





"HOW WE THINK": AN INSTITUTIONAL ANALYSIS OF THE CANADIAN ARMED FORCES AS AN ADAPTIVE INSTITUTION

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JCSP 45

Exercise Solo Flight

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"How we think": An Institutional Analysis of the Canadian Armed Forces as an Adaptive Institution

INTRODUCTION

In February 2019, the Commander of the Canadian Joint Operations Command (CJOC) Lieutenant-General (LGen) Mike Rouleau released a letter to his staff, titled "'How we fight:' Commander CJOC Thoughts,"¹ where he imparts personal observations made throughout his career that illustrate how shifting paradigms and global trends have profoundly reshaped the security environment. The ever-expanding arena of political competition has magnified friction and uncertainty. At the same time, however, the margin of error has narrowed. At the speed of a news cycle, a limited tactical misstep can lead to strategic fiasco. LGen Rouleau asserts that these changes to the environment are endemic and they will continue to profoundly influence how the CAF approaches the business of defence. Although the Strong Secure and Engaged defence policy and the Vice Chief of Defence Staff's (VCDS) Force Mixture Structure Design initiative are addressing these issues, he believes that the CAF cannot stop there.²

The purpose of LGen Rouleau's "How We Fight" dialogue is to generate tangible options enabling the Canadian military to adapt, and succeed, in the future environment. It implies stepping beyond current contexts to envisage a blueprint for the future, but bounded by the realism of resource constraints and capacity gaps:

> We need to agree on a common, balance of probabilities, future and reimagine the mix of capabilities, structure, approach, management philosophies, professional military education, doctrine, etc [sic] needed to be as successful as we can against a complex future.³

¹ Lieutenant-General Michael Rouleau, "'How we fight:' Commander CJOC Thoughts" (Internal Correspondence, Canadian Joint Operations Command, Ottawa, ON, 10 February 2019).

² Ibid., 1.

³ Ibid., 1-2.

To this end, he contends that CJOC's operational-level functions must be streamlined by well-defined and transparent frameworks of authorities and permissions that enable its subordinate task forces with greater freedom and power to act. Such an approach requires smart, adaptive and flexible leaders that are comfortable with uncertainty and limited resources. For this to occur, LGen Rouleau believes that necessary changes to joint command philosophies, leadership education and professional military development are required.

LGen Rouleau's observations and recommendations are founded on education, personal study and significant experience within the realms of conventional operations, irregular warfare and special forces operations, among others. The veracity and integrity of his guidance notwithstanding, he is the most recent addition to a number of capable civilian and military leaders that have advocated for transformation within the Canadian military institution. The results of those that preceded him have varied. This paper will address the CAF's propensity to change the way it learns, adapts and commands in a changing environment. This examination uses the Institutional Analysis methodology, based on the "Three Pillars of Institutions" analytical framework, informed by the work of William Richard Scott.⁴ Of note, examples from foreign militaries will be discussed in this paper out of relevance to their influence on institutional logics embedded within the Canadian military institution, or to illustrate how they approached similar challenges to the ones discussed here.

⁴ W.R. Scott, *Institutions and Organizations: Ideas, Interests, and Identities*, (3rd ed. Los Angeles: SAGE, 2008), 47-71.

Methodology

Scott's analytical framework for Institutional Analysis leverages commonalities found in the most accepted theories and schools of thought in the field.⁵ These are broadly defined by the normative, Cognitive and Regulative Institutional Pillars. The purpose of Scott's approach is to determine the significance of key logics embedded within the pillars to illuminate meaning behind collective rational, as well as, the decisions and behaviours of individual actors.⁶ Scott's Institutional Analysis framework will address the question of how the CAF thinks about how it fights by examining three key analytical elements: understanding the environment (through institutional learning), environmental adaptation and command philosophy. The first area refers to the institutional approaches to learning, through training and education, and how these influence the institution's interaction with, and understanding of, its environment. The second area refers to the institutional logics associated with how the institution perceives, and adapts to, change within its environment. Finally, the third area refers to the leadership, management philosophies that govern organisational functions. In the CAF context, this area is best addressed by examining command as a concept, practice and culture. In keeping with the central premise of LGen Rouleau's enquiry, the focus of this analysis on the joint CAF functions at the operational level of war. That said, subjects at the political, strategic, and tactical levels will be discussed due to their pertinence to the thesis.

⁵ W.R. Scott, Institutions and Organizations ... 55-56.

⁶ Ibid., 56.

DISCUSSION

Contextual Background

Throughout history, warriors and philosophers have attempted to rationalize the phenomenon of armed conflict, and the environment in which it resides. Carl von Clausewitz's astute insights into the "fog of war," broadly interpreted as friction, uncertainty and ambiguity are fundamental to contemporary understanding of the environmental dynamics that continue to evade conclusive scientific substantiation. For this reason, Clausewitz's characterisations of war as a complex system continue to be central to professional military education for operational-level leaders of modern Western militaries.⁷ Since the time that Clausewitz put his thoughts to paper, in the early Nineteenth Century, the ends, ways and means for which wars are fought have changed drastically. Modern forms of surveillance and computing technology now afford unprecedented access to environmental information to enable military operations. However, they still cannot predict the future. That the most powerful and sophisticated modern militaries can still be deceived, surprised and out-manoeuvered is proof that the "fog of war" is as relevant in the current environment as it was during Clausewitz's lifetime. As alluded by LGen Rouleau in "How We Fight," the competitive edge goes to the force that can learn and adapt faster that its foes.

In the century and a half since Confederation the Canadian military has experienced periods of gradual evolution, rapid transformation, as well as stagnation and

⁷ Coombs, Howard, Wakelam, Randall T., Rowley Roger, *The Report of the Officer Development Board: Maj-Gen Rowley and the Education of the Canadian Forces*, (Waterloo, Ont: Laurier Centre for Military Strategic and Disarmament Studies, 2010), XXX. Martin Van Creveld, *Fighting Power: German and US Army Performance, 1939-1945*. Vol. no. 32. (Westport, Conn: Greenwood Press, 1982), 76. Jefferey Stouffer and Bernd Horn (Ed.), *Educating the Leader and Leading the Educated: The Defence Learning, Education and Training Handbook*, (Kingston, ON: Canadian Defence Academy Press, 2013), 15, 40, 77.

decay. The social legitimacy of the military institution within Canada has also ebbed and flowed with time. These periods are defined by Canadian military institutional behaviors shaped by environmental factors associated with adversarial threats; domestic social and political forces; as well as, Canada's political and economic standing in the world. The most rapid periods of transition have been characterized by the presence of a perceived, or confirmed, existential threat, such as during the World War I (WW I), World War II (WW II) and the period immediately following the Al-Qaeda attacks in the United States, on 11 September 2001. During these events, the military generally enjoyed strong social legitimacy within Canada. Outside of war, social and political factors have defined the military's position in society in other ways. For instance, the social status of the military during the Victorian period was much higher than it is today. This was a function of British society and was reflected in Canada through its stronger social, political and ethnic ties to the United Kingdom in comparison to the present day. Whether as a British dominion or an independent state, Canada has always been a junior partner to either the United Kingdom or the United States. Aside from internal conflicts and United Nations (UN) Peace Support Operations, the Canadian military goes to war as an integrated member of larger multinational organisations led by a great power, such as the United State. For this reason, throughout history, How the Canadian military thinks, and fights has been largely influenced by either the British or American military institutions. The military's institutional behaviours have also been shaped by geo-political and socioeconomic factors unique to Canada. For this reason the Canadian military institution has been impacted by the tone of social legitimacy and threats to its institution in unique ways.

Cognitive Context

Constitutive Framework

Constitutive frameworks hold a great deal of importance for military institutions. Institutions derive meaning and stability through these shared conceptions of the environment and social reality.⁸ Such intangibles manifest the cohesion and resilience, needed for organised action in high stress environments. Institutional logics in the cognitive context are normally conservative in nature because stability is based on the constancy of these shared understandings. Some of the Canadian military's rationale and patterns of behaviour surrounding adaptation, command and learning can be traced back to its early history and British lineage.

Environmental Adaptation

The British Army is one of the oldest institutions in history, with a reputation for professional excellence and an enviable legacy for combat effectiveness.⁹ During periods of relative calm, its professional core fulfilled various roles for the Crown, such as: quelling internal unrest, policing the Empire and embarking on limited interventions within Europe. In times of major war, it has quickly expanded into large and powerful field armies. Soldiering in such a diverse range of missions and conditions bred a strong sense of resilience into the institution. Pragmatic resourcefulness in the face of adversity was embedded into its cognitive framework.¹⁰ This manifested into a "generalist" approach to warfighting, bulwarked by the natural leadership of the aristocratic officer

⁸ W.R. Scott, Institutions and Organizations: Ideas, Interests, and Identities, (3rd ed. Los Angeles: SAGE, 2008), 67.

⁹ Eitan Shamir, Transforming Command: The Pursuit of Mission Command in the U.S., British, and Israeli Armies, (Stanford, CA: Stanford University Press, 2011) 67.

¹⁰ Eitan Shamir, *Transforming Command: The Pursuit of Mission Command in the U.S., British, and Israeli Armies*, (Stanford, CA: Stanford University Press, 2011) 67.

corps, and the professional discipline of the "rank and file." Under these conditions, doctrine formulation and formal officer development was under-valued and underdeveloped in comparison to the armies of Europe.¹¹ Besides, with such a wide scope of work, global dispersion, and the demands on its resources the Army could ill afford to commit much focus or effort in these areas. Its strength was its ability to adapt. These cognitive and normative aspects of the British military institution were inherited by the United Kingdom's colonial dominions, like Canada.

The militia and the diminutive professional military institution of early Canada reflected British military culture. Pragmatic resourcefulness, the generalist approach and views towards doctrine and professional development were included among these. Coupled with other uniquely Canadian cultural aspects, the Canadian military demonstrated an organisational cognitive competence for adaptation. During WW I the Canadian Corps developed a sophisticated methodology for adapting its "attack doctrine" to environmental change on the Western Front.¹² This was owed in great part to Generals Sir Julian Byng and Arthur Currie for codifying a lessons-learned process that could be quickly adapted into training, tactics and procedures. Tim Cook relates how the Corps developing infiltration tactics, trench-raiding and combined arms cooperation to become the elite formation of the British Expeditionary Force by the final year of the war.¹³

¹¹ Ibid., 68.

¹² Tim Cook, *Shock Troops: Canadians Fighting the Great War, 1917-1918*, (Toronto: Viking Canada, 2008), Kindle location 308. https://read.amazon.ca/.

¹³ Tim Cook, *Shock Troops: Canadians Fighting the Great War, 1917-1918*, (Toronto: Viking Canada, 2008), Kindle location 487, 496 and 506. https://read.amazon.ca/.

Command Culture

The command culture of the Royal Canadian Navy and the Army owes many of its roots to the British systems. As previously discussed, the lack of formalised British military doctrine caused gaps in the organisational framework that we're filled in by strong leaders and competent troops at the tactical level. As noted in a U.K. Army doctrinal publication, "the British Command style, it is *improvisation*. A universal exception prevails, almost operating like a law of nature, that a Wellington or a Montgomery will turn up and . . . turn defeat into victory."¹⁴ Michael Howard suggests that Wellington's command style had "set the pattern of Command style for two hundred years." Eitan Shamir mirrors the same remarks for Field Marshal Montgomery for the Twentieth Century. Both men we're self-taught masters of their craft, highly experienced and positioned themselves at the center of operations. They both also tended to micromanage their staffs and subordinate commanders. Wellington's and Montgomery's are not anathema within the British system, it has its fair share of other styles, such as Field Marshal Slim, who exercised a more decentralised approach. However, the operative themes for the British command style is improvisational, directive if necessary and that among the most talented of their commanders were not products of the system. Since adapting Mission Command in the early 1980s, the British military still struggles with varying range of command approaches that often personality-based. The CAF struggles with the same competing command paradigms as the British Army and can be traced back to the same cognitive origins.

¹⁴ United Kingdom, Ministry of Defense, Army Doctrine Publication 71564, Command, vol. 2 (1995), 2-A2., As cited in

Understanding the Environment.

Military epistemology is a complex subject with deeply rooted institutional rationales that are hard to quantify and even harder to change. For this reason, transformation is a challenging endeavor because it usually requires changing assumptions, logics and behaviours that are deeply-rooted in an institution's identity. Changes to training and education systems causes instability, resistance and conflict within an organization. This is reflected in the Canadian military institution's experience with educational reform.

The environmental forces on the Canadian military, such as the ones discussed in the contextual background, have influenced institutional logics embedded within the Canadian military's approach to epistemology. These include certain biases towards the perceived validity of different types of knowledge. Factual knowledge, theoretical knowledge, tacit knowledge, embedded knowledge and explicit knowledge are briefly described in order to illustrate how these biases and their significant in normative context Factual knowledge are statements of fact derived from experimentation through the scientific method.¹⁵ Factual knowledge provided the foundation of much of the technical knowledge is based on assumptions of that which is not proven as fact. It is based on consensus derived from proven research methods.¹⁶ Its purpose is interpret meaning behind why things *are* the way they *are*. In the military context, theoretical knowledge is leveraged to determine more effective ways to interpret the environment and organize

¹⁵ Knowledge Management Tools. "The Different Types of Knowledge." Last accessed 27 April 2019. http://www.knowledge-management-tools.net/different-types-of-knowledge.html
¹⁶ Ibid.

action within it. Tacit knowledge is based on experience. It tends to be based on empirical trial, context-dependent and challenging to define.¹⁷ Embedded knowledge is tradecraft rooted within the institution. It is often communicated through personal transactions, such as leader mentorship. Explicit knowledge is a collection of factual, theoretical, tacit and embedded knowledge that is formally codified by an organization.¹⁸ Military doctrine is an example of explicit knowledge. Tacit knowledge has generally predominated Canadian military cognitive frameworks. It is reflected in the Institution's body of explicit and embedded knowledge, its approach to epistemology, and in a persistent institutional logic towards anti-intellectualism.

Experts in the field of Canadian forces professional development, such as Horne, Bentley, Wakelam and Coombs have all reflected on the legacy of British antiintellectualism on the Canadian military institution.¹⁹ Up until the Twentieth Century, British cognitive schemata was still present in the Canadian officer corps, such as antiintellectualism and personality-centric approaches to command. Other modelled British views and behaviours increasingly less congruent with Canadian society causing cognitive isolation. Bentley and Horn suggest that tacit knowledge is a high commodity of value and is generally favoured over theoretical knowledge. The nature of contemporary The Canadian military often contributes to coalitions operations with company to battalion battle-group-sized taskforces, air support elements of multiple

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Horne. Coombs, Howard, Wakelam, Randall T., Rowley Roger, The Report of the Officer Development Board: Maj-Gen Rowley and the Education of the Canadian Forces, (Waterloo, Ont: Laurier Centre for Military Strategic and Disarmament Studies, 2010) xxx.

aircraft and single ships or naval task forces. As a function of scale, the weight experience is based at the tactical level.

Organising Logics

Anti-intellectualism is a cognitive frame within the CAF that have persisted since it was originally inherited from British military culture. Horn's points alludes that it is perpetuated out of an organizational bias against theoretical knowledge and that it is one of the reasons why the CAF is caught in a "tactical paradigm."²⁰ This persistent logic is a source of tension within the institution when oncological reforms threaten this cognitive frame. Tensions between the competing command paradigms is representative of institutional logics at cross-purpose.²¹ Conflicting understandings of reality cause institutional instability. This is a possible explanation for why the CAF has taken on the amount of different operating concepts, such as Effects-Based Operations, Network-Centric Operations and Adaptive Dispersed Operations, in the last few decades. Although it may just be a function of the current rate of environmental change, it is also possible that it a rational institution effort to re-establish stability to its constitutive schema.

Regulative Context

Institutional governance in the regulative context is exhibited through rules and conditions reinforced by sanctions in order to limit actors' instrumental logic and action within the acceptable margins of institutional logic.²² The regulative framework of the Canadian Forces Personnel Appraisal Program demonstrates how the predominant

²⁰ B. Horn, B. and B. Bentley, *Forced to Change: Crisis and Reform in the Canadian Armed Forces*. (Toronto: Dundurn Press, 2015), 30-31.

 ²¹ W.R. Scott, *Institutions and Organizations: Ideas, Interests, and Identities*. 4th ed. (Los Angeles: SAGE, 2014), 68.
 ²² Ibid., 65.

¹¹

cognitive logics discussed above are reflected in the way that the CAF grooms and assesses potential leaders for the operational level. In this appraisal process, there are no performance or potential assessment factors for intellectual curiosity or independent contribution to the body of professional military study. The assessment factors at the captain (Navy lieutenant) to lieutenant-colonel (Navy lieutenant-commander), the target group for future employment at the operational level, can be seen as biased towards producing proactive tactical level leaders. It reinforces the necessity for developing the core competencies for expertise. However, it also misattributes tactical level performance with operational-level potential, which are not entirely the same skillset.

Normative Context

Environmental Adaptation

Following the end of WW II a handful of military and civilian leaders created momentum towards improving the intellectual development of Canadian military officers. Although the Canadian forces, overwhelmingly comprised of citizen volunteers, performed exceptionally well during the war the lack of higher education and advance military professional expertise had cost blunders at all levels, and the lives of soldiers.²³ At the dawn of the nuclear age, these proponents appreciated that a potential war against the Soviets would be decided before mass mobilization could occur, and for the Canadian Army's case, years of training and preparation as it had in England. In 1947, the Inter-Service Committee on Officer Training concluded with recommendations for major reforms for military training and education. Included among these was that a university

²³ O.D.B. Coombs, ODB. Bernd Horn and Bill Bentley (Ed), *Forced to Change: Crisis and Reform in the Canadian Armed Forces*, (Toronto: Dundurn Press, 2015).

education should be a prerequisite for an officer's commission.²⁴ This recommendation was not actioned and was not seriously revisited until the Rowley Commission over twenty years later. By the late 1960s, the security environment had evolved and become more complex. NATO had abandoned its "Static Defense" posture in Europe. The Soviet outmatch in conventional forces and tactical-level nuclear weapons necessitated a more sophisticated approach through technological offset, rapid strategic lift from North America and complicated operational-level maneuver and logistics. For similar reasons a few years earlier, Major-General Roger Rowley had revamped the Canadian Army Staff College (CASC) into a two-year program. In addition to NATO strategic doctrine, Canadian Army officers had begun to undertake increasingly diverse assignments, such as peacekeeping duties and aid to civil power tasks, for which prior professional military education had not prepared them.²⁵ Officers serving on operational-level staffs needed knowledge and skills to complete a broader range of tasks. The list of tasks required a greater general knowledge of joint integration, the operational art and national security strategy. Furthermore, it also involved greater technical expertise on computer-driven data analysis and advanced surveillance and target acquisition systems being introduced by the Americans.²⁶ At the end of the army staff college pilot project, Rowley and his staff concluded that they were "more convinced than ever that it is not possible to

²⁴ Bernd Horn and Bill Bentley (Ed), *Forced to Change: Crisis and Reform in the Canadian Armed Forces*, (Toronto: Dundurn Press, 2015), 12.

²⁵ Coombs, Howard, Wakelam, Randall T., Rowley Roger, The Report of the Officer Development Board: Maj-Gen Rowley and the Education of the Canadian Forces, (Waterloo, Ont: Laurier Centre for Military Strategic and Disarmament Studies, 2010) XXXVIII.

²⁶ Coombs, Howard, Wakelam, Randall T., Rowley Roger, The Report of the Officer Development Board: Maj-Gen Rowley and the Education of the Canadian Forces, (Waterloo, Ont: Laurier Centre for Military Strategic and Disarmament Studies, 2010) XXIX.

properly train a professional staff officer for modern war in less than 22 months."²⁷ The two-year program barely outlived Rowley's tenure as commandant before it was cancelled by the Army.

In 1967, the Chief of Defence Staff, General Jean Victor, tasked MGen Rowley to complete a comprehensive study of officer professional development in the CAF. This was sparked by forces of change in the security environment as well as the need for a plan for a standardized officer professional development for the unification of the CAF. Rowley's pivotal report on the commission's findings recommended widespread change to military training and education that are still in use today. Besides the university educational requirements of junior officers discussed previously, the commission recommended improved education for senior officers to enable greater contribution to national strategy, making leadership philosophy and military ethos central to all levels of CAF officer development, adequate science and technology education to meet the demands of modern operations, a methodical and comprehensive professional development plan to enable career-long learning (the Officer Professional Development [OPD]) and a culture that encourages "original research and contributions to professional knowledge."²⁸ Rowley also conceived of a "brain trust of the institution, Canadian Defence Education Centre (CDEC), charged with the task of conceptual development of "military professionalism and officership, essential for the future effectiveness and well-

²⁷ Coombs, Howard, Wakelam, Randall T., Rowley Roger, The Report of the Officer Development Board: Maj-Gen Rowley and the Education of the Canadian Forces, (Waterloo, Ont: Laurier Centre for Military Strategic and Disarmament Studies, 2010) XXXV.

²⁸ Rowley Roger, "Chapter 7: An Examination of the Present Canadian System, Vol 1" *The Report of the Officer Development Board: Maj-Gen Rowley and the Education of the Canadian Forces*, Edited by Howard Coomb and Randall Wakelam (Waterloo, ON: Laurier Centre for Military Strategic and Disarmament Studies, 2010) 72-73.

being of the armed forces, would be developed."²⁹ Rowley's recommendations were only ever partially realized.

The report was published in the midst of the turmoil occasioned by the dual processes of Unification and Integration of the CAF. In addition, the government, led by Prime Minister Pierre Elliot Trudeau, released a foreign policy review and a Defence White Paper over the period 1970– $71.^{30}$

In "Forced to Change: Crisis and Reform in the Canadian Armed Forces," Bernd Horn notes that from the end of WWII until the 1990s, there were nineteen major studies conducted on reforming institutional learning with negligible results to the system. He continues that the widening disconnect between the training and education system and the professional development needs of the officer corps was central to the "Somalia Affaire," which finally forced the hand of government to enforce change upon the CAF. Horne attributes this state of affairs to a deeply rooted culture of anti-intellectualism in the CAF. Understanding the Environment

The system of training and education for leaders in the CAF is conducted according five development periods.³¹ The professional development to prepare officers for staff and command at the operational level occurs the third development period with the most formative aspect being staff college.³² This course, now titled the Joint Command and Staff College serves to provide the transitional professional development

²⁹ Bernd Horn and Bill Bentley (Ed), *Forced to Change: Crisis and Reform in the Canadian Armed Forces*, (Toronto: Dundurn Press, 2015), 13-14.

³⁰ Bernd Horn and Bill Bentley (Ed), *Forced to Change: Crisis and Reform in the Canadian Armed Forces*, (Toronto: Dundurn Press, 2015), 14.

³¹ F. Brulier and D. Hartnet, Chapter 17: The Canadian Forces Professional Develoment System" in *Forced to Change: Crisis and Reform in the Canadian Armed Forces*, (Edited by Bernd Horn and Bill Bentley) Toronto: Dundurn Press, 2015), 294.

³² Handbook.

for CAF senior leadership and the theoretical knowledge needed to excel as a commander and planner at the operational level.

The JCSP curriculum is a modified version of the European staff college model from the Nineteenth Century. The predominant exemplar of this model is the German Kriegsakademie. Shaped by the reforms invoked by Sharnhorst, Gneisnau, Clausewitz and Moltke the elder, the Kriegsakademie was the military's "brain trust."³³ It was a 2-3year curriculum purposed to select the next generation of "military elites," destined for the general staff.

Since the Somalia inquiry, external pressure has caused higher education to gain increased relevance within the cognitive. At the same time, Horn points out multiple examples illustrating continued resistance towards higher education.³⁴ As such, it indicates that anti-intellectual normative frames remain persistent within the institution. It also indicates that there are normative and cognitive logics at cross-purpose, which continues to cause institutional tension with regards to this subject.

Command Philosophy

Mission Command as a distributed leadership concept was introduced into the US military in the late 1970s and early 1980s. It is an American interpretation of "Auftragstaktik" (Mission-type tactics), a German military command philosophy and cultural phenomenon based on intent-based direction and decentralized execution. Mission Command became a central element of 1980s US Army AirLand Battle doctrinal

³³ Martin Van Creveld, *The Training of Officers: From Military Professionalism to Irrelevance*, (New York, NY: Free Press, 1990), 29.

³⁴ B. Horn and J. Stouffer, *Educating the Leader and Leading the Educated: The Defence Learning, Education and Training Handbook,* (Kingston, ON: Canadian Defence Academy Press, 2012), 249.

development designed to offset Soviet conventional military, and tactical nuclear, outmatch of NATO forces in Central Europe. Mission Command first appeared within Canadian doctrine in the Canadian Army keystone doctrinal publication, Land Forces in Battle³⁵. It has since been widely integrated into CAF joint and branch specific doctrine and central to the CAF's institutional leadership philosophy.

German Auftragstaktik is predicated on delegated authority and power between commander and subordinate based mutual "professional trust." This trust relationship is built on institutional frameworks that legitimised doctrine and officer development. Thus in the Prussian and German systems, the commander-subordinate trust exchanged was founded on confidence in the system to produce competent commanders and subordinates. Alternatively, the "Command Personality" cognitive logic is predicated on interpersonal trust. A commander's level of trust in a subordinate determined how much authority was exchanged. This is reflected in a lesser value placed on doctrine and officer development in normative context. In Auftragstaktik, risk is accepted and shared at all levels. This was a rationalisation of Prussian and German society reflected through it's the military's enduring and strong social legitimacy.³⁶ As discussed previously, the social legitimacy of the military is situationally-dependent, which determines the degree to which risk is shared, assumed or avoided. Shamir characterises this approach to command as "Optional Control," meaning that shared trust, authority and responsibility vary based on the factors discussed above.

³⁶ Eitan Shamir, *Transforming Command: The Pursuit of Mission Command in the U.S., British, and Israeli Armies*, (Stanford, CA: Stanford University Press, 2011), 26.

Findings

The Canadian military institution was developed out of the British military institution and consequently inherited many of its institutional logics, rational and behaviours. Some of the most deeply embedded aspects of this legacy persist within the institution. The Canadian military has earned a reputation for professional expertise, agility and resourcefulness under demanding circumstances. This is owed in part to its British antecedents.

The CAF has since evolved on a separate path than its British forebearer and has been shaped by environmental influences through the prism of the uniquely Canadian social and geopolitical experience. Some deeply embedded logics have stunted its development. This has been most evident in the areas of officer professional development enabling operational acumen and strategic sensitivity. By the end of WWII, the conservative norms, values and behaviours of the officer corps, reflective of British aristocracy (in a country without an aristocracy) became increasingly problematic. Increasingly isolated from Canadian society, the military institution failed to fully appreciate social change and the educational revolution.³⁷ Transformation imposed by civilian authority destabilised the institutional core and fostered tension and distrust between the military and the government. Morton points out that it was one of the causal factors in the "Somalia Affaire."³⁸

³⁷ R. Wakelam, Randall. "Officer Professional Education in the Canadian Forces and the Rowley Report, 1969." Historical Studies in Education 16, no. 2 (2004): 289.

https://historicalstudiesineducation.ca/index.php/edu_hse-rhe/issue/view/52.

³⁸ D. Bercuson. "Up from the Ashes: Re-professionalization of the Canadian Forces after the Somalia Affair." Canadian Military Journal 9, no. 3 (2009). http://www.journal.forces.gc.ca/vo9/no3/doc/06-bercuson-eng.pdf.

The Prussian and German military institutions offer some of the most well researched exemplars of effective learning institutions. The literature on this subject indicates that this was due to effective institutional norms that were reflected in a culture that valued intellectual curiosity and experiential knowledge. At certain points in its history, the Canadian military has reflected similar attributes, such as the example of the Canadian Corps in WW I. Although this formation's normative framework came from the British institution, it demonstrated higher propensity for environmental adaptation. The German system displayed an informed and results-oriented approach to soldiering, enjoyed unparalleled social legitimacy.³⁹ The is a stark contrast to the British system, and its culture of anti-intellectualism, inherited by the Canadian military institution.

On several points in "How We Fight" LGen Rouleau emphasizes the importance of clarity and transparency in operational level command and planning as essential to overcoming the phenomena of "chance, friction and fog" in this complex environment. For Clausewitz, "friction" is the source of disparity between "real war" and "war on paper."⁴⁰ Understanding "friction" is contextually essential to the effective application of organised violence in the chaos of war. It is a prism through which the otherwise irrational confluence of human cognition, physiology, intellectual theory and the physical world in war can be understood. As such, theoretical study at staff college alone insufficiently prepares its students. Clausewitz Kriegsakademie curricula breakdown between theory and practical exercise tied together through Kantian dialectic was sourced in Clausewitz's efforts to synthesize intellectual and theorical knowledge.

³⁹ Martin Van Creveld, *The Training of Officers: From Military Professionalism to* Irrelevance, (New York, NY: Free Press, 1990), 25-26.

⁴⁰ Carl von Clausewitz, On War, ed. Rapoport, A and trans. Graham, Col. J.J. (London: Penguin Books, 1968), 251.

Institutional Analysis – A question of validity

Donaldson argues that the premise of institutional theory is unsound because it over emphasizes the influence of institutional culture, customs and group conformity on organisational behaviour. Institutional theorists underplay actor's capacity for rational decision making and leaders to affect change within an organisation.⁴¹ This is based on flawed logic based on Institutional theorists' misattribution of the continued influence of past events and circumstances on an organisation. He cautions that the logic behind Institutional Analysis stifles innovation because it encourages organisational actors to give-in to institutional norms and logics, since the "forces" from which they are derived are too powerful to individually change.⁴² He also refutes that these "forces" are not correctable through education.

If Donaldson's arguments are justified, the findings of this paper could be interpreted as an endemic failure of Canadian civilian and military leadership to affect rational change concerning how the CAF educates, organises and commands. This paper does not argue that institutional actors are incapable of rational thought and action dues to the confines of history or culture. At the same time, the research by the authors cited above does imply the presence of forces that have resisted change directed by national policy and written orders. In terms of innovation, when actors decide to chart a new course for the organisation, they do so based on assumptions on an un-known future, from where those assumptions derived? Donaldson's argument falls short of offering alternative arguments for the irrationality of institutional rationale.

 ⁴¹ Donaldson, Lex. 2002. "Damned by Our Own Theories: Contradictions Between Theories and Management Education." Academy of Management Learning & Education 1 (1): 102.
 ⁴² Ibid., 103.

CONCLUSION

Canada's military, from its early history to the present, has often operated within a a "strategic vacuum," caused by its geopolitical reality, vague and inconsistent political direction, and because of its position as "permanent junior partner" within coalition operations. The Information Age has caused several paradigm shifts in modern conflict. The associated cross-domain and techno-centric nature of the contemporary operating environment has magnified friction and uncertainty, which has significant implications on how we think about how we fight.

The tensions between competing logics within the cognitive and normative domains of the institution are causing a continued propensity of focus on the tactical level and away from the operational and strategic levels. Cognitive logics inherited from history, persistent albeit dissipating anti-intellectualism continues to abate efforts towards balanced professional development, tailored for operational-level leaders, that provides expertise through the synthesis of theoretical and experiential knowledge through meaningful developmental training. Like the Prussian-German military education system, it would be a "brand" through which graduates are accorded the "professional trust" so required for Mission Command. On the other hand, if the cross-purpose institutional logics persist, the CAF is destined to remain trapped in its extant cognitive paradigms.

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