

The Emperor Has No Clothes: The Canadian Perspective for Capacity Building Operations

A Monograph

by

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14. ABSTRACT Canada is likely to continue using the Canadian Armed Forces (CAF) to build capabilities in fragile states and stabilize conflict-affected states in Africa, Eastern Europe, and the Middle East in the near term. The conduct of capacity building (CB) operations is not a new paradigm. Through the lens of a traditional approach, the CAF uses the Operational Planning Process (OPP) combined with operational art and design for the creation of military strategies and operations within the operational environment (OE). This raises the following question: What role does contextual understanding have in producing CB strategies and operations that are effective and measurable? This monograph argues that the use of system framing from a linear to a complex adaptive systems approach can become the basis for CB operations that address national imperatives and mission requirements. The CAF needs to institutionalize a methodology, a constructivism approach, that includes design thinking within its OPP. Without the institutionalization of a holistic method for planning and executing CB operations, the CAF will continue the same traditional approach of "bottom-up" through intensive iterations. Design thinking allows commanders and their staff to create internally coherent military strategies, campaigns, and operations, in line with the twenty-first century's requirements to be externally relevant. This methodology will help the CAF to avoid the same painful learning, adaptation, and evolution that the organization experienced in the past while conducting CB operations.					
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Abstract

The Emperor Has No Clothes: The Canadian Perspective for Capacity Building Operations, by MAJ Jonathan Martineau, 73 pages.

Canada is likely to continue using the Canadian Armed Forces (CAF) to build capabilities in fragile states and stabilize conflict-affected states in Africa, Eastern Europe, and the Middle East in the near term. The conduct of capacity building (CB) operations is not a new paradigm. Through the lens of a traditional approach, the CAF uses the Operational Planning Process (OPP) combined with operational art and design for the creation of military strategies and operations within the contemporary operating environment. This raises the following question: What role does contextual understanding have in producing CB strategies and operations that are effective and measurable?

This monograph argues that the use of system framing from a linear to a complex adaptive systems approach can become the basis for CB operations that address national imperatives and mission requirements. The CAF needs to institutionalize a methodology, a constructivism approach that includes design thinking within its OPP. Without the institutionalization of a holistic method for planning and executing CB operations, the CAF will continue the same traditional approach of “bottom-up” through intensive iterations. Design thinking allows commanders and their staff to create internally coherent military strategies, campaigns, and operations, in line with the twenty-first century’s requirements to be externally relevant. This methodology will help the CAF to avoid the same painful learning, adaptation, and evolution that the organization experienced in the past while conducting CB operations.

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Abbreviations

ABCA	American, British, Canadian, Australian Armies Program
ADM (POL)	Assistant Deputy Minister (Policy)
ANA	Afghan National Army
ANP	Afghan National Police
ANSF	Afghan National Security Forces
BPC	Building Partner Capacity
CAF	Canadian Armed Forces
CAS	Complex Adaptive Systems
CB	Capacity Building
CDS	Chief of Defence Staff
CEFCOM	Canadian Expeditionary Forces Command
CJOC	Canadian Joint Operations Command
COE	Contemporary Operating Environment
COIN	Counter-Insurgency
CT	Collective Training
CTF	Combined Task Force
DCB	Defence and Related Security Capacity Building
DM	Deputy Minister
DND	Department of National Defence
DOTMLPF-P(I)	Doctrine Organization Training Material Leadership Personnel Facilities Policy Interoperability
ETT	Embedded Training Team
FAS	Feasible, Acceptable, Suitable
FD	Force Development
FE	Force Employment

FEC	Federal Election Commission
FG	Force Generation
FM	Force Management
FP&R	Force Posture and Readiness
FSO	Full Spectrum of Operations
GAC	Global Affair Canada
GIRoA	Government of the Islamic Republic of Afghanistan
GoC	Government of Canada
HN	Host Nation
HR	High Readiness
ISAF	International Security Assistance Force
IT	Individual Training
JCSP	Joint Command and Staff Program
JIPOE	Joint Intelligence Preparation of the Operational Environment
JTF-A	Joint Task Force Afghanistan
MDMP	Military Decision-Making Process
MND	Ministry of National Defence
MOE	Measure of Effectiveness
NATO	North Atlantic Treaty Organization
NORAD	North American Aerospace Defence Command
OE	Operational Environment
OMLT	Operational Mentor Liaison Team
OODA	Observe, Orient, Decide, Act
OPP	Operational Planning Process
PCO	Privy Council Office
PME	Professional Military Education

PRT	Provincial Reconstruction Team
SFCB	Security Forces Capacity Building
SJS	Strategic Joint Staff
SSE	Strong, Secure, Engaged
SSR	Security Sector Reform
TF	Task Force
TFK	Task Force Kandahar
UK	United Kingdom
UN	United Nations
US	United States
VUCA	Volatile, Uncertain, Complex, Ambiguous
WoG	Whole of Government Approach

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Introduction

Canadians have always been ready to share the burden and responsibility of making the world a safer place. We have a long history of working collaboratively with partners to prevent and respond to conflicts and crises abroad, including our support for peace and stabilization operations. The same applies to policy and advocacy that strengthen global norms on peace and security. Our commitment to collective security is reflected in our long-standing support for our core alliances, North Atlantic Treaty Organization (NATO) and North American Aerospace Defense Command (NORAD), and for the United Nations (UN).

—The Honourable Chrystia Freeland, Minister of Foreign Affairs

Canada is likely to continue using the Canadian Armed Forces (CAF) to build capabilities in fragile states and stabilize conflict-affected states in Africa, Eastern Europe, and the Middle East in the near term. According to Canada's Defense Policy, *Strong, Secure, Engaged* (SSE), capacity building (CB) operations are one of the eight core missions assigned to the CAF. SSE observes that the CAF will "support the security of other nations and their ability to contribute to security outside their border."¹ CB operations may be found in six other CAF core missions.² As all members of the North Atlantic Treaty Organization (NATO),³ Canada's

¹ Government of Canada, *Strong, Secure, Engaged: Canada's Defence Policy* (Ottawa, ON: Department of National Defence, 2017), 17, accessed August 23, 2020, <http://publications.gc.ca/site/eng/9.835971/publication.html>.

² From the eight core tasks assigned by SSE, CB activities can support six other CAF core missions. "For instance, by maintaining a combat-credible force through high-end training, the CAF is better-prepared to deter and defend against threats to Canada (Mission 1) or North America (Mission 2). As exemplified by the case of the operations in Iraq, the Sahel, and the Ukraine, capacity-building missions contribute forces to NATO and coalition efforts to deter and defeat adversaries, including terrorists, to support global stability (Mission 3), and to engage in capacity building to support the security of other nations and their ability to contribute to security abroad (Mission 5). Additionally, capacity-building initiatives, such as Canadian Training Assistance Team, Peace Support Training Center, and Military Training and Cooperation Program, contribute to international peace operations and stabilization missions with the United Nations (Mission 4). Finally, the CAF participation in Counter Terrorism Capacity Building Program assists civil authorities and law enforcement, including counter-terrorism operations, in support of national security (Mission 6)." This information will have an important relevance later in this monograph. For more details, see Yannick Michaud, "By, With, and Through: The Value of Capacity Building Operations to the Canadian Armed Forces," *Canadian Military Journal* 20, no. 3 (2020): 34, accessed September 1, 2020, <http://www.journal.forces.gc.ca/vol20/no3/page28-eng.asp>.

³ Government of Canada, *CJOC Primer: Capacity Building* (Ottawa, ON: Department of National Defence, 2020), 3.

political ambition is to provide military force elements for CB mandates. These forces improve partner abilities to achieve security-oriented goals, with either transactional or transformational implications. According to the Canadian Defence Plan 2018-2023, the CAF, as part of a Whole of Government (WoG) approach, needs to “adopt a new approach to defence – one that values the ability to anticipate new challenges, adapt to changing circumstances, and act with exemplary capability and professionalism while supporting peace and security around the world.”⁴ While SSE mandates that the CAF maintain its combat proficiency and readiness in the full spectrum of operations (FSO), seventy percent of troops deployed abroad contribute to developing partner nations’ defense and security capabilities. Currently, the CAF has primary roles in Operations Unifier and Impact, and secondary roles in Operations Reassurance, Proteus, and Projection.⁵

The CAF defines CB as including Security Sector Reform (SSR) (strategic/ministerial/institutional) and Security Forces Capacity Building (SFCB) (operational/tactical level training), a spectrum of peace and stability operations within the FSO. The foundation and approach used in these missions are based on national objectives established by the Government of Canada (GoC) and the host nation (HN), supported under two premises: 1) CB activities after an invasion, and 2) CB with a deliberate invitation.⁶ The conduct of CB operations presents risks to the intervening and host nations. One common challenge for states providing CB is failure to understand the dynamics of poor governments in other countries or treating them as if they were simply rich liberal democracies with fewer resources. This leads to

⁴ Government of Canada, *Defence Plan 2018-2023* (Ottawa, ON: Department of National Defence, 2018), 5.

⁵ Government of Canada, *CJOC Primer: Capacity Building*, 3.

⁶ Rebuilding and reconstruction activities are based on the concept of jus post bellum. For more details on the definition, consult George Lucas, *Ethics and Military Strategy in the 21st Century: Moving Beyond Clausewitz* (Andover: Routledge Ltd, 2019), 96–99; Hugo Grotius et al., *Le Droit de la Guerre et de la Paix*, Léviathan (Paris: Presses universitaires de France, 1999), 6–17; and Malcolm N. Shaw, *International Law*, 6th ed. (Cambridge: Cambridge University Press, 2008).

resources spent and lives lost needlessly, and can worsen the circumstances in poorly governed states.⁷

Based on the complexity and continual change in contemporary operating environments (COEs), contributing nations providing military and non-military capabilities for CB require a coherent approach to operational art and design to frame the problem and create viable military options. CB activities are not minor with respect to resources and personnel, efforts, and impact for a military force. Despite the significant costs of CB, analysts argue that the US and its allies still struggle to achieve their foreign assistance goals, despite the resources they invest.⁸ CB operations must properly integrate a systemic approach that includes physical, intellectual, and moral domains while planning and achieving national objectives and avoiding unintended consequences. Despite Canada's best intentions, there is no guarantee that the military skills as part of CB efforts will be used for their intended purposes. Systems thinking and military design are new approaches to campaign planning that promote holistic evaluations of the OE, and all stakeholders and actors can minimize the possibility of failure by appreciating the complexity of the mission and its context.

Given this context, this monograph will investigate the following question: What role does contextual understanding have in producing CB strategies and operations that are effective

⁷ Melissa A. Thomas supports that “if we cannot ‘fix’ poor governments, and if their strategies of governance are likely to persist for some time, then we must, for the interim decide how we want to respond to the way they govern. It is tempting to deny, to continue to engage poor governments as if they were simply poorer rich liberal democracies, as if the laws and formal institutional structures of government defined how they operated and as if their interest lay solely in public service delivery, rule of law, and democratic accountability. But as tempting as it is to live an easier alternative universe, this approach has led us [Western nations] to misunderstand the intentions, actions, and capacities of poor government, to make investments that are unlikely to bear fruit, to sacrifice lives needlessly, and perhaps even to destabilize poor government.” For more details, see Melissa A. Thomas, *Govern Like Us: U.S. Expectations of Poor Countries* (New York, NY: Columbia University Press, 2015), 194. Robert Draper also supports these claims. For more information, see Robert Draper, *To Start a War: How the Bush Administration Took America Into Iraq* (New York, NY: Penguin Press, 2020), 163–67.

⁸ Nadia Gerspacher, Querine Hanlon, and Nicholas Weiland, “Sustainable Capacity Building: Guidelines for Planning and Project Design Communities,” 8, accessed September 13, 2020, https://www.usip.org/sites/default/files/Sustainable_Capacity_Building_Manuscript.pdf.

and measurable? The key to developing CB options is adherence to the following criteria: feasibility with respect to resources allocated, acceptability of commitment and risk, suitability for strategic-political objectives, and measurability to evaluate success. The secondary questions for this research are: how does the CAF use operational art and operational design to plan CB operations, and how should it use these concepts? What is the result of performing CB missions without properly framing the operational environment and the problem at hand?

This monograph argues that the use of system framing from a linear to a complex adaptive systems (CAS) approach can become the basis for bespoke (tailored-unique) CB operations that address national imperatives and mission requirements. The use of contextual understanding of CB missions will create relevant and meaningful measurement, increasing the CAF's effectiveness and learning success. The institution will be better tooled to frame the OE accordingly, frame the problem, and create FAS options, which fits into the CAF conceptual tradition of niche solutions to problems. Consequently, this will allow the CAF to develop coherent approaches to frame the OE and create CB operations with emergent practices using a cognitive approach, including system thinking and design thinking.

Systems, Complexity, and Design Thinking

A pile of sand is not a system. If you remove a sand particle, you still have a pile of sand. However, a functioning car is a system. Remove the spark plugs and you no longer have a working car.

—Nadia Gerspacher, *Strategic Advising in Foreign Assistance: A Practical Guide*

This monograph focuses on the importance of contextual understanding in producing CB strategies and operations. This section examines the central concepts of systems theory and complexity theory. These theories' concepts provide a better understanding of Boyd's Observe, Orient, Decide, and Act (OODA) "loop" and its traditional and emergent approaches to understand complexity. Finally, this part concludes with presenting key concepts on design thinking and its utility in a military context.

Systems Theory

With limitations imposed by the Newtonian approach in science, systems theory emerged in various scientific disciplines including physics, engineering, chemistry, social sciences, and economics to face reality. The modernist, mechanistic, and reductionist Newtonian approach considers systems "as closed entities, isolated from their environment."⁹ Newton supports that the world can only be analyzed objectively and "outside events do not influence such a system; the only dynamics are those arising from its internal workings."¹⁰ However, the environment comprises multiple layers of systems (or systems of systems) that are in constant interaction internally between subsystems (i.e., intended and unintended) and externally with the environment.

As Ludwig von Bertalanffy noted, the great shock of twentieth-century science has been that systems cannot be understood by analysis, for the application of the analytical procedure depends on two conditions. First, the interaction between parts is non-existent or very weak; second, the relationships describing the behavior of parts is linear. These

⁹ Frans P. B. Osinga, *Science, Strategy and War: The Strategic Theory of John Boyd*, Strategy and history 18 (New York, NY: Routledge, 2007), 65.

¹⁰ Ibid.

conditions are not fulfilled in the entities called systems, i.e., consisting of parts ‘in interaction.’ The properties of the parts are not intrinsic properties but can only be understood within the context of the larger whole. Instead of focusing on the parts, systems thinking concentrated on basic principles of organization. Analysis means taking something apart to understand it; systems thinking means putting it into the context of the larger whole.¹¹

This systems theory replaced the linear cause and effect approach, and permitted the adoption of a holistic perspective to synthesize how subsystems (with their interdependent variables) combine to affect the bigger complex system. To better understand the COE, new theories emerged to portray the new realities and described the new environment as volatile, uncertain, complex, and ambiguous (VUCA).¹² Complexity theory emerged to better comprehend the VUCA effects and impacts with the COE.

Complexity Theory

Complexity theory deviates from the tradition of static, linear models to focus on non-linear dynamic systems that are difficult to predict, with emerging properties not reducible to their elements. To better grasp the complexity of systems, complexity and chaos theories emerged

¹¹ Osinga, *Science, Strategy and War*, 71. In addition, systems are “open” and non-linear within their context – considering time, space, and logic. One of the main concept of system theory is that the larger whole is greater than the sum of its parts. Matthew Ammissah et al. support Ludwig Bertalanffy’s claims and also add that system theory approach for the “reasoning and treatment of real-world problems based on the fundamental notion of ‘system.’ System here refers to a purposeful assembly of components. Thus, systems thinking is aimed at understanding relationships between components and their overall impact on system outcomes (i.e., intended, and unintended) and how a system similarly fits in the broader context of its environment.” See Matthew Ammissah, Thomas Gannon, and Jamie Monat, “What is Systems Thinking? Expert Perspectives from the WPI Systems Thinking Colloquium of 2 October 2019,” *Systems* 8, no. 1 (2020): 1–2, accessed November 11, 2020, <https://doi.org/10.3390/systems8010006>.

¹² Philippe Beaulieu-B. and Paul T. Mitchell, “Challenge-Driven: Canadian Forces College’s Agnostic Approach to Design Thinking Education,” last modified January 13, 2019, accessed November 3, 2020, <http://militaryepistemology.com/challenge-driven/>. To address the challenges and understand new phenomena within the COE, the authors assert that military planners must consider the environment has volatile, uncertain, complex, and adaptive. The authors argue that “VUCA conditions challenge the notion of predictability that is inherent in modern military planning. VUCA scenarios are unpredictable because of their penchant to both ‘learn’ and evolve. Volatile situations are continuously becoming something else; the massive number of loosely interacting variables gives them an Unpredictable quality, making each moment unique in time; this same characteristic generates Complexity, which requires a synthetic understanding of the whole, rather than an analytical understanding of the individual parts; last all this combines in ways that create multiple, incommensurate, and competitive attempts to make sense of what is inherently Ambiguous. These effects are made more problematic given they emerge from innumerable individuals all making independent decisions, pursuing disconnected aims, based on their own autonomous assessments of the situation.”

in the last century. The difference between the two theories is that complexity theory emphasizes that systems are composed of many agents or parts, whereas chaos theory concentrates on the turbulences that drive systems to a point where they become disordered and unmanageable.¹³ The Cynefin Model, represented in Figure 1, depicts the difference between the two theories.¹⁴ Complexity theory emerged across multiple disciplines, including physics, biology, computer sciences, and social sciences, to better understand systems as diverse and open to counter the lack of comprehension by traditional scientific methods. The human brain tends to use an ad hoc basis to trigger a simplistic chain of cause and effect to solve complex or ill-defined problems.¹⁵ Complexity theory implies that the traditional, reductionist, and linear sense-making approaches cannot analyze and explain systems' behavior in the VUCA-world.

Complexity theory led to the discovery of the CAS. One of the significant characteristics of CAS is the desire to improve through adaptation. These systems display spontaneous self-organization, patterns, and logic (or strategy) that learn and adapt within their environment based on feedback.¹⁶ The agents in CAS “continually interact (dialogue), try new sub-organizations (innovation), and disperse their knowledge and experience (collaboration) throughout the systems.”¹⁷ The theory considers systems complex because it is impossible to simplify a system's

¹³ Michael D. Cohen and Robert Axelrod, *Harnessing Complexity: Organizational Implications of a Scientific Frontier* (New York, NY: Free Press, 2014), xv.

¹⁴ The Cynefin framework provides valuable information between the difference of chaos and complexity theories. For more information, see Greg Brougham, *Cynefin Mini-Book*, Enterprise Software Development Series (InfoQ, 2015), 5–10.

¹⁵ Dietrich Dörner, *The Logic of Failure: Recognizing and Avoiding Error in Complex Situations* (New York, NY: Basic Books, 1996), 6.

¹⁶ Everett C. Dolman, *Pure Strategy: Power and Principle in the Space and Information Age*, Cass series-strategy and history 6 (London: Frank Cass, 2005), 123–24. Dolman supports that there are types of feedback: positive and negative. Positive feedback is external to the system that impacts the system. Negative feedback is internal to the system that keeps the status quo within the system, self-correct. The feedback allows the system to be stable, balanced, in equilibrium.

¹⁷ Ibid., 138. And Göktuğ Morçöl and Aaron Wachhaus, “Network and Complexity Theories: A Comparison and Prospects for a Synthesis,” *Administrative Theory & Praxis* 31, no. 1 (2009): 49, accessed October 21, 2020, <https://doi.org/10.2753/ATP1084-1806310103>. Morçöl and Wachhaus stipulate the component of systems as variables. They specify the term variable, agent, and component are interchangeable to define a part of a system. Cohen and Axelrod describe that agents can be a component, a

overall behavior to a set of properties characterizing the individual components based on the unknowable quantity of independent yet interdependent variables, creating new unpredictable patterns with unintended consequences.¹⁸ This emerging theory has empowered scientific fields

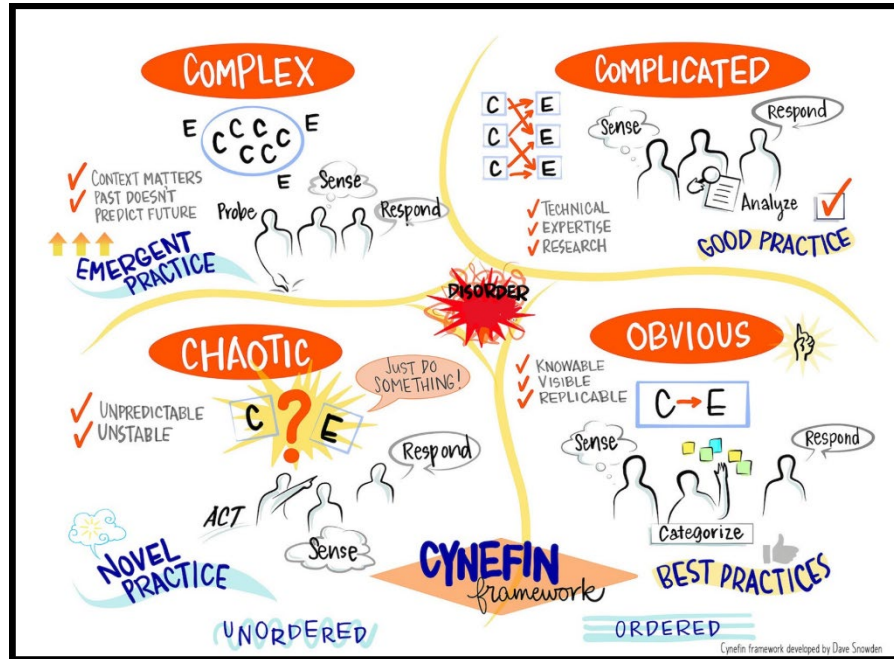


Figure 1. Cynefin Framework. Danae West, “Cynefin Framework Navigating Home Healthcare during a Pandemic,” last modified May 14, 2020, accessed December 1, 2020, <https://medium.com/@dawest4/cynefin-framework-navigating-home-healthcare-during-a-pandemic-4087fd560a40>. Modified by author.

to study the interaction between the parts that give rise to a system’s collective behaviors and how systems interact and form relationships in their environment’s broader context, considering time and space elements.¹⁹ When looking at a system, the whole is greater than the sum of its parts.

person, population, or even an organization. They also claim that a that an agent is expected to have the following properties: location (where it operates), capabilities (describe how it can change the whole), and memory (what influence it can carry forward from its past). For more details, refer to Cohen and Axelrod, *Harnessing Complexity*, 4.

¹⁸ James Moffat, “Complexity Theory and Network Centric Warfare,” (2003): xi, accessed December 1, 2020, <https://apps.dtic.mil/sti/pdfs/ADA457288.pdf>.

¹⁹ Yaneer Bar-Yam, *Making Things Work: Solving Complex Problems in a Complex World* (Cambridge, MA: NECSI, 2004), 24.

Interaction and interrelation can produce properties at the collective level, which are not present when agents are considered independently.²⁰

An emergent property is another essential component of CAS. Understanding emergent properties gives insight into how a system operates and provides the “appearance of a characteristic of function not previously observed in the system or structure.”²¹ These properties cannot be understood with a reductionist approach; the observer must look at the whole system instead of individual properties separately.²²

Understanding complexity theory and the CAS facilitates understanding of a VUCA-world. When looking at a system, a systemic approach must consider the goals, purpose, objectives, strategy, feedback, cohesion, and patterns of that system. The better a system is understood, the better it can be influenced. This enables planning and measurement through a holistic and systemic approach.

Boyd’s Concept

Military theorist Colonel John Boyd’s four-step model, the OODA loop, enhanced the decision-making process for combatants involved in a warfighting environment by applying reflection *in* action and reflection *on* action.²³ His theorem added the requirement to “speed the process up,” and by doing so, Boyd addressed maneuver warfare at its core. “Feedback-loops” should occur constantly and continuously, leading to superiority in decision-making and learning.

²⁰ Bar-Yam, *Making Things Work*, xi. Dolman supports this claim by adding that “complexity theory is based in the observation that individual agents interacting repeatedly on the basis of simple rules of behavioral guides may self-organize to form a structure that exhibits characteristics or properties that cannot be predicted on knowledge of those interactions alone.” See Dolman, *Pure Strategy*, 115.

²¹ Dolman, *Pure Strategy*, 115.

²² Jamshid Gharajedaghi, *Systems Thinking: Managing Chaos and Complexity*, 3rd ed. (Burlington, MA: Morgan Kaufmann, 2011), 45.

²³ Antoine J. Bousquet, *The Scientific Way of Warfare: Order and Chaos on the Battlefields of Modernity*, Critical War Studies (New York, NY: Columbia University Press, 2009), 188.

Although often confused as a closed system with a linear approach to thinking, this framework draws information from the environment throughout the process, as depicted in Figure 2.

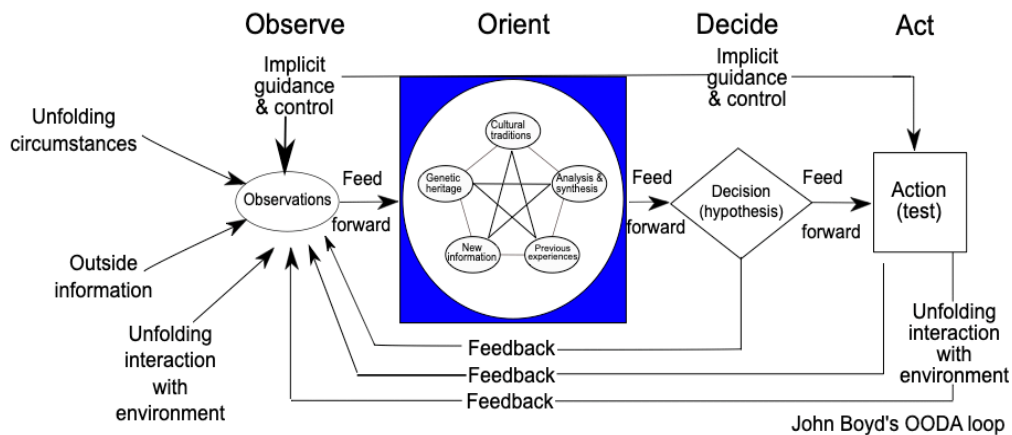


Figure 2. Colonel John Boyd’s OODA Loop Model. Frans P. B. Osinga, *Science, Strategy and War: The Strategic Theory of John Boyd*, Strategy and history 18 (New York, NY: Routledge, 2007), 231.

The cognitive theory was initially created to foster fighter pilots’ critical thinking in their decision-making process, which “subsequently became extended to all aspects of warfare, including the strategic dimension.”²⁴ Boyd recognized that the world is uncertain, ever-changing, and unpredictable, which generates gaps in knowledge.²⁵ To analyze the environment within its own context, Boyd analyzed two approaches and delineated their characteristics: the traditional approach (a modernist approach based on the Newtonian paradigm) and the emergent approach (a post-modernist approach to quantum physics). Figure 3 demonstrates the characteristics of each approach. Used in many fields of study, the OODA loop proposes an emergent, systemic approach to understanding complexity theory and the environment presenting VUCA characteristics.

²⁴ Bousquet, *The Scientific Way of Warfare*, 188.

²⁵ Ginger Richards, “Conceptual Spiral: John R. Boyd,” 31, accessed November 20, 2020, <https://www.coursehero.com/file/73204172/Conceptual-Spiralpdf/>.

Traditional	Emerging
Reductionism	Holism
Linear causality	Mutual causality
Objective reality	Perspective reality
Determinism	Indeterminism
Survival of the fittest	Adaptive self-organization
Focus on discrete entities	Focus on relationships between entities
Linear relationships	Non-linear relationships
Newtonian physics perspectives	Quantum physics perspectives
World is predictable	World is novel and probabilistic
Modern	Postmodern
Focus on hierarchy	Focus on heterarchy (within levels)
Prediction	Understanding
Based on nineteenth-century physics	Based on biology
Equilibrium/stability/deterministic dynamics	Structure/pattern/self-organization/ life cycles
Focus on averages	Focus on variation

Figure 3. Characteristics Depiction Between Traditional and Emergent Approach for Boyd’s OODA Loop. Frans P. B. Osinga, *Science, Strategy and War: The Strategic Theory of John Boyd*, Strategy and history 18 (New York, NY: Routledge, 2007), 188.

Boyd endorses that the world is an open system, non-linear, and CAS, in which complexity theory demonstrates the “fundamental limits in our ability to understand, control and manage the world, and the need for us to accept unpredictability and change.”²⁶ Boyd’s approach to sense-making is an iterative or discursive process that necessitates repeating the cycle while observing and measuring outcomes, which allows for revisiting or adjusting the initial decision. His framework is an iterative process of observation, framing, reframing, and learning (through feedback). Also, Boyd asserts that every situation is unique based on an open system, considering that all variables are linked to the environment. The same process, “ad hoc” from previous experience, cannot be reproduced in another environment.²⁷

The OODA model’s first two steps, the Observe and Orient, provide a holistic approach for problem-solving and problem-framing, considering the external will interact with the internal in relation to their environment. During the observation step, the agent gathers information from

²⁶ Osinga, *Science, Strategy and War*, 96.

²⁷ Dörner also supports the same claim and explains that the two main reasons why the logic fails when facing complexity: humans developed the tendency to deal with problems on ad hoc basis and they forget to see the problem within its context. For more information, see Dörner, *The Logic of Failure*, 6.

the environment, including subjective and objective information collected through the senses. The main activity in this phase is collecting data, without analyzing or synthesizing, to avoid biases such as *what you see is all there is* (WYSIATI) or availability heuristics to compromise the decision-making process of the observing agent.²⁸ All information collected feeds the second step, Orient, which turns into intelligence. The second step's primary role is to reflect on what has been found during observation and transform that information into knowledge. This transformation occurs by combining explicit knowledge (data, information, documents, records, files, etc.) and tacit knowledge (pattern recognition, perceptual discrimination, judging typically, mental models, and mindsets) with cognitive heuristics and other mental models.²⁹ The mental models and heuristics place the information into a narrative to identify possible outcomes and remove bias.³⁰ This systemic approach provides the frame and the mindset to ask the right questions, the *what*, *how*, and *why*, to develop FAS options. Filtering the interaction between parts and the whole through analysis (deconstruction) and synthesis (creation) allows an individual to choose the action to take on the environment, considering its context, time, and space. This synthesis leads to new understanding through learning, and a new perception of the environment. Therefore, the *observe* and *orient* steps help determine the causality with certainty and develop options or actions that will be further used in the *decision* and *act* steps.³¹

²⁸ WYSIATI and availability heuristics are terms used by Daniel Kahneman. Kahneman describes WYSIATI as a cognitive bias where the decision-making is not entirely based on rational thoughts and the person only considers the information presented as factual without analyzing further. For more information, see. Also, Kahneman describes availability heuristics as a mental shortcut that relies on immediate examples that come to mind when evaluating a specific topic, concept, method, or decision. Also, availability heuristics substitutes one question for another, usually for an easier one, where the substitution of question leads to inevitably to produce systematic errors. For more information, see Daniel Kahneman, *Thinking, Fast and Slow* (New York, NY: Farrar, 2011), 85-86, and 130-132.

²⁹ Osinga, *Science, Strategy and War*, 59.

³⁰ Margaret Rouse, Roderic Yapp, and Corrine Bernstein, "OODA Loop," accessed December 1, 2020, <https://searchcio.techtarget.com/definition/OODA-loop>.

³¹ For more information regarding the decision, act, and feedback steps, refer to Osinga, *Science, Strategy and War*, 189-257.

Design Thinking and its Utility in the Military Operations

The VUCA characteristics in today's operational military environment have exponentially increased over the last century. This tendency will grow as global economies, political structures, and technologies continue to evolve.³² In today's complex world, problems presented in the COE are 'ill-defined,' 'ill-structured,' or 'wicked,' and challenges are interlinked and cannot be addressed individually with a reductionist approach.³³ To tackle such complexities, people typically employ design thinking, a systemic approach to sense-making that offers conceptual tools to appropriately frame the environment by finding problems rather than solving them.³⁴ Consequently, design thinking is the most appropriate way to grasp the environment, provide contextual understanding in which military forces operate, and cope with encountering challenges. This new paradigm allows commanders and their staffs to create military strategies, campaigns and operations that are internally coherent (based on resources, future end state and conditions, and policies) and externally relevant (based on international laws, other governments, or organizations).

Currently, military organizations use heuristic planning processes such as the United States (US) Army's Military Decision-Making Process (MDMP) or the Canadian Armed Forces' Operational Planning Process (OPP) to understand the OE and develop military plans. Due to the inherent complexity of today's OE, the US Army had to expand its traditional approach to

³² Kirk G. Mensch and Tim Rahschulte, "Military Leader Development and Autonomous Learning: Responding to the Growing Complexity of Warfare," *Human Resource Development Quarterly* 19, no. 3 (2008): 263, accessed October 28, 2020, <https://doi.org/10.1002/hrdq.1239>.

³³ Gharajedaghi, *Systems Thinking*, 137. The term 'wicked problem' is defined as a problem ill-defined where a person does not understand the problem until a person find a solution. This type of problem has not a right or wrong solution. Every wicked problem is essentially unique and novel. For more details, refer to Jeff Conklin, "Wicked Problems and Social Complexity," (2010): 7–8, accessed October 11, 2020, <https://cognexus.org/wpf/wickedproblems.pdf>.

³⁴ Bryan Lawson, *How Designers Think: The Design Process Demystified*, 4th ed. (London: Architectural, 2006), 117.

operational planning, and introduced design in its doctrine in March 2010.³⁵ Most western nations then transitioned and incorporated design into their doctrine.³⁶ US Army Field Manual 5-0, *The Operational Process*, defines design as “a methodology for applying critical and creative thinking to understand, visualize, and describe complex, ill-structured problems and develop approaches to solve them.”³⁷ The nature of design is more conceptual, enabling contextual understanding where planning is more detail-oriented. “The different logics of designing and planning generate a creative tension between interpretation and analysis, creativity and rationality, holistic and detailed understanding, and situational specificity and generic applicability.”³⁸ However, design and detailed planning are not independent practices during the iterative decision-making process; they are mutually dependent (figure 4).

Efficient military planners recognize that effective planning necessitates both conceptual and detailed thinking. All effective planning requires a conceptual component, and many of the ideas underlying the design methodology (including reflection, iteration, systems thinking, learning theory, narrative, dialogue, and cultural lenses) are advantageous to the commander and staff even when there is inadequate time to employ the design methodology explicitly.³⁹ The

³⁵ Anna Grome, et al., *Army Design Methodology: Commander’s Resource* (Fort Leavenworth, KS: School of Advanced Military Studies, 2012), 1.

³⁶ Design was first used informally by several western nations. Some did so quite early (mid 1980’s), and some rather late (2015). To see the creation and evolution of design methodology within armed forces, see Rebecca W. Jensen, “The issue of Battle: The Evolution of Operational Art in Western Iraq, 2003-2007” (PhD diss., Graduate Program in Military and Strategic Studies, University of Calgary, 2021), received via e-mail from the author.

³⁷ US Department of the Army, Field Manual (FM) 5-0, *The Operational Process* (Washington, DC: Government Publishing Office, 2010), 3-1.

³⁸ US Department of the Army, *Art of Design: Student Text, Version 2.0* (Fort Leavenworth, KS: School of Advanced Military Studies, 2010), 26.

³⁹ Wayne Grigsby et al., “Integrated Planning: The Operations Process, Design, and the Military Decision-Making Process,” *Military Review* (2012): 18, accessed December 11, 2020, https://www.armyupress.army.mil/Portals/7/military-review/Archives/English/MilitaryReview_20120630MC_art006.pdf.

design methodology acknowledges that the arrangement between military systems are

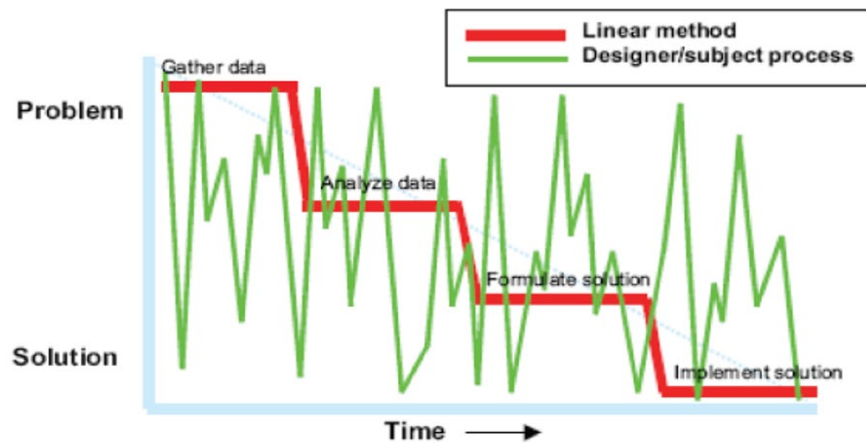


Figure 4. Linear Methodology (Detailed Planning) in Relation with a Designer’s Cognitive Mental Process. Jeff Conklin, “Wicked Problems and Social Complexity,” (2010): 6, accessed October 11, 2020, <https://cognexus.org/wpf/wickedproblems.pdf>.

based on logic, form, and function.⁴⁰ Figure 5 depicts the difference between design and detailed planning, and summarizes the interaction between the methods.⁴¹ Design is a living process that enables planners’ understanding by continually challenging their assumptions and preconceived ideas, use system monitoring, and adapt their mindset to adaptive learning with process that enables planners’ understanding by continually challenging their assumptions and preconceived

⁴⁰ Logic is defined as the principles that guide the reasoning of an actor in a particular situation. It also provides the meaning for form and function. Form is defined as the “visualized physical arrangement of organizations, materiel, and actions. Form is the tangible expression of the design’s function and logic.” Function represents the “intended purpose for a design. The functions identified in design are always underpinned by a logic and form follows from function.” US Army, *Art of Design*, 322–23.

⁴¹ According to Mary Hatch, epistemology is defined as the branch of philosophy that studies what counts as knowledge. Hatch asserts also that epistemological assumptions are made whenever theorist conceptualize or theorize. Ontology means, in the philosophy branch, the studies of assumptions about the existence and definitions of the reality (assumptions made about what exists influence their theorizing by establishing what can be studied). When combined, epistemology defines the kind of knowledge that can be used to address what ontology establishes as real. For more information on those definitions, see Mary J. Hatch, *Organization Theory: Modern, Symbolic, and Postmodern Perspectives* (Oxford: Oxford University Press, 2018), 13–14. Regarding meta-questioning, the term is defined as “questioning the current line of questioning. Meta-questions are used during design-discourse to enhance critical thinking” and reflexive thinking. For more information, see US Army, *Art of Design*, 323.

ideas, use system monitoring, and adapt their mindset to adaptive learning with self-reflective practices.⁴²

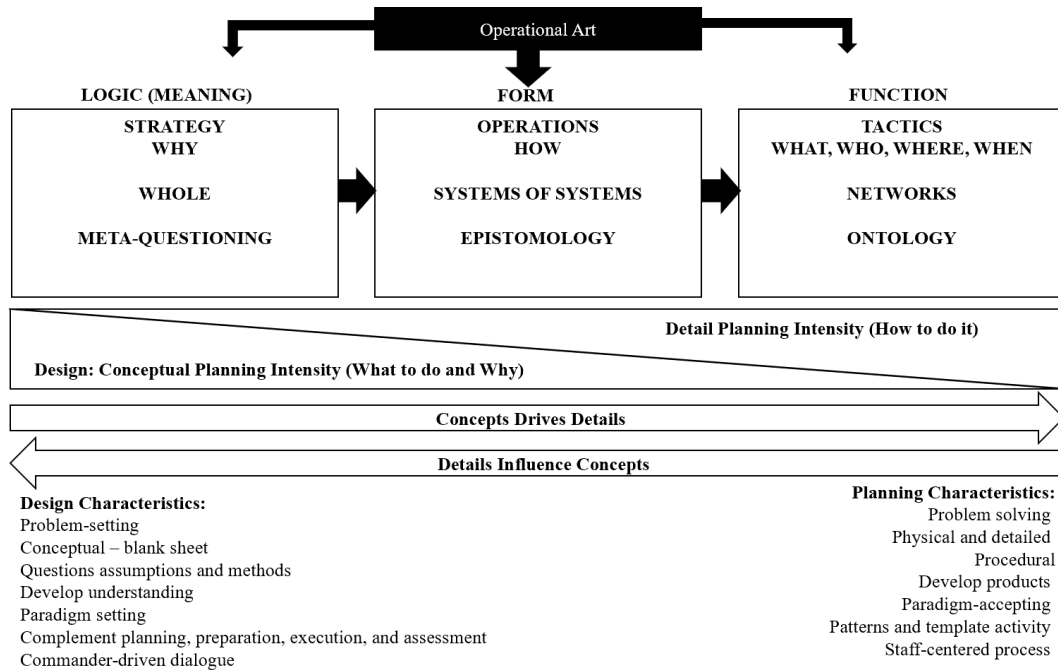


Figure 5. Diagram Demonstrating the Relation in Design Between Logic, Form, and Function. Information retrieved from Alice Butler-Smith, “Great Power Perspectives: Lesson 4 - What is Turkey” (Whiteboard Sketch, Fort Leavenworth, KS, October 3, 2020); US Department of the Army, Army Techniques Publication (ATP) 5-0.1, *Army Design Methodology* (Washington, DC: Government Publishing Office, 2015), 1-3, 2-2; and Philippe Beaulieu-B. and Paul T. Mitchell, “Challenge-Driven: Canadian Forces College’s Agnostic Approach to Design Thinking Education,” last modified January 13, 2019, accessed November 3, 2020, <http://militaryepistemology.com/challenge-driven/>. Created by author.

Design thinking is a cognitive and conceptual approach to understand the OE and considers the environment as a CAS. This thinking method is accomplished through narration and dialogue to enable military planners to steer their actions and, in theory, avoid unintended consequences to attain the desired outcomes by framing the environment and problems correctly and creating options. This systemic approach allows designers to create “a frame of reference that aids comparison in a changing environment and enables learning through iterative actions.”⁴³ By

⁴² Donald A. Schön, *Educating the Reflective Practitioner: Toward a New Design for Teaching and Learning in the Profession*, 1st ed., Jossey-Bass higher education series (San Francisco, CA: Jossey-Bass, 1987), 25–26.

⁴³ US Army, *Art of Design*, 4.

utilizing design thinking to frame the environment, military planners recognize that the environment encompasses many variables in an iterative but open system that can affect them via interrelationships such as feedback, buffering, critical variables, and indicator variables.⁴⁴ “This interdependence is the primary characteristic of complex systems, and the design approach is needed to understand and influence these systems.”⁴⁵

During the OE framing, meta-questioning, such as what is going on, why and what, and how the future OE should look are critical questions to enable comprehension. A designer uses mental models to frame (or reframe) and diagnostic tools to assess the current state of the OE such as, but not limited to, operational variables, ASCOPE, or SWEAT analysis.⁴⁶ This systemic approach allows a commander and staff to consider the living system’s integrity and its nature to comprehend the challenging problems in the whole system, within its context in time and space. To understand the nature of the problem, the designer must look at the symptoms and causality to understand the environment and its context (figure 6).

⁴⁴ Dörner, *The Logic of Failure*, 74–75. Dörner defines critical variables as the parts in the system that interact mutually with many other variables in the system. If we change or affect them, “we exert a major influence on the status of the entire system.” Also, Dörner defines indicator variables as those variables that are dependent from other variables and they apply little influence over the whole system. Those indicators provide “important clues that help us assess the overall status of a system.”

⁴⁵ US Army, *Art of Design*, 21.

⁴⁶ According to the US Army doctrine, the operational variables are Politic, Military, Economic, Social, Information, Infrastructure, Physical Environment, and Time (PMESII-PT). For more details, refers to US Department of the Army, Army Doctrine Reference Publication (ADRP) 5-0, *The Operations Process* (Washington, DC: Government Publishing Office, 2012), 1–10. The acronym ASCOPE stand for Areas, Structures, Capabilities, Organization, People, and Events. This analysis is useful for the analysis and synthesis of civil considerations during a military operation. For more information, refer to US Army, ADRP 5-0, 1-9. The acronym SWEAT stand for Strengths, Weaknesses, Opportunities, and Threats. This framework is designed to view a situation from different perspectives of a given situation. For more details, see US Department of the Army, *The Applied Critical Thinking Handbook: Formerly the Red Team Handbook* (Fort Leavenworth, KS, 2016), 203. The Red Team Handbook propose other cultural frameworks to assess the environment such as *Kluckhohn’s Six Age-Old Dimensions of Culture*, *Nesbitt on Cognitive Differences*, *Hall on Communication Patterns*, *Ofstede’s Country Profiles*, and *Five Operational Cultural Dimensions*. For more information on those models, see US Department of the Army, *The Applied Critical Thinking Handbook*, 26.

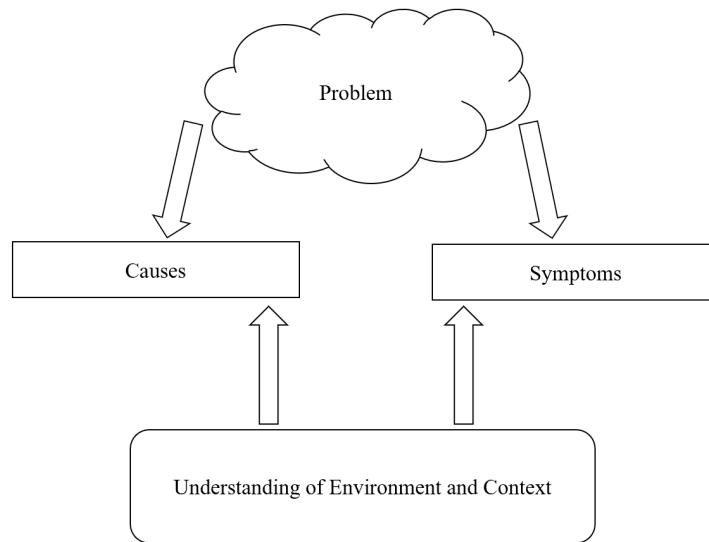


Figure 6. Dynamic of How to Understand the Environment and Problem. Created by author.

Understanding the whole system, military planners can develop options to guide future actions to meet the desired end state. To develop options, the designer must have a clear understanding of the context, including implicit and explicit functions; consider emerging results; integrate conceptual abstraction and active experimentation; and use innovation and iteration to generate a clear and meaningful picture of the desired outcomes.⁴⁷ However, many organizations fail to adapt to unintended outcomes because they act without analyzing the situation and fail to anticipate side effects and long-term repercussions. Additionally, organizations may fail because they make assumptions without adapting them to the situation, are blinded by over-involvement in their judgment and are prone to cynical reactions.

⁴⁷ Gharajedaghi, *Systems Thinking*, 137–38.

Research Methodology

Qualitative analysis will answer the primary and secondary research questions through the lenses of historical and policy analysis, and the theoretical frameworks discussed below. Sources include doctrine, interviews, and archival material as well as secondary literature. The initial section presents how the CAF plans CB operations. This review is based on current doctrine and recent academic studies. Also, this section demonstrates how the CAF employs operational art, the operational level for the planning and execution of operations, and tools the CAF uses for sense-making to create CB operations. The next section extrapolates the main challenges of planning for effective and sustainable CB operations in fragile states. This portion is supported by recent assessments and literature developed by Canada and other countries. The final section includes a case study detailing the Canadian approach for CB activities in Afghanistan between 2006 and 2011, marking the beginning and end of major combat operations. Despite CAF attempts to use the comprehensive approach at the operational level, this case study demonstrates that the CAF-planned CB operation in Afghanistan falls in line with a traditional linear approach. The traditional characteristics analyzed in the case study are:

1. Reductionism: Based on the Newtonian paradigm, this approach divides the problem into components (sub-systems), solves each piece of the puzzle separately, then aggregates the results from pieces to obtain a general solution to the problem.⁴⁸
2. Linear causality: Represents the simplest type of causal relationship between events: where a single cause produces a single effect in the environment, mainly used in a closed system.⁴⁹

⁴⁸ Osinga, *Science, Strategy and War*, 65.

⁴⁹ American Psychological Association, *APA Dictionary of Psychology*, accessed January 20, 2021, <https://dictionary.apa.org/>.

3. Objective reality: The external world within the system can be observed, measured, and tested.⁵⁰
4. Determinism: The system behavior or future states of the system is entirely defined by the input. Therefore, a deterministic approach will usually produce the same output from a given starting condition or initial state.⁵¹
5. Positivism: A positivist approach is “seeing is believing,” underlying that the social world is formed by the phenomenon of believing is seeing, or interpreting.⁵² This approach postulates that all significant propositions must be reducible to sensory experience and observation. Therefore, all authentic knowledge must be built on strict compliance with an empirical method (verifiable by observation or experience rather than reasoning with theory or pure logic) of verification.⁵³

To ensure its future success, the CAF must use design methodology for sense-making to empower contextual understanding in framing military problems and produce military operation options that accurately support political objectives established by the GoC.

Significance

While the US Army and western countries are currently refocusing their efforts on Large Scale Combat Operations against antagonist states, the CAF balances national objective requirements between deterrence operations in Europe within the framework of NATO and other global CB operations in support of fragile states. In the twenty-first century, the COE is fragile and complex.⁵⁴ The strengthening of “partner countries lack[ing] the capacity to defend their populations and borders, never mind the capabilities necessary to contribute meaningfully to

⁵⁰ American Psychology Association, *APA Dictionary of Psychology*.

⁵¹ Ibid.

⁵² US Army, *Art of Design*, 259.

⁵³ American Psychological Association, *APA Dictionary of Psychology*.

⁵⁴ Globalization, digitalization, and automatization are emergent characteristics rendering the COE fragile and more complex than ever.

international coalitions, peacekeeping operations, or shared security goals with other countries”⁵⁵ is vital for Canada’s interests abroad. The conduct of military CB activities can present challenges, consequences, and risks to moral and ethical standards that the CAF’s leadership must understand at all levels.

Limitations

For this monograph, the researcher selected an Afghanistan CB mission due to the abundance of open-source information on the subject. Since all ongoing CB missions executed by the CAF are classified, limiting the accessibility and usefulness of that material, this research required an operation that was accessible to research. Plus, the CB provides a sufficiently complex military activity in a difficult setting to draw conclusion on the use of systemic approaches vis-à-vis military strategy and operations. Therefore, the case study demonstrates that the CAF uses a modernist, traditional, and linear approach to develop strategies and operations. Also, in the Canadian context, the Canadian Joint Operations Command (CJOC) headquarters is responsible for the operational layer, Canadian Special Forces Command (CANSOFCOM), and NORAD inclusively.⁵⁶ Consequently, for the purpose of this monograph, CJOC is the only entity analyzed for the planning and execution of CB operations.

⁵⁵ Alexandra Kerr and Michael Miklaucic, *Effective, Legitimate, Secure: Insights for Defense Institution Building* (Washington, DC: Center for Complex Operations, National Defense University, 2017), ix.

⁵⁶ Paul Johnston et al., “A Canadian Approach to Command at the Operational Level,” *Canadian Military Journal* 14, no. 4 (2014): 8, accessed October 12, 2020, <https://www.files.ethz.ch/isn/189862/CMJ144E.pdf>.

How the CAF plans CB Operations

I call it theory-induced blindness: once you have accepted a theory and used it as a tool in your thinking, it is extraordinarily difficult to notice its flaws.

—Daniel Kahneman, *Thinking Fast and Slow*

History has shown that an army which lacks relevant doctrine, or fails to practice it, will fail operationally.

—B-GL-300-000/FP-000, Canada's Army, *We Stand on Guard for Thee*

Since the end of the Second World War, traditionally, Canadian foreign policy was committed to preserving a middle ground between major and minor powers, dedicating its efforts to become a peacebuilder nation through the UN's mandates or coalitions and alliances.⁵⁷ In fact, Canada participated in numerous CB operations for Peace Support Operations, Counter-Terrorism, and stability operations in almost every part of the world, focused in Europe, the Caribbean, in Africa, and the Middle East.⁵⁸ In the 1990s, the GoC appointed the Department of National Defence (DND) as the principal institution to lead the nation's efforts regarding CB initiatives through the DND Military Training Assistance Program, renamed the Military Training Cooperation Program in 2010. The objectives of CB initiatives are: "to enhance peace support operation's interoperability among Canada's partners to lessen the operational burden on Canada; to expand and reinforce Canadian bilateral defence relations; to promote Canadian democratic principles, the rule of law, and the protection of human rights in the international arena; and to achieve influence in the areas of strategic interest to Canada."⁵⁹ However, in previous CB activities, Canada failed to work collaboratively with either the HN or a coalition/alliance to

⁵⁷ Robert W. Murray and John McCoy, "From Middle Power to Peacebuilder: The Use of the Canadian Forces in Modern Canadian Foreign Policy," *American Review of Canadian Studies* 40, no. 2 (2010): 172, accessed November 19, 2020, <https://doi.org/10.1080/02722011003734712>.

⁵⁸ For more details on all operations where the CAF deployed troops in supports of CB initiative, see Mike Jeffery, "The Future of Foreign Military Training," *Canadian Global Affairs Institute*, March 1, 2013, accessed November 19, 2020, https://www.cgai.ca/the_future_of_foreign_military_training.

⁵⁹ *Ibid.*, 6.

define clear strategic objectives based on Canada’s “piecemeal” approach to its overarching grand strategy, commitment, and resources to generate positive strategic outcomes.⁶⁰ Since 1945, due to its colonial status, the GoC and the CAF adopted other nations’ strategies and doctrine to build its operational concept, and now has become part of the Commonwealth and Five Eyes intelligence community, and one of the United States’ closest allies.⁶¹ Since the 1990s, under the US initiative and to enable interoperability in operations, nations like Canada, Australia, and the United Kingdom (UK) incorporated operational art, operational design, and operational level of war into their doctrine. This section covers these concepts and how the CAF develops its contextual understanding of CB operations’ planning and execution.

What are CB Operations?

CB operations provide conflict-affected states the military capabilities to enhance their security forces to stabilize and alleviate suffering, the preferred form of operations for western nations. The CAF defines CB as “the process of increasing a host nation’s ability to achieve self-sufficiency, typically through improved governance, security, human capital, development, and reconstruction.”⁶² Similarly, the US Army employs the term “building partnership capacity,” while NATO uses Defence and Related Security Capacity Building (DCB) initiatives for similar operations.⁶³

⁶⁰ Jeffery, “The Future of Foreign Military Training,” 4, 8.

⁶¹ Howard Coombs and Michel Gauthier, “Campaigning in Afghanistan: A Unique Canadian Approach,” in *No Easy Task: Fighting in Afghanistan*, ed. Bernd Horn and Emily Spencer (Toronto, ON: Dundurn, 2012), 103.

⁶² Government of Canada, *B-GL-322-010/FP-001: Stability Activities and Tasks* (Ottawa, ON: Queen’s Printer, 2012), 9-1.

⁶³ The US Army defines BPC as “a term that refers to a broad set of missions, programs, activities, and authorities intended to improve the ability of other nations to achieve those security-oriented goals they share with the US.” See Kathleen J. McInnis and Nathan J. Lucas, “What Is Building Partner Capacity: Issues for Congress: CRS Report for Congress, R44313,” 14, last modified December 2018, accessed August 16, 2020, <https://www.hsdl.org/?view&did=789241>. Also, NATO defines DCB initiatives as a form of “NATO’s commitment to partners and helps project stability by providing support to nations requesting assistance from NATO. DCB helps partners improve their defence and related security capacities, as well as their resilience, and, therefore, contributes to the security of the Alliance. It can include various types of support, ranging from strategic advice on defence and security sector reform and institution-building, to

Regardless of the definition's semantics, CB operations embody activities and programs for an HN throughout political, institutional, and all levels of war. For the last two decades, the term CB has become a catch-all for wide-ranging security assistance programs established for this purpose. Nadia Gerspacher et al. emphasize that

Capacity building [...] refers to the process by which people or institutions are taught capacity – the knowledge of how to deploy a capability effectively. Whereas a capability is something tangible, like an armored personnel carrier, logistics database, or a system or process captured in doctrine or a Standard Operating Procedure (SOP), capacity refers to the know-how to use the capabilities. Individual or human capacity is the knowledge and skills people acquire by study or years of application and problem-solving experience. Institutional capacity, on other hand, refers to embedded management structures, processes, and practices. Capacity building focus[es] both on human and institutional capacity building. Capacity building should focus on building capacity.⁶⁴

Therefore, CB operations concentrate their efforts by providing support to augment the supported HN's security capacity effectiveness and employment of capabilities.

The CAF has no official doctrine defining CB and there is currently dissonance between GoC and CAF on how to define the different forms of CB operations or activities. Commonly in the doctrinal literature, the two subsets of CB are identified as SFCB or Security Force Assistance. In the *CJOC Primer: Capacity Building*, CJOC identifies CB's two subsets as SSR (ministerial/institutional/strategic) and SFCB (operational/tactical level training).⁶⁵

development of local forces through education and training, or advice and assistance in specialized areas such as logistics or cyber defence.” See North Atlantic Treaty Organization, “Defence and Related Security Capacity Building Initiative,” last modified April 23, 2020, accessed January 28, 2021, https://www.nato.int/cps/en/natohq/topics_132756.htm#:~:text=The%20Defence%20and%20Related%20Security,nations%20requesting%20assistance%20from%20NATO.&text=It%20uses%20NATO%27s%20unique%20defence,and%20coordinate%20practical%20specialised%20support.

⁶⁴ Gerspacher, “Sustainable Capacity Building,” 2.

⁶⁵ SSR is generally conducted at the political level and is defined as “a stability operation that establishes or transforms security institutions and forces so that they play an effective, legitimate, and democratically accountable role in providing external and internal security.” SFCB is defined as “activities undertaken to develop the institutional and operational capabilities of HN security forces, in order to create appropriate, effective and legitimate security institutions and forces.” SFCB is divided in two subsets: Defence Institutional Building (DIB) and Defence Capacity Building (DCB). DIB is defined as “activities undertaken by DND to assist in the development of effective and legitimate Ministerial-level Defence Institutions of partner Defence forces.” DCB are “activities undertaken by the CAF to assist in the development of the effective, competent and credible operational capabilities of partner Defence forces.” See Government of Canada, *CJOC Primer: Capacity Building*, 14–15.

As part of the peace support operation spectrum, CB operations incorporate a WoG approach in which activities can be conducted either in a permissive or non-permissive environment and performed by civilian agencies, military personnel, or both, depending on requirements and the operational environment.⁶⁶ Figure 7 illustrates the different areas of responsibilities or essential tasks between the military forces and the civilian agencies. Typical civilian departmental agencies participating in CB operations are Global Affairs Canada (Foreign Affairs and International Development) and Public Safety organization (Correctional Service Canada and Royal Canadian Mounted Police). Depending on the security environment, the CAF may be assigned to conduct CB tasks and simultaneously provide security forces in support of civilian agencies.

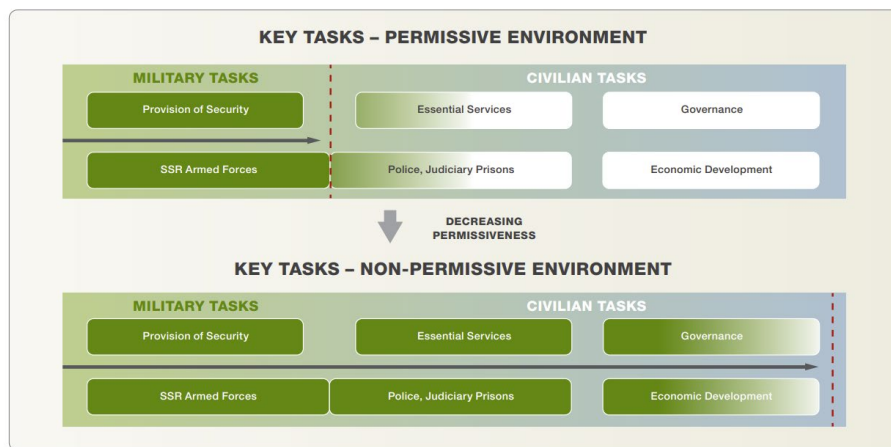


Figure 7. Tasks Conducted by Military and Civilian Agencies in Relation to Permissiveness. Government of Canada, *B-GL-322-010/FP-001: Stability Activities and Tasks* (Ottawa, ON: Queen’s Printer, 2012), 9-1-1.

To create CB operations, the CAF (military-strategic and operational levels) in collaboration with civilian agencies, use the traditional approach of ends-ways-means to meet both the political objectives from the GoC and partner forces/HN needs. Figure 8 illustrates the CB operating framework design that demonstrates the interaction between the agencies and the

⁶⁶ Michaud, “By, With, and Through,” 30.

CAF, ranging from consultation to analysis, to create the overall objectives and end-state. The CAF employs operational art for the creation of military strategies and operations.

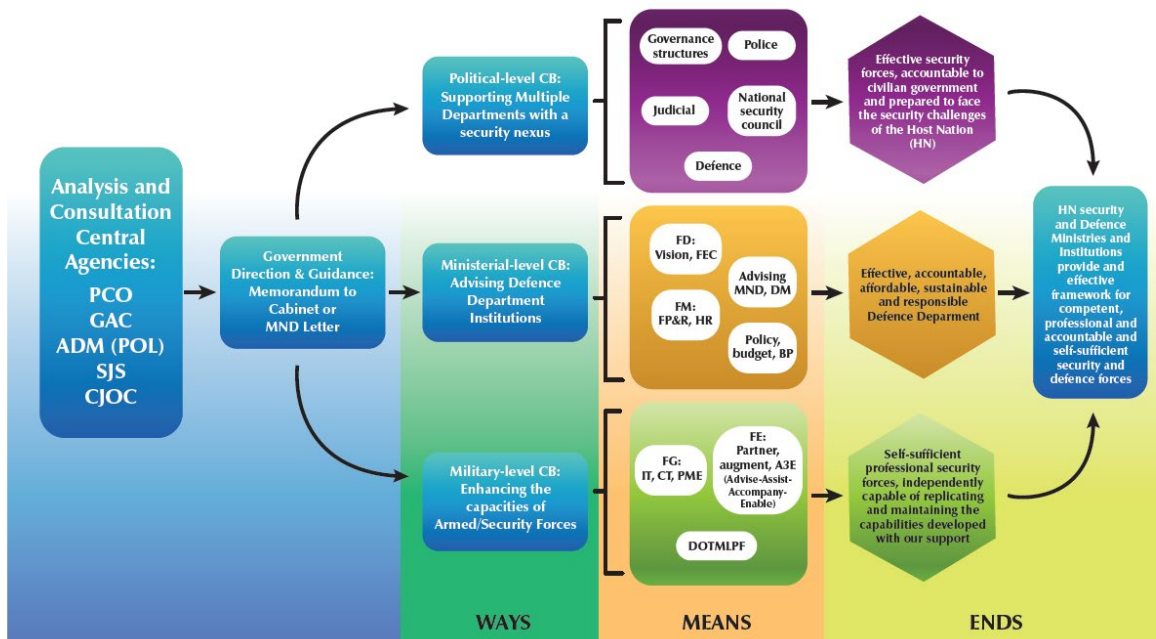


Figure 8. CB Operating Framework Design. Government of Canada, *CJOC Primer: Capacity Building* (Ottawa, ON: Department of National Defence, 2020), 7.

Operational Level in the CAF

Within the Soviet general staff in the twentieth century, officers such as Alexander Svechin, Georgii Isserson, Mikhail Tukhachevskii, and Vladimir Triandafillov are the fathers of the first formal theory of operational art and operational level of warfare to support their deep battle concept. The terms operational level and operational art emerged in the US Army in the 1980s.⁶⁷ Simultaneously, combined with the trend of maneuver warfare, these terms became institutionalized within most of the Western nations. Based on historical trends, this terminology became apparent to link tactical actions to achieve political goals. The *NATO Comprehensive Operations Planning Directive (COPD) V2.0*, defines the operational level as the level at which campaign and major operations are planned, executed, and sustained to achieve strategic military

⁶⁷ One of the biggest lessons learned by the US Army during the Vietnam War was the inefficiency of measurement of performance. Consequently, they shifted to effect-based operations, measuring effectiveness.

objectives within the theater or designed areas of operations.⁶⁸ The creation of the operational level of warfare “permits an orderly and methodical information of strategic objectives to attainable and tactical goals.”⁶⁹ The operational level exists below the political and the military-strategic levels and above the tactical level. Based on those definitions, the CAF would entail designing an operation (or campaign as used in the CAF doctrine) to link the tactical actions in the theater of operation to meet the goals established by the GoC.

The *Canadian Forces Joint Publication 3.0: Operations* defines this interaction as “plans and direction at this level link tactics with military strategy by establishing joint operational-level objectives that are necessary to achieve strategic-level objectives.”⁷⁰ The Chief of Defence Staff (CDS) with his staff, the Strategic Joint Staff, are responsible for developing the military strategies, the *why* or the logic, in accordance with GoC’s intent.⁷¹ Based on CDS guidance, “it is the responsibility of operational level Commanders to translate strategic direction into operational purpose, enabled and sustained through joint, interagency, and combined action – the how.”⁷² Also, Johnston et al. further expands the role of operational level:

...seeks to inform the CDS with relevant information and useful information about the nature of the operational environment, understanding of the operational challenges and adversaries, as well as understanding the aims, force structures, operational designs, and intentions of partners at the operational levels – ultimately contributing to the formulation of military advice that the CDS may provide to strategic decision-makers. These inputs [from the operational level], among others, support the Government as it makes calculated choices with respect to available options and the effect that might result from military operations conducted by, with, and through operational partners and

⁶⁸ Supreme Headquarters Allied Powers Europe, *Comprehensive Operations Planning Directive (COPD) V2.0: NATO Unclassified* (Belgium, 2013), L-4, accessed January 20, 2021, https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwj1IexhqvuAhUQKKwKHbKaAUoQFjAAegQIBRAC&url=https%3A%2F%2Fwww.cmdrcoe.org%2Fdownload.cgf.php%3Fid%3D9&usq=AOvVaw3LHn_yc7-JdHp-w0asQ92_.

⁶⁹ Allan D. English et al., ed., *The Operational Art: Canadian Perspectives* (Kingston, ON: Canadian Defence Academy Press, 2005), 33.

⁷⁰ Government of Canada, B-GJ-005-300/FP-001: Canadian Forces Joint Publication 3.0 (CFJP 3.0), *Operations* (Ottawa, ON: Department of National Defence, 2011), 1–2, accessed December 10, 2020, [http://armyapp.forces.gc.ca/SOH/SOH_Content/CFJP%203-0%20\(2011\).pdf](http://armyapp.forces.gc.ca/SOH/SOH_Content/CFJP%203-0%20(2011).pdf).

⁷¹ Johnston et al., “A Canadian Approach to Command at the Operational Level,” 6.

⁷² *Ibid.*

partnerships.⁷³

Figure 9 demonstrates the interactions between the GoC and the three levels of warfare.

The operational level is responsible for closing the gaps between the strategic and tactical levels to conduct and prepare operations. However, the creation of the operational level has always been a “gray area” within the CAF. General Jonathan Vance, former CDS, supports that the CAF has no chance of exercising pure operational level action external to Canada because the CAF has never deployed independently abroad without operating as part of a coalition or alliance.⁷⁴ The Combined Joint Operations Center (CJOC) is the central organization for the CAF that manages the operational level.

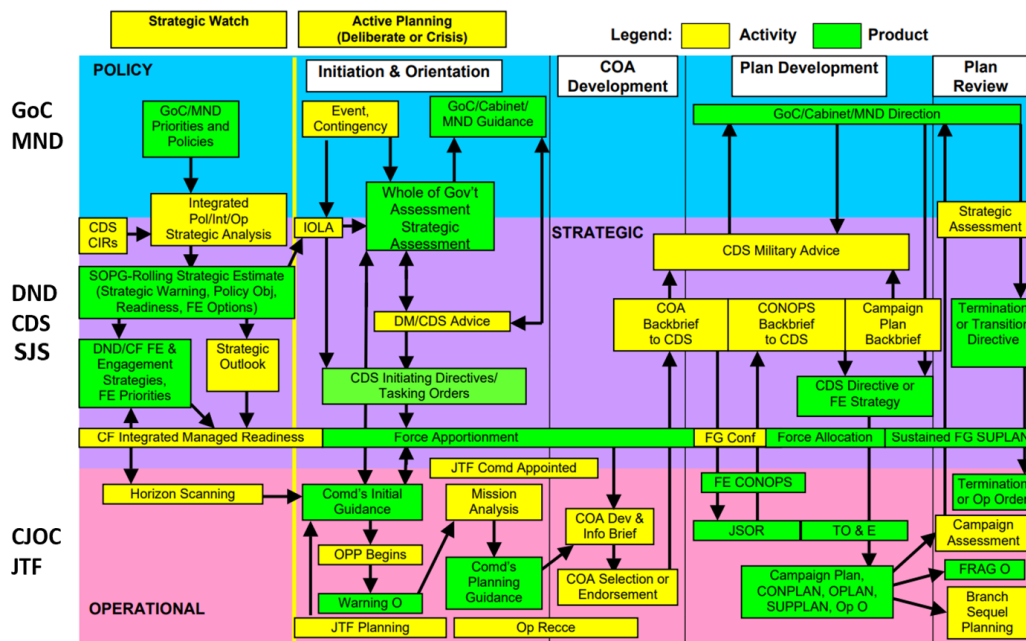


Figure 9. Interaction Between Policy, Strategic, and Operational Level for the Creation of Operations. Government of Canada, B-GJ-005-500/FP-000: Canadian Forces Joint Publication 5.0 (CFJP 5.0), *The Canadian Forces Operational Planning Process* (Ottawa, ON: Department of National Defence, 2008), 1B-1, accessed November 20, 2020, [http://armyapp.forces.gc.ca/SOH/SOH_Content/CFJP%205-0%20\(2008\).pdf](http://armyapp.forces.gc.ca/SOH/SOH_Content/CFJP%205-0%20(2008).pdf).

⁷³ Johnston et al., “A Canadian Approach to Command at the Operational Level,” 11.

⁷⁴ Jonathan Vance, “Canada’s Departure from the Classic Doctrine of Operational Art: AMSC 7” (Masters thesis, Canadian Forces College, 2004), 4, accessed January 10, 2020, <https://www.cfc.forces.gc.ca/259/260/267/vance.pdf>.

Before creating an operational level in the CAF, all operations were managed at the military-strategic level through the Deputy Chief of Defence Staff (DCDS). The DCDS was responsible for planning and executing domestic and expeditionary operations through the National Defence Headquarters (NDHQ) operation center, it became apparent in the 1990s that it had many limitations. The first operational level HQ, Canadian Expeditionary Forces Command (CEFCOM), was created in 2006 under CDS General Rick Hillier. The purpose of this organization was to perform joint functions and it became the operational command responsible for planning and controlling all CAF operations outside North America. These ranged from humanitarian aid through peace support to combat, excluding domestic operations and operations conducted by the CANSOFCOM.⁷⁵ This HQ was functional until 2012 and managed multiple expeditionary operations, such as the Afghanistan campaign. In 2012, the CAF completed another restructure amalgamating CEFCOM and Canadian Operational Support Command to create CJOC.

CJOC is still the operational level command for purely national CAF operations. The primary role of CJOC is to plan and lead CAF operations in Canada, North America, and abroad. CJOC's primary responsibilities are to lead CAF missions from planning to closure, integrating national and international military strategic objectives; planning for contingencies; and establishing structures and processes that can be activated or used at short notice (command and control, intelligence, and sustainment), except for CANSOFCOM and NORAD operations.⁷⁶

In comparison with the US, CJOC assumes the same function as a combatant commander to manage operations within its assigned area of responsibility without assuming the same

⁷⁵ For more details regarding the role and responsibility of CEFCOM, see John Pike, "Canadian Expeditionary Forces Command (CEFCOM)," *Global Security*, last modified November 7, 2011, accessed January 10, 2020, <https://www.globalsecurity.org/military/world/canada/cefcom.htm>.

⁷⁶ Government of Canada, "Canadian Joint Operations Command (CJOC)," accessed January 10, 2021, <https://www.canada.ca/en/department-national-defence/corporate/organizational-structure/canadian-joint-operations-command.html>.

military-strategic role. However, CJOC is not only regionally focused but encompasses all CAF operations worldwide. To enable operational planning and execution, the CAF uses the operational art and operational design.

Operational Art and Operational Design in the CAF

Operational art is an essential part of the operational level and military leaders and academics have studied operational art for centuries.⁷⁷ Like the operational level, the CAF borrowed the US Army concept and then “Canadianized” the concept within its doctrine.⁷⁸ The CAF approach to operational art has been developed and institutionalized through continuous peacekeeping support and NATO operations over the last six decades.⁷⁹ CAF doctrine defines operational art as: “the skill of employing military forces to attain strategic objectives in a theatre of war or theatre of operations through the design, organization, and conduct of campaigns and major operations.”⁸⁰ Operational art pertains to all aspects of operational design, including operational planning. The extent of operational art use does not depend on the size of the forces involved and is delimited by time and space.

⁷⁷ Richard Dickson provides an intensive analysis on the subject in his monograph. For more details on the foundation, history, and implementation of the operational art, see Richard Dickson, “Operational Art in a Middle-Power Context: A Canadian Perspective” (Masters monograph, United States Army Command and General Staff College, School of Advanced Military Studies, 2004), accessed January 10, 2021.

⁷⁸ Coombs, *No Easy Task: Fighting in Afghanistan*, 103. Dr. Coombs and Lieutenant-General Gauthier assert that CAF adopted the US version of the operational art without applying its full potential by adopting American doctrinal concepts word for word. Maryna Bessonova mentions that Canada’s top priorities on policy and strategy evolved from monocentric orientation on the UK and after it on the US towards the multilateralism and active participation in international organizations and institutions. See Maryna Bessonova, “Canada’s Foreign Policy Priorities at the Beginning of the 21st Century: Few Generalizations About Regional Dimensions,” *Scriptorium Nostrum* 3 (2017): 253, accessed September 20, 2020, https://www.researchgate.net/publication/341030089_CANADA%27S_FOREIGN_POLICY_PRIORITIES_AT_THE_BEGINNING_OF_THE_21st_CENTURY_FEW_GENERALIZATIONS_ABOUT_REGIONAL_DIMENSIONS_in_English.

⁷⁹ Howard Coombs and Rick Hillier, “Planning for Success: The Challenge of Applying Operational Art in Post-Conflict Afghanistan,” *Canadian Military Journal* 6, no. 3 (2005): 6.

⁸⁰ Government of Canada, *B-GL-300-001/FP-001: Land Operations* (Ottawa ON: Queen’s Printer, 2008), 6-3.

Operational art is a commander-driven activity, not a staff-driven process. Howard Coombs claims that commanders use operational art as a heuristic method “to translate strategic aims (ends) into campaigns (ways) using elements of operational design that will ultimately permit the allocation of resources (means) to be utilized at the tactical level to achieve the original strategic objectives. Elements of operational design are used to create a practical expression of operational art: the campaign.”⁸¹ CAF defines operational design as the process of expressing operational art. More precisely, the Canadian Army defines operational design as the “process that examines the whole situation and constituent element of an environment, along with the nature of the problem at hand, in order to conceive a framework that can be used to meet the desired strategic and operational end states.”⁸² Like operational art, operational design elements provide a framework to analyze the assigned missions that empower commanders to understand, visualize the operation, and describe their intent.⁸³

The primary tool that CAF employs to conceive and plan operations is the Canadian Forces OPP (CF OPP). Like the Joint Operation Planning Process used by the US at the joint level, the CF OPP process is a traditional approach exercised at the joint level that consists of five distinct phases: initiation, orientation, course of action development, plan development, and plan review.⁸⁴ Mainly, the commander and staff develop their contextual understanding of the operational problem and the environment during the orientation phase during mission analysis.

⁸¹ Government of Canada, *B-GL-300-001/FP-001*, 6-3.

⁸² Government of Canada, *B-GL-300-001/FP-001*, 3.

⁸³ *Ibid.*, 6–8. The *B-GL-300-001/FP-001: Land Operations* defines the elements of operational design as: end state and military battlespace conditions to be achieved, center(s) of gravity, objectives, decisive points, line of operations, culminating point, operational reach, approach and pauses, simultaneous and sequential operations, linear and non-linear operations, and tempo. To see in details the definition of each element, refer to Government of Canada, *B-GL-300-001/FP-001*, 6-8 to 6-21.

⁸⁴ For more details regarding details within each steps, refer to Chapter 3 in Government of Canada, B-GJ-005-500/FP-000: Canadian Forces Joint Publication 5.0 (CFJP 5.0), *The Canadian Forces Operational Planning Process* (Ottawa ON: Department of National Defence, 2008), accessed November 20, 2020, [http://armyapp.forces.gc.ca/SOH/SOH_Content/CFJP%205-0%20\(2008\).pdf](http://armyapp.forces.gc.ca/SOH/SOH_Content/CFJP%205-0%20(2008).pdf).

During mission analysis, planners use Joint Intelligence Preparation of the Operational Environment (JIPOE) for the designated area of operation.

This process is critical for the commander and staff to understand, visualize, describe, and assess the reality and the context of the operational environment. As stated in the *CFJP 2-1.1: Intelligence Preparation of the Operational Environment*, understanding the OE is essential to identifying the conditions required to achieve the commander's objectives.⁸⁵ This holistic and iterative approach makes it possible to avoid undesirable effects that may hamper the mission's accomplishment, considering the human terrain systems, the information environment, the physical environment, and the domains (space, air, land, maritime, and sub-surface). This analysis assesses the effects of the friendly, adversary, and neutral actors or agents on the commander's concept of operations and progress toward achieving the end state.⁸⁶ The JIPOE is an iterative and analytical process integrated within the CF OPP that allows the commander and staff to understand the OE and its problem.

Merged into JIPOE and the CF OPP, the CAF incorporated cognitive thinking tools to empower commanders and planners to understand the OE. *CFJP 5.0: The Canadian Forces Operational Planning Process (OPP)* states that concepts like Systemic Operation Design, Strange Analysis, or Operational Net Assessment should be used to develop an understanding of the OE to assist commanders at strategic and operational level decision-making.⁸⁷ "Once the relationships of the mission to the environment are established, each influencing factor (tasks, intention, etc.) is quantified by its relative significance and impact on achieving the desired

⁸⁵ Government of Canada, B-GJ-025-201-FP101: Canadian Forces Joint Publication 2-1.1 (CFJP 2-1.1), *Intelligence Preparation of the Operational Environment* (Ottawa, ON: Department of National Defence, 2016), 1–2, accessed November 20, 2020, [http://armyapp.forces.gc.ca/SOH/SOH_Content/CFJP%202-1.1%20\(2016\).pdf](http://armyapp.forces.gc.ca/SOH/SOH_Content/CFJP%202-1.1%20(2016).pdf).

⁸⁶ Ibid.

⁸⁷ Government of Canada, B-GJ-005-500/FP-000, 3–10.

effects on the system or the enemy.”⁸⁸ These processes are taught at the Canadian Forces College in the Joint Command and Staff Programme (JCSP), located in Toronto, for senior officers. Additionally, JCSP introduced a design thinking module to expand students’ knowledge on cognitive thinking tools for their future employment at the operational and strategic levels. However, the CAF employment of the operational level and operational art amalgamated with cognitive thinking tools is nebulous and not mastered.

The Level of Confusion – The Reality

This subsection examines how the CAF employs the operational level of warfare through GoC policies and how the CAF plans operations with the CF OPP with practices from other nations.

Operational Level

The way the CAF employs the operational level and develops military strategy creates confusion internally and with our allies. As mentioned previously, the CAF tends to translate its strategic objectives directly into tactical actions without fully employing the concepts. In fact, “Canada, like other medium powers, has a history of and preference for being a force provider at the tactical level, and not a force employer at the operational level of war.”⁸⁹ As a medium power⁹⁰ and with limited military resources, Canada prefers to employ its military instrument of

⁸⁸ Government of Canada, *B-GJ-005-500/FP-000*, 3–10.

⁸⁹ Based on Canada’s historical heritage with the Commonwealth, Canada contributed contingents in support of the alliance. Historically, Canada never had the need to deploy on national operations. Jonathan Vance, “Chapter 8 - Tactics without Strategy or Why the Canadian Forces Do Not Campaign,” ed. Allan D. English et al., *The Operational Art: Canadian Perspectives*, 273.

⁹⁰ Political scientists use either Middle power or Medium power to define the same purpose. Both terms appeared after the Second World War to classify power in three main categories: Super, Medium, Minor powers. Müftüler Baç defines Middle power, in international relations, a “state that holds a position in the international power spectrum that is in the ‘middle’—below that of a superpower, which wields vastly superior influence over all other states, or of a great power, but with sufficient ability to shape international events” with its military capabilities and diplomatic means. Middle powers rely on diplomacy and specific conditions under which they pursue foreign policy. Middle powers favor multilateral foreign policy and the formation of coalitions rather than unilateral decision making in foreign policy. Meltem Müftüler Baç, “Middle Power: Politics,” last modified July 2, 2017, accessed December 9, 2020, <https://www.britannica.com/topic/middle-power>

national power to operate almost exclusively within an alliance, UN, or coalition framework for any military operations. This creates a constrained operational environment where the CAF is assigned mandated military strategies and objectives, limiting its ability to produce campaign plans and operations.⁹¹ These in turn become shaped by the alliance or the coalition needs.

Currently, the way that the GoC creates policies and the CAF translates them into strategy is no longer a question of defeating concrete threats to achieve perfect security; instead, it has become a way of managing risks.⁹² In some cases, the GoC prescribes the ways and means without any specificities regarding political objectives, leaving the CAF to react to the GoC's demands instead of deliberately planning and executing military operations. Johnston et al. argue that

The pressure to 'do something' often leaves many questions with respect to what should be done, to whom, and how it should be done unanswered. The CAF, at certain times, has even been told what the number and nature of deployed forces on specific operations shall be, as opposed to being provided explicitly strategic security or national objectives that inform the military ways and means that ultimately are committed.⁹³

Also, Coombs endorses that the GoC tends to develop "piecemeal" approaches and narratives for military operations supported with nebulous policies and objectives (ends) translated into tangible activities (ways and means).⁹⁴ Coombs observed that

The reality of this ends-ways-means paradigm is somewhat messier than theory would have one belief, particularly in the Canadian context. Canadian strategy making, which is less constrained by a process, is sometimes slightly incoherent and fragmented, with elements generated from the bottom up in a discursive fashion.⁹⁵

Deprived of clear political objectives and military strategies, this constrained environment limits CJOC's employability to accomplish its operational level function for the preparation and

⁹¹ For more detail, see Vance, *The Operational Art: Canadian Perspectives*, 272–73.

⁹² Johnston et al., "A Canadian Approach to Command at the Operational Level," 11.

⁹³ Ibid.

⁹⁴ Howard Coombs, "Strategy and Strategic Narrative in the Age of COVID 19," (2020): 2, accessed January 15, 2020, received via e-mail from the author.

⁹⁵ Ibid.

conduct of operations at home and abroad, increasing the deployed troops' level of uncertainty and risk and the level of ambiguity with its allies and partners. These conditions negatively impact CJOC's ability to shape their contextual understanding to frame the OE and the problem and create FAS options meeting the strategic and GoC expectations.

In Canada, the political objectives and strategies developed are less focused on tactical results and are preoccupied with the political advantages of participating on the international stage.⁹⁶ General Vance claims that the CAF produces campaign plans and operation orders at the operational level to remain externally relevant to the Canadian public and our allies and partners without providing substantive and valuable information for the tactical level to operate effectively. For example, during the Afghanistan campaign, as the commander of the Joint Task Force – Afghanistan, General Vance claimed that the CAF did not campaign but organized itself tactically from a “bottom-up” fashion to meet strategic needs without an operational estimate to connect ends and means in the campaign.⁹⁷ Based on those conditions, the tactical level determines its objectives and measure of effectiveness without understanding the OE and the problem, creating potential unintended consequences.

Planning Tools for Development of Operations

As mentioned above, the CAF uses the CF OPP and cognitive tools to develop military strategies and operations. Nevertheless, Canadian defense scientist Matthew Lauder argues that the CAF is inefficient and ineffective in how it employs the CF OPP. Lauder also asserts that analytic planning methods included in the CF OPP limit the commander and staff's ability to understand the VUCA, non-linear, and dynamic characteristics present in the COE because there are no institutionalized cognitive tools integrated into the planning cycle.⁹⁸ During the last two

⁹⁶ Vance, *The Operational Art: Canadian Perspectives*, 286.

⁹⁷ Coombs, *No Easy Task: Fighting in Afghanistan*, 105.

⁹⁸ Matthew Lauder, “Systemic Operational Design: Freeing Operational Planning from the Shackles of Linearity,” *Canadian Military Journal* 9, no. 4 (2009): 41, accessed November 28, 2020,

decades, the CAF has attempted to integrate emergent practices within its planning tools and processes with no fruitful successes. For example, during the planning and execution of the Afghanistan campaign, Coombs says that the CAF used a form of Centre of Gravity analysis, more akin to the US Marines Corps' Strange Model, which results in a form of systems thinking.⁹⁹ This conceptual approach accomplished a portion of the holistic analysis of the design of the operations. However, it fell short due to the coherent design approach's lack of rigor. The ad hoc analysis lacks the depth and breadth that truly discerns and delineates the OE and the problem. Therefore, it does not allow for the formulation of solutions that address the core issues, and instead, it describes the more easily determined symptoms.¹⁰⁰ Nevertheless, the planning and conduct of CB operations present many challenges to be considered for both, partner nations and HN.

https://www.researchgate.net/publication/331718608_Systemic_Operational_Design_Freing_Operational_Planning_from_the_Shackles_of_Linearity.

⁹⁹ Howard Coombs, E-mail message to Jonathan Martineau, December 27, 2020.

¹⁰⁰ Ibid.

Challenges of Planning for Effective and Sustainable CB Operations

While there is a wealth of academic and military thinking applied to CB operations, no agreement and standardization exists regarding the design and implementation of an effective CB operation. As Gerspacher et al. claim, there is no one-size-fits-all solution to CB.¹⁰¹ This section presents the two main challenges that contributing nations face when planning and conducting CB operations in fragile states: the variance in national approach in a coalition/alliance environment and sustainability of CB operations.

Variance in National Approach

In a coalition or alliance environment, the application and the conduct of each nation's CB operations may present a challenge for the nations supporting the HN. CB requires that partner nations leverage each other's programs and authorities and ultimately unite their efforts towards a common goal.¹⁰² The reality is that CB operations are undertaken cooperatively and intra-governmentally between the HN and supporting countries.¹⁰³ Indeed, based on budgetary limitations and military capacity demands across their force structure, "neither the US nor its key allies – Australia, Canada, France, Germany, or the UK – can meet the global security assistance needs alone."¹⁰⁴ Within this context, CB operations cannot be planned and conducted in isolation.

Accordingly, it is evident that partner nations' interactions can become overly complex within a multinational effort to support an HN. Every nation has an area of expertise and its own political objectives. Other than national interests, the *ABCA Security Force Capacity Building (SFCB) Handbook* also identifies national restrictions and dual main command structures as

¹⁰¹ Gerspacher, "Sustainable Capacity Building: Guidelines for Planning and Project Design Communities," 1.

¹⁰² Ibid., 14.

¹⁰³ Ibid.

¹⁰⁴ Ibid.

critical challenges in a coalition or alliance environment.¹⁰⁵ For example, when General Stanley McChrystal took over command of the International Security Assistance Force – Afghanistan (ISAF) in 2009, McChrystal recognized that the coalition had no unity and synchronization of efforts.

McChrystal declared that “ISAF’s subordinate headquarters must stop fighting separate campaigns.” To this end, he established an intermediate operational headquarters – ISAF Joint Command – to “synchronize operational activities and local civil-military coordination and ensure a shared understanding of the mission throughout the force.” With ISAF Joint Command taking care of the “down and in” aspect of command, ISAF Headquarters would be able to focus on the ‘up and out’ aspect: that is, overall campaign strategy, coordination with the Afghan government and international partners, and liaison with NATO capitals and other countries in the region.¹⁰⁶

McChrystal’s assessment, then, was that participating nations were not in unison and did not have the same main efforts due disparate political and military objectives. Such dissonance between partners can put the overall CB operations at risk by creating unanticipated consequences. A coordinated effort between participating nations empowers the coalition or the alliance to identify gaps, determine defined outcomes and objectives, develop a comprehensive approach, weigh risks appropriately, and avoid redundancy of efforts between nations supporting the HN.

One of the complications tied to national approaches for CB operations is the lack of standardization between providing nations. No common doctrine nor universal template for CB operations exists. The *SFCB Handbook* endorses that contributing nations tend to adjust their operating processes and approaches for CB efforts based on the lead nation or the theater strategy.¹⁰⁷ Even though that operating processes and approaches are clearly defined, the standardization may not be delivered in the same fashion. This can cause friction and interoperability issues amongst the various elements of the HN security forces. Typically, each

¹⁰⁵ ABCA, *Security Force Capacity Building (SFCB) Handbook: ABCA Publication 369*, 2nd ed. (2011), 1–4.

¹⁰⁶ Rudra Chaudhuri and Theo Farrell, “Campaign Disconnect: Operational Progress and Strategic Obstacles in Afghanistan, 2009-2011,” *International Affairs* 87, no. 2 (2011): 275, accessed November 19, 2020, <https://doi.org/10.1111/j.1468-2346.2011.00973.x>.

¹⁰⁷ ABCA, *Security Force Capacity Building (SFCB) Handbook*, 1–4.

contributing nation tends to design and deliver CB operations within their area of expertise based on their ambition, interests, and caveats – with their own national practice – which can be incompatible internally (with other security forces elements of the HN) and externally (with coalition or alliance partners). However, to counter this challenge of standardization for NATO DCB operations, the alliance created Standardization Agreements, which are agreed on and adhered by all allies and partners. For every DCB operation, NATO produces Capability Codes and Statements, outlining in detail how each asset, contributing to a capability, should be enabled by each participating nation.

Sustainability

The principle of sustainable CB operations is primarily oriented on building and maintaining specific capacity in partnership with the HN over the long term. Nadia Gerspacher asserts that the ultimate “goal of an international mission [CB operations] should be to create that will remain in place and continue to be effective after the intervener departs”¹⁰⁸ from partner nations. Also, without a long-term vision, time horizon, and institutionalization, the developed capacity atrophies.¹⁰⁹ For a CB operation to be sustainable and impactful in the long term, donor and partner nations must consider many factors including commitment, refresher training, maintenance of facilities and equipment, HN security force absorptive capacity, spare parts, resourcing, and funding.¹¹⁰ However, the current paradigm for supporting nations is maximizing the short-term to avoid long-term commitment in resources and funding. In their study, Christopher Paul et al. assert that this *modus operandi* was employed over the last two decades in

¹⁰⁸ Nadia Gerspacher, *Strategic Advising in Foreign Assistance: A Practical Guide* (Boulder, CO: Kumarian Press, 2016), 30.

¹⁰⁹ Michael R. Boera and Paul R. Birch, “Rebuilding Afghanistan’s National Security Forces: Fighting Asymmetry with Symmetry,” *Military Review* (2011): 26, accessed October 15, 2020, https://www.armyupress.army.mil/Portals/7/military-review/Archives/English/MilitaryReview_20110430_art006.pdf.

¹¹⁰ Christopher Paul et al., *What Works Best When Building Partner Capacity in Challenging Contexts?*, Research report RR-937-OSD (Santa Monica, CA: RAND Corporation, 2015), 13.

CB operations like in Afghanistan and Iraq. These CB operations were short-term successes that became long-term failures as developed or enhanced capabilities worked initially, but due to the lack of sustainability the capacities returned to their status quo.¹¹¹ The partner nations must establish quantitative and qualitative measures of effectiveness (MOEs) to assess the successes or signs of progress and sustainability within the operation.¹¹²

Fostering sustainability for a CB operation is not a small undertaking; it requires a lot of time, energy, and resources from the supporting nation(s) and the HN. Incorporating sustainability into mandates and strategies, striving to create resilient and flexible systems, seeking home-grown definitions of problems and solutions, ensuring solutions are applicable and viable, nurturing inclusivity, coping with resistance to change, and mutual trust are fundamental tenets for successful and sustainable CB operations.¹¹³ The key takeaway from these principles is that planning for CB operations cannot be done in isolation; the HN must create the solution in collaboration with all partner nations. CB is owned by the HN, not by the partner nations. Many partner nations tend to have ethnocentric and modernist approaches by imposing their will and proposing preconceived *ad hoc* solutions that were supposedly successful in the past. Gerspacher claims that many CB operations fail from the start because

...the recent surge in capacity building reflects perceived inadequacies of previous approaches to reconstruction and stabilization. Many critics have accused interventions conducted in the last two decades of being ineffective, because they have sought to transplant preexisting solutions from other countries instead of devoting the time and effort to developing home-grown, sustainable solutions.¹¹⁴

¹¹¹ Paul, *What Works Best When Building Partner Capacity in Challenging Contexts?*, 13.

¹¹² Gerspacher claims that MOEs are essential to analyze and gauge the effectiveness, to inform the redesign or adjustment, and to assess the impact of the work on the targeted HN capacity of the ongoing CB operations. There are types of evaluations that should both be conducted on a regular basis during the conduct of CB operations. One is a “process of evaluation” that allows one to identify the limitations encountered due to poor or inefficient resource allocation. The second is “an impact evaluation” that seeks to assess the adequacy of the project, its content, and its delivery method to measure it against project goals. Gerspacher, *Strategic Advising in Foreign Assistance*, 31.

¹¹³ For more details on the definition of these principles, see *ibid.*, 132-139.

¹¹⁴ *Ibid.*, 12.

From this, strategists and operational planners must work in conjunction with the HN to plan and execute FAS CB operations based on HN needs, and enhance the likelihood of sustainable and impactful outcomes.

Because of this need, the OE should be analyzed as an open system with the VUCA characteristics to create sustainable CB operations. Contributing nations tend to concentrate their CB efforts on identified deficiencies within the HN security forces or institutions without paying attention to the causes, other agents like the local populace, and the culture. Recognizing that all institutional levels and all systems within society are interconnected is one of the first steps towards building capacity in any country. Strategists and operational planners must focus on interactions within the whole system to avoid a negative impact on one or more systems, jeopardizing the integrity and validity of the CB operations. For example, Gerspacher claims that the US military

...has been heavily and directly involved in the capacity building of the police in several countries emerging from conflict. As a consequence, those police forces have acquired a military outlook, seeing enemies within the public rather than criminal elements from which the public needs protection. Such a perspective makes the public wary of the police and, by extension, of the government, thereby undercutting capacity-building efforts.¹¹⁵

Before and during CB operations, engagement with the HN is vital to build a deeper comprehensive understanding of the OE, define the problem, and propose solutions to create the operation's characteristics within its context. The HN stakeholders "know better how the recipient function or institution is situated in the broader system and can identify ways in which the intended activity can have impacts that resonate throughout it."¹¹⁶ Commanders and planners at the strategic and operational levels must concentrate their efforts on systematic CB design, implementation, and evaluation.¹¹⁷ Canadian researcher Emily Spencer claims that

...in the end, to be successful in the contemporary operating environment means more

¹¹⁵ Gerspacher, *Strategic Advising in Foreign Assistance*, 14.

¹¹⁶ Gerspacher, *United States Institute of Peace*, 13.

¹¹⁷ Gerspacher, *Strategic Advising in Foreign Assistance*, 12.

than just equipping and training soldiers to fight with the most advanced technology and weapons systems available [...] But equally, if not more importantly, it demands military professionals who are culturally astute, who can see reality through the eyes of others and utilize that knowledge to influence others to achieve their aims. Only by fully understanding others it is possible to win their trust and confidence and influence them in a substantive lasting way.¹¹⁸

Greater comprehensiveness and awareness from the supporting nations toward the HN needs and environment enhance CB operations' chances of success and avoid unintended consequences.

The Canadian perspective concerning the CB operations in Afghanistan is the mission was a challenging experience for the strategic and operational levels. Based on the needs of the HN, it took several years of iterative processes to create and adjust a vision and operational approach.

¹¹⁸ Emily Spencer, *Solving the People Puzzle: Cultural Intelligence and Special Operations Forces* (Toronto, ON: Dundurn Group, 2010), 27.

Canadian Experience in Afghanistan

This section provides a case study on the CAF approach for CB activities in Afghanistan between 2006 and 2011. During this timeframe, the CAF was a component of the Canadian WoG approach to stabilize Afghanistan. Canada achieved several interests by participating in the Afghanistan rebuilding efforts: it improved Canada-US diplomatic relations and helped Canada preserve a prominent voice at NATO, enabling its influence over the Afghan strategy.¹¹⁹ One of the primary CB efforts assigned to the CAF was the development of Afghan National Security Forces (ANSF), namely the Afghan National Army (ANA) and the Afghan National Police (ANP) through Canadian Operational Mentor and Liaison Teams (OMLT). Despite that, the CAF tried to develop “a military campaign with a holistic perspective,”¹²⁰ but instead the CAF planned CB operations in Afghanistan with a traditional approach. In terms of scope, this example examines the Canadian contribution to OMLT during Operation Athena from 2006 to 2011 to the “advice-assist-accompany-enhance” (A3E) of the ANA in the Kandahar province.

Context

In 2006, the Kandahar province’s operational environment was deteriorating due to Taliban influence and threats, putting the coalition’s efforts in the region at risk. In 2005, the GoC expanded Afghanistan’s mission with the Provincial Reconstruction Team’s (PRT) responsibility in Kandahar, which paired diplomats, NGOs, and police trainers with CAF members.¹²¹ The PRT was in constant danger due to the insurgent activities, and Kandahar province was close to collapse. From March to August 2006, Combined Task Force (CTF) Aegis was created to secure

¹¹⁹ Spilka O’Keefe and George Petrolekas, “Canada and the NATO Training Mission in Afghanistan,” *CDA Institute Report* (2012): 17, accessed November 1, 2020, https://cdainstitute.ca/wp-content/uploads/2012/06/cdai_ntma_21Dec2012.pdf.

¹²⁰ Coombs, *No Easy Task: Fighting in Afghanistan*, 117.

¹²¹ Andrew Burtch, “At the Limit of Acceptable Risk: The Canadian Operational Mentor and Liaison Team, 2006–2011,” *International Journal: Canada’s Journal of Global Policy Analysis* 68, no. 2 (2013): 314, accessed November 19, 2020, <https://doi.org/10.1177/0020702013493611>.

the Kandahar province. Under the umbrella of Operation Enduring Freedom (the US-led multi-national coalition), CTF Aegis was a brigade-sized multi-national TF led by Canada. Under its command and control the TF had a Canadian battalion-sized battlegroup (TF Orion), plus elements from the Netherlands, the UK, the US, and Estonia. Upon completing its deployment in the region, CTF Aegis became Task Force Kandahar (TFK) within the International Security Assistance Force (ISAF), a NATO-led (Article 5) mission in Afghanistan.

In September 2006, ISAF launched one of its largest combat operations of the conflict – Operation Medusa. This operation aimed to “clear” Taliban strongholds in the Zhari and Panjwai districts to maintain freedom of movement along Highway 1, the key provincial transportation artery, and maintain security for Kandahar City.¹²² For this operation, the Canadian battlegroup provided the main combat element. Upon completing the fifteen-day offensive operation, the Kandahar City, Panjwai, and Zhari districts became the focus of the Canadian battlegroup. Figure 10 demonstrates the CAF’s area of responsibility (AOR). After Operation Medusa, the Canadian battlegroup had subsequent tasks to “hold” and “build.” However, the “hold” task in the three assigned districts was almost impossible due to limited CAF force ratio. Nevertheless, this situation was not unique and all ISAF contributing nations needed more and adequate capabilities to “clear, hold, build.” The ANSF was therefore vital to ISAF in stabilizing the region. However, the ANSF was still evolving and needed advisors.

In 2006, to assist the ANSF, ISAF developed and implemented the OMLT concept that consisted of providing leadership training and mentorship to the ANA to improve regional security and the long-term stability of the Government of the Islamic Republic of Afghanistan (GIROA). The ISAF OMLT concept with the ANA was similar to US Embedded Training Teams (ETT), which were composed of thirteen to thirty members, depending on their assigned role in

¹²² David Fraser and Brian Hanington, *Operation Medusa: The Furious Battle that Saved Afghanistan from the Taliban* (Toronto: McClelland & Stewart, 2018), 2.

their respective AOR. Each ETT had to be ready to accomplish the following functions – be the liaison element between ISAF forces and ANA units; provide training and mentoring to the ANA, including assistance in planning operations; and provide enabling assistance during the conduct of operations such as fire support, close air support, and casualty evacuation.¹²³

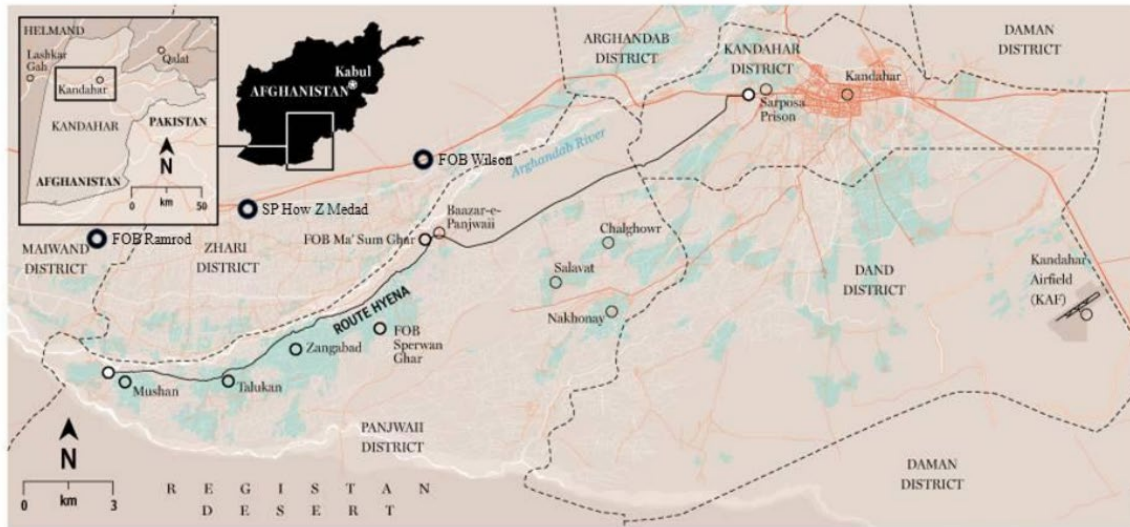


Figure 10. Map of Kandahar Province. G. Hampton, “Leading From the Front: The evolution of the Canadian Mission in Kandahar Province at the Operational Level of War” (Master’s dissertation, Canadian Forces College, 2013), 60, accessed February 5, 2021, <https://www.cfc.forces.gc.ca/259/290/299/286/hampton.pdf>.

During the same year, the CEFCOM issued a campaign plan supporting the NATO initiative for CB activities to strengthen the ANSF in Kandahar province.¹²⁴ The ANSFs in Kandahar province were unable to support the CAF’s operations. Canadian historian Andrew Burtch emphasizes that “ANA units were rarely available to support Canadian operations,

¹²³ Jesper J. D. Andreassen, Kenneth Boesgaard, and Anders D. Svendsen, “Stabilization Operations Through Military Capacity Building—Integration Between Danish Conventional Forces And Special Operations Forces” (Masters thesis, Naval Postgraduate School, 2016), 64, accessed August 15, 2020, <https://calhoun.nps.edu/handle/10945/51710>.

¹²⁴ In conjunction with ISAF strategy, the CAF published a campaign plan where the mission was “to conduct operations in Afghanistan in order to support the [GIRoA] effort to create a secure, democratic and self-sustaining state.” The two main strategic objectives were helping and maintaining a secure Kandahar environment and supporting establishing efficient and durable Afghan security forces structures. These strategies goals intended to “build the human and capacity and processes in GIRoA institutions while expanding their reach and credibility and supporting reconstruction activities.” Roland Paris, “The Truth About Canada’s Mission in Afghanistan,” accessed January 15, 2021, <https://www.cips-cepi.ca/how-canada-failed-in-afghanistan/>.

extremely vulnerable to enemy attack, and unless accompanied by American trainers, prone to retreat. The ANP presented a far worse problem; its unprofessionalism made it an obstacle to progress.”¹²⁵ With the emergence of new threats, an increase in violence, and ISAF unable to allocate more capabilities in the region, the CAF had to establish a formal relationship like that of the ETT with ANSF to increase their capabilities to ensure provincial stability.¹²⁶ Based on the increasing insurgent activities threatening the Kandahar region, ISAF and GIRoA agreed to increase the effectiveness of ANSF in the region. By 2007, the ANA 1st Brigade of the 205 (1/205) Atul (Hero) Corps was based in the Kandahar province.¹²⁷ The brigade consisted of three infantry battalions, Kandaks, one combat support Kandak, giving fire support and operational assistance to combat elements, and one Combat Service Support, or logistics/ordnance, Kandak.¹²⁸

Key Challenges

Nations like Canada created a parallel operational level structure to manage their own operations and campaign plans. These frameworks were not necessarily synchronized with ISAF objectives, even though ISAF remained the authority controlling/coordinating all national theater strategies and operations. Each nation was expected to provide agreed upon capabilities, and plan and execute operations supporting ISAF within their respective AOR. In fact, the CAF employed two operational headquarters to plan and control its capabilities during the Afghanistan campaign. First, Joint Task Force Afghanistan (JTF-A) located in Kandahar Airfield, Afghanistan, was created in 2006 to facilitate the coordination between the CAF deployed units and CEFCOM. CEFCOM and JTF-A managed the operational level and JTF-A had two primary responsibilities.

¹²⁵ Burch, “At the Limit of Acceptable Risk,” 315.

¹²⁶ Ibid.

¹²⁷ G. Hampton, “Leading From the Front: The evolution of the Canadian Mission in Kandahar Province at the Operational Level of War” (Master’s dissertation, Canadian Forces College, 2013), 28, accessed February 5, 2021, <https://www.cfc.forces.gc.ca/259/290/299/286/hampton.pdf>.

¹²⁸ Ibid.

These were administrative control responsibilities on CAF's military elements in the theater and provided the command-and-control headquarters of Task Force Kandahar (TFK), a multi-national ISAF brigade-level headquarters managing the Kandahar province's operations under ISAF Regional Command (South) headquarters.¹²⁹ TFK and JTF-A were pretty much the same entity, with both functioning as the operational and tactical headquarters. Before the CAF concluded its operations in Kandahar province in 2011, JTF-A had under its command the CAF battlegroup, the KPRT, three US Army battalions, one engineer regiment, OMLTs, and Police OMLT. JTF-A was in constant coordination with CEFCOM to communicate the operational theater needs.

CEFCOM's primary responsibilities were to monitor ongoing operations in theater, force generation of military capabilities required for the mission, and to translate military strategies into operational objectives through a campaign plan. CEFCOM's campaign plan had the goal to accomplish "a series of operational objectives flowing from Canada's overarching strategic objectives for the mission."¹³⁰ It is essential to highlight that ISAF's operational needs and goals were not always precisely aligned with the providing nations to the stabilization mission. Kimberly Unterganschnigg, who was a joint lesson learned officer in Kandahar during 2010-11, observed, "Inconsistency in strategies at the international and national (Canadian) levels, such as strategies for the rule of law sector, impeded progress in security, reconstruction and development."¹³¹ Following the January 2008 Manley Report, it became crucial to increase CB efforts to strengthen the ASF with CAF capabilities as it was a critical part of Canada's exit strategy from Afghanistan. However, the CAF was not prepared to meet the demand.¹³²

¹²⁹ Government of Canada, "Joint Task Force Afghanistan," last modified April 11, 2014, accessed January 16, 2021, <https://www.canada.ca/en/department-national-defence/services/operations/military-operations/recently-completed/operation-athena/joint-task-force-afghanistan.html>.

¹³⁰ Coombs, *No Easy Task: Fighting in Afghanistan*, 113.

¹³¹ Kimberly Unterganschnigg, "Canada's Whole of Government Mission in Afghanistan - Lessons Learned," *Canadian Military Journal* 13, no. 2 (2013): 10, accessed January 20, 2021, <http://www.journal.forces.gc.ca/vol13/no2/page8-eng.asp>.

¹³² Burtch, "At the Limit of Acceptable Risk," 324.

Throughout the campaign, these CB operations were always reactive, and improvisational solutions were the norm.¹³³

The GoC-mandated CB efforts were a paradigm shift for which the CAF was not ready. In shifting the efforts from a combat mission to a more institutional support role within a conflict zone, CEFCOM and JTF-A had to conceptualize an operational approach. The operational level positivist and modernist approaches adopted by CAF impacted the development of a feasible operational scheme enabling the alignment of the “ways” and “means” to support CB efforts. The ETT concept was successfully employed by the US Army and replicated by the CAF to become the employment concept for the Canadian OMLTs. Despite that, the GoC and ISAF political and strategic priorities were not well understood and commensurately resourced by the CAF.¹³⁴ Between 2006 to 2011, the CAF repeatedly deployed OMLT force elements which could not meet the demands placed upon them. The organization expanded yearly to support the CB efforts mandated by ISAF and the GoC in a piecemeal fashion. As noted by Burtch, capacity expansion requirements were done “from the bottom up” in response to pressing operational requirements that emerged in the theater but did not result in immediate adaptations to the CAF’s plan for future OMLT force generation and organization. Nor were they matched to national or alliance objectives.¹³⁵ Ultimately, each Canadian OMLT rotation (ROTO) had to improvise at the tactical level to meet the operational effect.

One can argue this lack of effectiveness was due to JTF-A and CEFCOM planning the CB efforts with a reductionist and linear approach. When combining the GoC and military-strategic guidances, the planned operational approach created a misconception that if the CB efforts with the ANA were successful, the outcomes achieved would create the conditions for Canada to withdraw its troops in Afghanistan. However, commanders of the Canadian OMLT

¹³³ Ibid., 315.

¹³⁴ Ibid.

¹³⁵ Ibid., 321.

had no clear contextual understanding, like one achieved through a systems approach, of their role, function, and, more importantly, their organization based on the information from the theater. Before their 2007 deployment, OMLT's commanding officer, Colonel Wayne Eyre, stated in an interview with Burtch that "this was very, very new for us ... The Canadian Army was wrestling with how to man this organization ... They pulled in individual augmentees from around the country ... [At] that point we had nothing to go on as to what the mission was."¹³⁶ This low prioritization was due to a deficiency in the CAF's understanding of the importance of developing the ANA in a counter-insurgency (COIN) campaign and the need to prioritize the Canadian battlegroup's training and capabilities to support this goal.¹³⁷ The OMLT's role was to create the conditions for a professionalized ANA. This would, in turn, eliminate the insurgency and create a stable environment for the civilian population, fostering the trust and legitimacy of the GIRoA.¹³⁸ Another crucial role of the OMLT was to act as a bridge for combined operations between the ANA and ISAF. These roles were not well understood by other commanders and CAF entities, creating tensions between the OMLT and affiliated ISAF (Canadian) elements. Colonel Stéphane Lafaut, Commander ROTO 3 OMLT in 2007, noted that he

...began with little information about the OMLT's relationship with the rest of the [Canadian] battle group, its potential cultural impediments to working with the ANA, or even the nature of the final disposition of his team. During the training, which was conducted between December 2006 to July 2007, the battle group's sole focus had been on preparing for war, and the OMLT and the PRT had received less attention because of the prevailing belief that the battle group would be doing most of the fighting without much involvement from the ANA.¹³⁹

In the early years of Canadian operations in Kandahar, the battlegroup was preparing to fight a conventional war, not necessarily a counter-insurgency. During predeployment training, the

¹³⁶ Burtch, "At the Limit of Acceptable Risk," 317.

¹³⁷ Ibid., 321, 323.

¹³⁸ Alex D. Haynes, "Opportunity Lost: The Canadian Involvement in the Development of the Afghan National Police," in *No Easy Task*, ed. Bernd Horn and Emily Spencer (Toronto, ON: Dundurn, 2012), 200.

¹³⁹ Burtch, "At the Limit of Acceptable Risk," 321.

OMLT capacity was underestimated before and during the deployment. Many battlegroup commanders had a misconception of their utility and the importance of the ANA Kandaks to conduct stability operations. Despite the OMLT concept being a high priority for the GoC and ISAF, CEFCOM gave a greater priority to fill the capability requirement in personnel to the battlegroup and then, the OMLT. The OMLT mandate's importance did not match the GoC's narrative with the increasing resources from the CAF. The failure to provide the proper resources rendered the OMLT CB efforts to be accomplished and measurable. It is only in 2010-11 the importance of the OMLT and its synchronization with operations within JTF-A and TFK was understood, and all Canadian operations were combined with 1/205 with the OMLT facilitating planning and conduct. TFK commander at the time directed the battlegroup and other operations to align with 1/205 in a support role.

Furthermore, another challenge was the delivery of sustained training based on the actual need to create an autonomous Kandak. One of the biggest obstacles to building a first-rate Afghan army was the lack of training. The CAF was not responsible for forming (basic training) the ANA under ISAF auspices; instead, Canadians supplement training in Kandahar with on-the-job training or mentoring.¹⁴⁰ The center of gravity of the OMLT was their credibility. If the OMLTs have no credibility toward their ANA counterparts, as Colonel Eyre emphasized, "it does not matter what you do after that, they are [ANA] not going to listen, and we will not be able to accomplish our mentoring mission."¹⁴¹ The rotation between the OMLT mentors and Kandaks was not synchronized and created friction between the two organizations, rendering the mentorship ineffective. The deployment of the OMLT was based on the Military Readiness Plan (MRP), which consisted of deploying new teams every six months. The Afghan rotation between

¹⁴⁰ Colin Kenny et al., *How Are We Doing in Afghanistan?: Canadians Need to Know* (Ottawa, ON, 2008), 16, Report of the Standing Senate Committee on National Security and Defence, accessed February 13, 2021, <https://sencanada.ca/Content/SEN/Committee/392/defe/rep/rep09jun08-e.pdf>.

¹⁴¹ Burtch, "At the Limit of Acceptable Risk," 318.

Kandaks was based on a nine-month operational cycle, or sometimes shorter.¹⁴² This desynchronization rendered the mentorship difficult because the OMLTs did not have enough time to know their organization correctly. The Canadian mentors had the impression that they could only offer more than hit-and-miss advice.¹⁴³

The focus of the OMLT was to mentor the ANAs on their combat skills and execute combat operations in their respective assigned AOR. The ANA capabilities were hampered by the lack of human resources, equipment, and combat service support. The mentorship was combat-centric and lacked the ability for development of other combat functions such as sustainment. Thus, Kandaks were not able to sustain themselves. Keeping the ANA supplied by their own logistics chain stocks was a constant internal battleground in which OMLTs could have been effectively used to mentor them. The OMLT had to consequently procure commodities through the ISAF sustainment chain to ensure that the ANA could operate effectively in the counter-insurgency efforts.

In summary, looking back on the OMLT's role, it appears as though the effort was an ISAF-wide improvisation to resolve an emergent tactical problem.¹⁴⁴ Regardless of the challenges presented during the Canadian OMLT operations between 2007 and 2011, the CAF grew its expertise progressively and gained the reputation of being credible and efficient mentors within ISAF. Through iteration, adjustment, and learning, the Canadian OMLT outperformed expectations at the tactical level, and its expertise gained was judiciously utilized for Operation Attention – a GoC commitment to deploy 950 military trainers from 2012 to 2014 in Kabul with the tasks to train, mentor, and develop the skills of the ANSF.¹⁴⁵

¹⁴² Kenny et al., *How Are We Doing in Afghanistan?*, 16.

¹⁴³ Ibid.

¹⁴⁴ Burtch, "At the Limit of Acceptable Risk," 328.

¹⁴⁵ O'Keefe, *CDA Institute Report*, 6.

Conclusion and Recommendations

More than ever before, twenty-first century requirements in combat and non-combat operations require a comprehensive understanding of the military strategic and operational environment. The contemporary security environment necessitates holistic approaches and military engagement embedded in a coordinated and synchronized WoG approach that is based on an adequate understanding of the OE. The question is: What role does contextual understanding have in producing CB strategies and operations that are effective and measurable? The system of systems empowers both commanders and planners to understand, visualize, describe, and assess the OE through synthesis and narrative to determine trends, opportunities, risks, potentials, and phenomena. Cognitive tools, critical thinking, and theories, such as the OODA loop, propose an emergent, systemic approach to comprehend complexity theory and the OE presenting VUCA characteristics. This methodology helps to better understand the system's interaction by its contextualized causes and symptoms.

Military institutions tend to employ a modernist approach to solve a complex problem with cognitive heuristics and other mental models such as the MDMP or the OPP. The use of design thinking during the planning and execution of military operations empowers the commander and their staff to “map the mess” and adequately frame or reframe the OE and solve the right problem at hand. Furthermore, it enables military personnel to develop and adjust FAS operational approaches and solutions with meaningful measurement, facilitating the CAF's increasing effectiveness and learning success. The CAF uses the CF OPP (incorporating operational art and operational design) and cognitive tools to develop military strategies and operations but never formally institutionalized the use of system thinking and design thinking.

The CAF has a positivist and linear causality approach for creating CB operations and strategies, anchoring its practices from other nations' ad hoc best practices or status quo. The requirements of having a clear contextual understanding of both the OE and the problem are

inevitable for the CAF when developing CB strategies and operations that encompass the details for understanding the OE, develop the approach, define the effects, deduce the capabilities, and generate the force elements. The availability of these factors defines the required capabilities to accomplish the assigned tasks.

Undoubtedly the CAF must develop military strategies and operational approaches when participating within a coalition/alliance context. This approach derives either from the necessity to generate and equip the forces or to lead them in a theater. However, depending on the scale and scope of the CB operations, the CAF has to use cognitive tools to create tailored-unique operations that address national imperatives and mission requirements within its AOR.

Due to Canada's medium-power status, the CAF's CB operations are not small undertakings; it requires time, energy, commitment, and resources from the partner nation(s) and the HN's willingness. The main challenges and complexities in planning and effectively conducting CB operations are varied national approaches and sustainability. First, in a coalition and alliance, every nation must unite its efforts and develop a comprehensive approach to realistically assist the HN's targeted capacity by transferring knowledge, skills, and information. Contributing nations must orient their relation towards partnership with the HN, putting their ethnocentric behaviors and positivist/modernist approaches aside. Second, sustainability is key in CB operations. CB efforts focus on capacity. Building capacity within a fragile state takes time; short-term commitments to CB efforts have the tendency to provide a minimal impact by putting a "band-aid" on the symptoms, and not address the cause of the disintegrating factors. To assess the existing HN's capacity of relevant actors and systems for sustainable CB operations, strategists and operational planners must dialogue with the HN and ask better questions to frame the OE and the problem, to then create FAS and measurable solutions. Capacity designers tend to invest little effort to produce comprehensive, integrated analyzes of the HN systems and their dynamics and to identify the gaps in human and institutional capacity to be enhanced. Therefore,

CB designs are often ineffective and inefficient. To ensure its success, CB operations are owned by the HN, not by the supporting nations. They cannot be completed quickly.

Considering the history of the Canadian military, the conduct of CB operations is not a new paradigm. For the last four decades, the CAF gained vast experience in this regard but produced doubtful positive outcomes due to GoC's piecemeal and positivist approaches. Nevertheless, while SSE mandates the CAF to maintain its combat aptitude and readiness in the FSO, seventy percent of troops are currently deployed abroad to support CB efforts by developing partner nations' defense and security capabilities.

Based on the OMLT case study in Afghanistan, three significant observations are obvious. First, it was evident that the CB operations to mentor the ANA demonstrated several issues at the tactical, operational, and strategic levels. The campaign demonstrated planning and structural issues that increase or exacerbate the planning flaws. Despite that JTF-A and TFK were operational level headquarters, both headquarters were employed mainly at the tactical level. Neither JTF-A nor TFK was doing the operational planning, which created enormous frictions for the force generation of capabilities by CEFCOM to support the campaign and understand the OE. Equally, both headquarters were consumed with the management of immediate objectives and daily operations. Second, notwithstanding the lack of anticipation based on the theater's needs, the CAF's OMLT efforts became unachievable, caused by the lack of resources allocated to achieve the end state. The CAF underestimated the capacities required to accomplish the task without adjusting the MRP. That increased the risk at the tactical level. From 2007 to 2011, the OMLT mandate expended yearly in a piecemeal fashion, putting pressure on the tactical level to deliver effects. Regardless of the CB operations for the highest priority of ISAF and the GoC, the CAF allocated more importance to battlegroup to accomplish COIN operations, framing the operational approach solely on fighting the insurgency, not in the capacity building of the ANA. This resulted in the "tacticization" of strategy. The third observation is OMLT CB operations were not suitable. The CB operations became the priority for the GoC to create the conditions for

an exit strategy to withdraw the Canadian troops from the theater. The timeframe was ambitious and lacked long-term commitment, creating non-sustainable outcomes to stabilize the Kandahar province.

In conclusion, the CAF needs a methodology to understand the OE, a constructivism approach, that design brings to the table. Without the institutionalization of a holistic method for the planning and executing CB operations, the CAF will continue the same traditional approach of “bottom-up” through intensive iterations. It will take the CAF years to build efficacy. However, the CAF can change its *modus operandi* by using design thinking. Design thinking allows commanders and their staff to create military strategies, campaigns, and internally coherent operations, in line with the twenty-first century’s requirements and externally relevant rather than just address the symptoms. This methodology will help the CAF to avoid the same painful learning, adaptation, and evolution that the organization experienced in the past while conducting CB operations. The institutionalization of a holistic approach would enable the CAF to create FAS military strategies and operations that correctly set the mission with less cost (people life, resources, and finance). Without a holistic approach to elaborate on military strategies and operations, military organizations prepare and fight the last war.

By using some elements of the DOTMLPF-P(I) framework, several developments can be recommended in support of CB operations:

1. **Doctrine:** In the last two decades, the CAF made tremendous efforts to align its joint doctrine with NATO. However, most of the doctrine currently used by the CAF is outdated for the planning of campaigns and operations. The CAF must continue developing its joint doctrine incorporating greater importance to design and system thinking not only in the JIPOE, especially at a joint operational level. A promising avenue of approach can be using the *NATO Comprehensive Operations Planning Directive (COPD) V2.0* as a model for developing this joint doctrine.
2. **Organization and Personnel:** It is crucial in military operations to have a clear task.

Therefore, the question is who is supposed to do what and how. It is the military strategic level's privilege to advise the political leadership in defining the why. It is the operational level's (CJOC and JTF commanders) obligation to recommend and designate component commands, services, and branches in line with this direction to create the form. Ultimately, the latter define tactical capacities and force elements, capable of achieving the desired effects. This process leads to the organizational requirements of running commands on the military strategic, operational, and tactical levels. If the CAF decide to deploy a joint operational headquarters in a theater, this headquarter cannot be double hatted to perform the form and function simultaneously. The CAF have to properly man the operational headquarters if one is needed.

3. Training and Leadership: CFC must include design in its professional military education (PME) curricula. Also, the CAF must continue to send officers attending the U.S. advanced PME programs to increase its knowledge and expertise at the operational level.
4. Interoperability: The CAF must ensure interoperability both internally and externally. Therefore, the goals and objectives, end states, and roadmaps to partner force autonomy for existing and future CAF CB operations must be re-evaluated, adjusted and expanded to ensure consistency with the HN and partners, especially within a coalition or alliance framework.

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