changing rapidly, not necessarily for the better, it is no surprise that we look back to what we mistakenly think was a simpler and clearer world. [p16]" This quote, from Margaret MacMillan's The Uses and Abuses of History, is what captured my interest. She plainly states that her book would look back at history and show the complications and shadows of the past and demonstrate how it relates to today. Indeed, her book is a captivating and pointed trip through the last century and more of world history.

The world seems to be taking a turn towards isolationism and nationalism – hinted at by Brexit and the election of Donald J. Trump – and it is helpful to understand how history can shed a light on these surprising current events. This book was written before the recent events I mentioned, but it remains a very insightful look at how leaders, dictators, and nations have consistently used history to influence their people and get them to view the world through a national leadership's particular lens. MacMillan's background as a well-published Canadian academic historian makes her perfectly qualified on this topic, and she has written the book in an incredibly easy-to-read manner, without footnotes, making it very accessible to anyone.

The book starts with some popular current uses of history, such as the making of entertaining movies or popular television series like Mark Starowicz's *Canada: A People's History*. MacMillan then goes on to show how various governments and the media portray history to largely make people feel good about themselves. From there, the book takes a darker turn and describes the serious misuses of history by many different nations, including the extreme efforts the Maoist government of China took to create revisionist history. In fact, the narrative is incredibly appealing because there are so many examples given from across the last century and from diverse countries such as the United States, Canada, Russia, China, and Israel. The central argument is that all nations will use history to advance their own aims, nefarious or not, and that historians have not done enough to inform the people of all sides of historical events.



If there is one criticism that can be levelled against this book, it is that the title is misleading. MacMillan sees so clearly the abuses of history, but she provides few examples of the positive uses of history. As an example of her focus on abuses, she outlines the current trend of governments, Canada included, to apologize for events of the past and even to provide recompense for victims of the nation's past. She outlines it like this: "...words are cheap - although they can lead to expensive demands - and politicians like to appear caring and sensitive. Moreover, apologies about the past can be used as an excuse for not doing very much in the present. [p30]" She makes a very good point, but the other side of that argument is that apologies can highlight events from the past to influence decision makers and the public of the present.

There are two very notable examples of past decision-making by Canadian governments that show the value of apologies. First, the *Komagata Maru*

was a ship turned away from Vancouver in 1914 and hundreds of would-be immigrants were forced to return to India where most faced incarceration or death. Second, *MS St. Louis*, a ship of nearly 1,000 German-Jewish immigrants, was turned away from the United States and Canada in 1939, tragically ending in the murder of 254 of the passengers in Hitler's holocaust. On 18 May 2017, the Prime Minister of Canada, Justin Trudeau, apologized for the *Komagata Maru* incident and it is expected that he will apologize for the *MS St. Louis* incident as well. Because many, if not most, Canadians have never heard of these incidents, the apologies serve to highlight little-known decisions from the past that the government is telling the public that they do not want to repeat.

In today's arguably anti-immigrant mood, and with thousands of asylum seekers pouring over Canada's border from the United States, the apologies help put current immigration concerns into historical perspective. Regardless of whether the government of the day had legitimate reasons for turning back those two ships, it is useful to use those incidents to express today's values in a hope of making better decisions tomorrow. As the apologies described above took place well after MacMillan wrote her book, and she uses only the *Komagata Maru* incident, these two examples are not intended at all as criticism, but simply to show how one can use her book and the reader's own knowledge to put today's world in a new perspective.

The tremendous value of Macmillan's intriguing book is that she deftly uses enough examples to allow the reader to extrapolate her analysis to other historical events, which certainly had me thinking about the book long after I finished the short and insightful read. As the military is a frequent user of history to

extrapolate lessons learned from past campaigns to the next big fight, I highly recommend *The Uses and Abuses of History* to military personnel wishing to think about misuses of history that have complicated our past, and how we might better use history to plan for the future. In her own elegant closing words on history: "...my only advice is use it, enjoy it, but always handle history with care. [p187]"

Lieutenant-Colonel James Pierotti is a currently-serving Air Combat Systems Officer with the majority of his experience in Search and Rescue on board the mighty C130 Hercules. He has a Master's of Arts in War Studies degree from the Royal Military College of Canada, where he developed a passion for history and how it can put the present in context.

Canadian Arctic Operations, 1941-2015: Lessons Learned, Lost, and Relearned

Edited by A. Lajeunesse and P. W. Lackenbauer

Fredericton, The Gregg Centre for the Study of War & Society, 2017

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Reviewed by Darryl Bannon

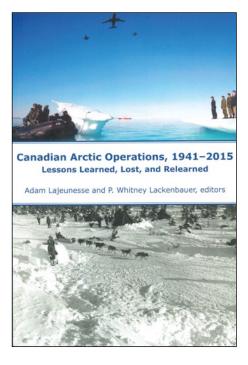
dam Lajeunesse is an Assistant Professor and the Irving Shipbuilding Chair in Arctic marine security at the Mulroney Institute of Government at St. Francis Xavier University. His academic interest

in the Arctic stems from a Ph.D. examining the history of Canada's arctic maritime policy. In more recent years he continues to focus on northern issues relating to defence cooperation and governance as well as understanding how the Arctic is being shaped by China's influence.

Paul Lackenbauer is a Professor at St. Jerome's University (University of Waterloo) who specializes in Arctic security, sovereignty, and governance. He is the editor, author, or contributor to dozens of books on arctic issues and in his spare time is the Honorary Lieutenant-Colonel of the 1st Canadian Ranger Patrol Group (1 CRPG), based in Yellowknife.

This book is a compilation of arctic stories and military lessons learned, and it follows a chronological format from past (1941) to present (2015). Lajeunesse and Lackenbauer are the book editors as well as the authors of several individual chapters.

The book introduction breaks down the chronology of the book into three time periods, into which the various chapters can be grouped. This is helpful for the reader, as this chronological phasing is one way compartmentalize the book in the reader's mind so as to keep clear the periods of increased Arctic interest (and funding). The time periods start around 1945, 1970, and 2000, and each begin with the Canadian military finding its Arctic feet anew. As the reader learns, the reason for this requirement for the



military to constantly relearn the Arctic is because between each of the phases, there is a decade of Arctic amnesia – due to geopolitics, economics, and other factors.

The introduction also presents the reader with a number of the issues surrounding the Canadian military's involvement in the Arctic. One such issue is the real or perceived value for the military of its Arctic activities. For instance, the military has at times over the period covered in the book focused upon presence patrols, sovereignty and/ or community relations in the Arctic. However, as noted by the editors, these goals could easily (and perhaps more cost effectively) be achieved by a visit from the Governor General. This line of reasoning draws the reader towards a possible thesis of the book, namely, what should be the Canadian military's objectives in the Arctic?

The book starts out by describing the Second World War European Arctic experience of the Canadian-led Spitzbergen Raid in 1941. While the historical narrative is intriguing, it will likely be the lessons learned which most interest the reader. In this chapter's instance, while the objective of the raid was primarily to destroy mining infrastructure so as to deny it to the Germans, it was later realized that it was the loss of the meteorological stations that most impacted German operations.

A common thread which connects many of the stories and experiences detailed in the book is the austere nature of the Arctic – and that it is a formidable military defence unto itself. Indeed, it is noted several times that a foreign power attempting to seize part of the Canadian Arctic would need an incredible logistics train. Specifically, as noted in Colonel (retired) Bernd Horn's chapter, the fewer airfields we have in the Arctic, the fewer there are to defend – and the reader will be led to believe that at times our government's position with respect to defence of the Arctic was one of 'scorched ice.' This is turn leads the reader to question whether infrastructure being developed in Arctic is duly weighed against security concerns. Fortunately, as the book points out, the risk of direct foreign occupation of the Arctic is low.

The book emphasizes the importance of working with the Inuit – who are the local experts – whenever one goes to the Arctic. Indeed, Peter Kikkert discusses the importance of *ihuma*

when dealing with Inuit. *Ihuma* is an Inuktitut word which has many meanings, but generally refers to reason, wisdom, and knowledge, particularly in the face of adversity. This is important, given that the harsh terrain can offer many obstacles to even the simplest mission, and one has to keep perspective and be flexible. A non-Arctic example for someone having *ihuma* might be an individual who is able to keep calm, even when stuck in Toronto rush hour traffic.

The book's various authors all speak to the hardships faced by troops in the Arctic – the remoteness, the lack of infrastructure, the difficulties with equipment, and the importance of training, along with other issues and concerns. For an Inuit living in a remote northern community, these things would be common knowledge, but for an outsider who is going to be working in the Arctic, or for outsiders who take up residence there, the book will provide valuable insight. This insight could help maintain realistic expectations and appropriate preparedness. Given this, I would certainly recommend this book to people going to the remote Arctic, whether they be soldiers, adventurers, or scientists, so that they can maximize their *ihuma*.

Captain Darryl Bannon currently works as a Watch Officer at the Joint Operations Centre (JOC) at Joint Task Force North (JTFN) in Yellowknife, Northwest Territories.

The Cinderella Campaign: First Canadian Army and the Battles for the Channel Ports

by Mark Zuehlke

Madeira Park: Douglas and McIntyre Ltd, 2017

469 pages, \$37.95

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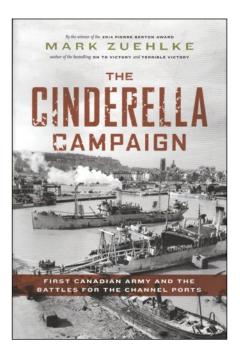
Reviewed by Geoff Tyrell

he Canadian Army's Second World War experience in North-West Europe is dominated by several well-known names: Dieppe, Juno Beach, and the Rhineland to name but a few. Less well-known are Boulogne, Calais, and Cap Gris Nez. All

of these places – the Channel Ports – lay along First Canadian Army's path from its belated victory at Falaise to the meat grinder of the Scheldt Estuary. Their place in the story of the Canadians in Europe is in no way less significant than that of their better-known cousins.

The Cinderella Campaign is Mark Zuehlke's latest entry in his Canadian Battle Series. In it, he examines the events that transpired between the two marquee operations of First Canadian Army's campaign on the European Continent in 1944, a period that tends to receive scant attention in more popular histories. It is an effective examination of an oft-overlooked segment of the Canadians' slow, costly, and unglamorous mission to both safeguard and strengthen the lifeline of the Allied armies in Europe.

By late-August 1944, the Battle of Normandy ended for the Canadians with the closure of the Falaise Gap. The *Wehrmacht* reeled back towards Germany, and it was clear that the Allies would not be evicted from France. First Canadian Army, bloodied but unbowed, was proud of its victory while gritting its teeth for the fight ahead. The paucity of reinforcements – particularly for



the infantry battalions – began to bite, as replacements consistently failed to keep up with casualties. And yet, the determination of the Canadians did not falter, even as fissures became more apparent in Allied high command.

As Zuehlke skilfully illustrates, the Canadian campaign to clear the Channel Ports was an unintended victim of dissent between the most senior commanders of the Allied Expeditionary Force: Bernard Montgomery and Dwight Eisenhower. Convinced that a final victory was possible in 1944, Monty advocated for a narrow thrust deep into northern Germany, while 'Ike' pursued a broad front strategy that would overwhelm the Germans along the length of their western front. As strategic indecision reigned, one truth was clear for either approach: major ports were required to maintain the Allies' ever-stretching lines of communication back to Britain. Logistics

would be the deciding factor in the Western Allies' effort to defeat Hitler's Germany.

It fell to First Canadian Army to clear the Channel coast, seizing critical ports into which supplies of men and material could flow and sustain the Allied march to Berlin. Unfortunately for the Canadians and their commander, General Harry Crerar, 'Monty' paid lip service to the importance of the unenviable task which he handed First Canadian Army. From late-August until early-October 1944, Crerar's troops and their mission 'took a back seat' to his obsession with the narrow front strategy (which culminated in the failure of Operation *Market Garden*). As a result, First Canadian Army was chronically under-resourced. These circumstances represent the genesis of Zuehlke's book.

Like his other works, Zuehlke ably explores the challenges facing the Canadians with anecdotes from the tactical level, while maintaining the campaign in its operational and strategic context. The fact that First Canadian Army often consisted of several non-Canadian units is not overlooked, such as I (British) Corps' role in liberating Le Havre, and the Czech Brigade's masking of

Dunkirk after it was decided to isolate the city (the Germans there held out until V-E Day).

Zuehlke examines the impact of the acrimonious relationship between Crerar and II Canadian Corps' commander, Lieutenant-General Guy Simonds, on the Channel Ports campaign in both its planning and execution. He also highlights the varying quality of the Canadians' German opponents, a mixture of first-rate, veteran combat units and hastily-assembled tactical groupings that could either fight to the last man, or surrender without a shot being fired. The Canadians' march to the 'great widow-maker' of the Scheldt was not an easy one, as their adversary remained ever dangerous.

In *The Cinderella Campaign*, Mark Zuehlke has created a worthy addition to his admirable Canadian Battle Series. Well-researched and engaging, this book shines a light on a place in Canadian military history that, while not as breathtaking as the events of the so-called Norman summer, was still critical to the ultimate defeat of Hitler's empire.

Major Geoff Tyrell is a graduate of the Royal Military College. A logistics officer serving with 1 Service Battalion, he has deployed to Afghanistan and Ukraine.

The Second World Wars: How the First Global Conflict was Fought and Won

by Victor Davis Hanson

New York: Basic Books, 2017

652 pages, \$48.00

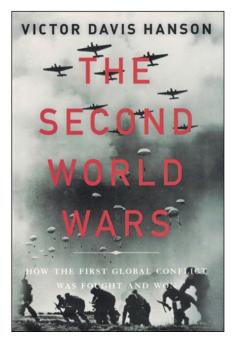
ISBN 978-0-465-06698-8

Reviewed by Mark Tunnicliffe

he so-called 'post-war period' ended in 1991 with the Peace of Paris and the re-unification of Germany, and with it, a new phase in human history. That said, we are still living with the legacy of the most destructive conflict humanity has ever inflicted upon itself: the Second World War. However, with the passage of time,

historians are beginning to build a perspective, not only on the role of that war in driving the course of subsequent history, but on the nature and conduct of the war itself. Studies such as Richard Overy's authoritative *Why the Allies Won* (London: Johnathan Cape, 1995) and Paul Kennedy's *Engineers of Victory* (New York: Random House, 2013-reviewed on these pages in CMJ Vol. 14, No. 1) provide analyses at various levels of granularity to demonstrate why that war was a lost cause for the Axis Powers.

Except that it wasn't... By late-1941/early-1942, with the Soviet counter-offensive outside Moscow failing, a large British army surrendering at Singapore, US and British fleet losses in the Pacific, and the U-boat campaign still enjoying the late successes of its first "happy time" in the Atlantic, the nascent manpower and economic advantages of the Allies appeared irrelevant to an early Axis victory. The turning point of the war, then, was late-1942. Once the situation was stabilized – i.e. that the Allies were probably not going to lose – the question still remained: how did the Allied powers turn the situation into inevitable victory. Or did they



also have help from the 'character flaws' inherent in the three main Axis powers?

This is the main lesson that the reader draws from Hansen's analysis. The book's title was chosen to illustrate the scope of the Second World War – a war fought in so many different and seemingly-unrelated locales across the globe, and employing heretofore unseen modalities. In Hansen's account, the war progresses from an eminently winnable (from the Axis perspective) set of local engagements against "predicable enemies," to a global war that they were incapable of winning. In other words, (although he does not use the term) Shakespearian hubris.

Hanson bases much of his discussion upon basic features of warfare known since classical times. For example, "...the winning side is the one that most rapidly learns from its mistakes," and responds

more quickly to changing circumstances. As a classical historian, therefore, he bases his arguments upon the old lessons of war particularly those learned by the ancient Greeks and Romans. The structure of his book follows that of an earlier study (A War Like No Other: How the Athenians and Spartans fought the Peloponnesian War, also reviewed in these pages – CMJ Vol. 7, No.2), in which he takes a thematic, vice chronological approach. Not surprisingly, he breaks the core of his discussion into themes based upon the original Greek elements of Air, Water, Earth, and Fire (although fortunately, he eschews the fifth one, Aether, to cover his discussion on ideology under the heading of "Ideas" instead). A final section containing chapters on command, leadership, and production is appropriately-entitled, "People." The thematic areas examine the opposing capabilities in aviation (particularly strategic airpower), maritime forces, land operations, and firepower (largely on land), and notes that once the war had gone global, the Axis had no real means of attacking the core capabilities of their opponents, given their lack of a global maritime and air capability. His references to past military lessons are useful and appropriate, but the heavy weighting he places upon examples from the Classical period (and

complete omission of anything from the Warring States period of China) betray his research background, and perhaps, his bias.

Indeed, a skeptical view of his book might suggest elements of a foray into a relatively new academic field for the author. In any book there will be small details of commission or omission that are either incorrect, or at least, open to debate. This one has a few. The PzKpfw Mk IV tank did not have sloped armour nor a KwK 42/70 gun, for instance - only the turretless Jagdpanzer version of this vehicle sported these features. The first plate in the book misidentifies German anti-tank guns (probably 75mm PaK 40s) as FlaK 88 anti-aircraft guns being produced in France. For a classical scholar to miss a detail on Second World War artillery is understandable, but failing to correctly translate the original French caption is a bit more problematic. In some cases, his omissions weaken his own thesis. For example, Hansen several times mentions a period in the Pacific war when USS Enterprise was the only carrier the US had in the Pacific. This was only strictly true as the Royal Navy had responded to a call for help from the US by transferring HMS Victorious to operate with Enterprise in the Pacific under US command, and using US carrier aircraft for the first half of 1943. Indeed, this example would have illustrated a point that Hanson makes elsewhere that the Allies (particularly the Americans and British) were mutually self-supporting, and that support did not just go one way.

However, to that skeptical reader, the question remains – do such glitches matter? In some books they can destroy the credibility of the author and his thesis. But not in this one. Here Hanson gets the big questions right. In the case of tank design, for instance, he deftly handles the common question (and one that this reviewer as a museum interpreter often has to field) - What was the best tank of the Second World War?" The "correct" answer is usually "...the one that is on the battlefield." As Hanson points out, this is generally the tank that is produced in large numbers (because it could be assembled by masses of semi-skilled workers), transportable by rail and ship to the combat theatre, supported by an integrated and defended supply train, could navigate the bridges the engineers could construct, and was easy to maintain and operate. Usually this meant that that tank was a Sherman or a T-34. On the occasion that a *Panther* or a *Tiger* did encounter them, the finely-crafted German tank could knock them out – but not in the large numbers the respective Allies were able to get to the front.

Hanson also makes no apologies for the Allied bombing effort – noting that only the British and Americans were capable of mounting a serious and effective strategic bombing campaign. While outlining the costs and setbacks incurred in the air war over Germany, he defends it as vital to the final victory, making the usual arguments concerning disruption of German production

and resources. Hanson also observes that Japan was essentially the first major nation to acknowledge defeat largely as a result of air power. The US campaigns in the Pacific effectively served to place the Japanese homeland within practical range of B-29 bombers, which then conducted low level fire bombing raids to lay waste to cities and infrastructure, leading to Japanese capitulation. Japan, in consequence, suffered an army of occupation, but, unlike Germany, not one of invasion.

Hanson is quite generous in his assessment of the role of the UK in the war – in its contribution, impact, and the competence of its leadership (both political and military). However, a potential frustration to Canadian readers is his penchant for flipping back and forth in his reference to the UK and the British Empire as if they were one and the same. In a sense, they were - Empire and Dominion forces used pretty much the same doctrine, uniforms, and equipment, and usually served under higher British command. But the figures Hanson often quotes (force size, GDP, and casualty rates, for instance) usually refer to the UK itself, tending to ignore, by way of examples, the relatively-large size of the Indian Army, the not-insubstantial contribution of the RCAF to Bomber Command, and the overall economic contribution of the Empire and Dominions to the larger British effort (the total Empire GDP during the war was, for example, about double that of the UK itself). This is to some extent understandable, because the nature of this contribution (which ranged from the sophisticated in the UK, to subsistence level in India) is hard to tease out in terms of its relevance, but Hanson might have done better to at least acknowledge it and take more care in making the distinction between the Britain and its Empire.

The Second World War (plural or not) was far too immense an event for one book to summarize or encapsulate. That said, Hanson's well-written examination of the basic lessons of war that defined its successful prosecution (from the Allied perspective) provides a useful and important perspective. It does not replace earlier studies of the subject, but rather, it provides an excellent amplification and an additional point of view which deserves a place on the bookshelves of any student of this significant episode in world history.

That said, however, one wonders if his central thesis has not already been well summed up in the old misquote from Oscar Wilde: "To lose one world war may be regarded as misfortune; to lose both looks like carelessness."

Mark Tunnicliffe served for 35 years in the Canadian Navy, and another five with Defence Research and Development Canada, before retiring in 2013. He now serves as a volunteer interpreter and researcher at the Canadian War museum in Ottawa.