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Dismantling Military Professionalism and Warrior Culture: How to Lose the Next War

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Major Michael Timms

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ABSTRACT

The tenets of military professionalism demand that the CA adapt its warrior culture to social expectations and battlefield imperatives to meet the challenges soldiers will face. Examining both the concept military professionalism and the army's culture illustrates that culture forms the bridge between the ideas of military professionalism and soldiers' lived experiences. First, examining the trends of the contemporary and future battlefield reinforces many components of the Canadian Armed Forces' (CAF) definition of military professionalism, exemplifies the reasoning behind many components of the CA's culture, and illustrates that the demands placed upon soldiers are only increasing. Second, examining the demographic changes within Canada shows that the CA must make investments to compensate for the changing health, fitness, and skills of potential recruits, and continue use of military indoctrination to a common culture and ethos, nested within professionalism. Third, examining how biological sex and constructs of gender within society align with the extant notions of warrior culture shows that there is no reason one's sex or gender render them incompatible with the military profession, warrior culture, or duties of a soldier. Importantly, the criticisms that CA's warrior culture are masculine are valid regardless of the use of the term warrior. To ensure the CA can benefit from Canada's diversity, meet its recruiting needs, and meet its professional demands, the CA must address perceptions of its warrior culture. To do so, it requires an army specific ethos, which resonates with soldiers and embodies the inclusion and professionalism required.

CHAPTER 1 – INTRODUCTION

Thesis: Soldiers and Their Culture are Critical

In the famous words of Carl von Clausewitz, “war is no pastime; it is no mere joy in daring and winning, no place for irresponsible enthusiasts.”¹ The Canadian Army (CA) is changing its culture and structure to meet the demands of Canadian society and its perceived future operating environment. Though, will the direction of this change compromise its soldiers’ preparedness for war? In recent years, the warrior culture of the CA was criticized as being overly masculine, and detrimental to both recruiting and retention of a diverse Canadian population.² However, culture is a key component of the CA’s fighting strength. Can the goals of generating competent soldiers fit for the rigors of the modern battlefield be matched with the ideals of creating equitable army team fit for Canada’s growing diversity? This paper argues that the tenets of military professionalism demand that the CA adapt its warrior culture to social expectations and battlefield imperatives to meet the challenges soldiers will face.

U.S. General Eric Shinseki observed “if you dislike change, you're going to dislike irrelevance even more,”³ This is frequently cited by senior CA officers to cultivate much-needed culture change, addressing current sexual misconduct scandals, and to

¹ Carl Von Clausewitz, *On War*, trans. Michael Howard and Peter Paret (Princeton: Princeton University Press, 1989), 86.

² Krystal K. Hachey, Tamir Libel and Waylon H. Dean, *Rethinking Military Professionalism for the Changing Armed Forces* (Cham, Switzerland: Springer, 2020), 1-2, 5, 149-160, 189-195, & 229. <https://go.exlibris.link/Kyr9Pcz3>.; Walter Callaghan, "Missing the Point: A Critical Reflection on Operation HONOUR and Reactions to Military Sexual Misconduct by Veterans of the Canadian Armed Forces," *Atlantis Journal* 41, no. 2 (2020), 78.; Valerie M. Wood and Danielle Charbonneau, "Gender, Self-Efficacy, and Warrior Identification in Canadian Army Personnel," *Journal of Gender Studies* 27, no. 7 (2018), 747-756.; James J. Do and Steven M. Samuels, "I Am a Warrior: An Analysis of the Military Masculine-Warrior Narrative among U.S. Air Force Officer Candidates," *Armed Forces and Society* 47, no. 1 (2021), 26.

³ "Eric Shinseki," last modified November 28, accessed April 11, 2022, https://en.wikiquote.org/wiki/Eric_Shinseki.

garner support for the potentially drastic changes envisioned by the CA as part of Force 2025.⁴ Indeed, change is a reality of military service. The enduring characteristics of conflict, derived from Clausewitz and inculcated in CA doctrine, are “friction, uncertainty, ceaseless change, and violence.”⁵

The CA has adapted to many changes over the decades, such as the post-Cold War force reduction, the Somalia Affair reforms, and the imperatives of combating counter-insurgency tactics in Afghanistan. The CA must continue to change despite challenges it presents, and a fulsome understanding of the problems the CA faces are necessary to enable such change. This paper aims to expand the discussion on recent CA culture change initiatives which focuses on gender and inclusivity, to better contextualize such issues within the broader challenges of changing battlefield technologies, increasing battlefield complexity, and changing Canadian demographics and culture. Only once such issues are understood can one assess the impact such changes have on the development of soldiers for the CA.

As technology, global power dynamics, and Canadian demographics change, the demands upon the CA change. Despite these changing demands, war remains a human endeavour where fighting is waged due to a clash of ideologies, where humans make decision and operate the weapons, and where soldiers and civilians on the battlefield endure the violent effects of such fighting. As such, the soldiers in the CA remain its most critical capability. To meet battlefield challenges, soldiers still require the physical, emotional, intellectual, and moral toughness developed through demanding training. Such

⁴ LGen W. D. Eyre, *Force 2025 - Commander's Planning Guidance, 1901-1 (DLFD SI-2)* (Ottawa: Canadian Army Headquarters, 2020).

⁵ Canada, *B-GL-300-001/FP-001 Land Operations* (Ottawa: Department of National Defence, 2008), 2-17.

demanding training means exposing individuals to strife and stress in ways which replicate the horror of combat, and pushing them beyond their perceived limits. Creating a more diverse and inclusive force amplifies the need for military professionalism, for the indoctrination of soldiers into a common ethos, and subsequently the development of soldiers' ability to succeed on the battlefield.

This paper intends to build upon existing military professionalism research by focusing on how changes on the battlefield and changes amongst Canadian peoples impact our ability to develop soldiers. It does so through the lens of the CA which faces several current challenges, including lagging recruitment, poor retainment, cultural change, and operational challenges. There are three objectives to this research. First, the paper examines trends on the contemporary battlefield to understand how the demands upon soldiers and military professionalism are changing. Doing so exemplifies the necessity of military professionalism, provides additional understanding of the CA's informal warrior culture, and emphasises the need to provide soldiers with the ability to perform under high stress. Second, studies of changing demographics within Canadian society are examined in relation to the abilities soldiers require to thrive in combat and stress, and have positive moral and emotional outcomes. This shows a growing delta between potential recruits starting fitness and resilience, and that which is required of soldiers. Therefore, the CA must make deliberate investments in training and development for its soldiers.

Finally, this paper examines how extant notions of warrior culture can be adapted to make them more gender neutral and inclusive. The research indicates that one's biological sex does not determine one's capacity to perform as a soldier, that describing

army culture as masculine is due to social perception rather than military need, and that the hypermasculine criticisms of CA culture are valid whether they are branded with the term warrior or not. In light of growing global competition, changing societal expectations, and ongoing controversies, this research is both relevant and timely to how the CA is going to evolve over the next decade. Ultimately, it shows that the challenges the CA faces are broad and complicated, and that the CA must respect the tenets of military professionalism and understand its own culture and purpose as it adapts. A particularly useful way the CA can meet these challenges is the development of its own espoused ethos, unique to the land environment and army problem set, which unifies the army wide culture.

Military Professionalism: A Theoretical Approach

The requirement for trust between the Canadian Forces and the Canadian people, together with the complex environment of modern armed conflict, makes it imperative that all members of the country's military share a common understanding of the concept of military professionalism and how it applies to Canada and its citizens. Equally important, the success of the Canadian Forces in armed conflicts depends upon its members having a common understanding of the military ethos and embracing both a collective and individual identity as members of the Canadian profession of arms.⁶

The sociological theory of *military professionalism* underpins this analysis of developing soldiers. As the means by which the military manages violence in a disciplined and purposeful way, military professionalism is critical to how soldiers behave and act.⁷ Failure of such professionalism is exemplified by the indiscriminately

⁶ Canada, *Duty with Honour: The Profession of Arms in Canada* (Ottawa: Department of National Defence, 2009), 4.

⁷ Canada, *Duty with Honour: The Profession of Arms in Canada*, 31.; Canada, *CFJP 01 Canadian Military Doctrine* (Ottawa: Department of National Defence, 2011), Ch. 6 14.; John P. Kiszely, "The Relevance of History to the Military Profession: A British View," in *The Past as Prologue* Cambridge University Press, 2006), 27.; Samuel P. Huntington, *Soldier and the State: The Theory and Politics of Civil-Military Relations*, 1985th ed. (Cambridge: Harvard University Press, 1957), 11-12.; Andrea

violent atrocities committed by Russian soldiers in Ukraine.⁸ For this reason, military professionalism underpins all doctrine for soldiers' culture, training, and employment.⁹ It is a concept which sees militaries as a profession in the same way as others who serve society, such as doctors, lawyers, or educators. To be a profession, an organization must be governed by a code of ethics with guiding values, incorporate science and learning into a collective body of knowledge, and it must have a social contract with society which grants autonomy and self-regulation.¹⁰ The components of military professionalism are constructed from historical experiences, reflecting the unique role of defending society with violence.¹¹ Like any profession, the military profession is sanctioned with legitimate authority, regulated by a code of ethics, and maintains a professional culture.¹²

Western perceptions of military professionalism evolved with learned experience throughout history from the Roman Empire to the present day, with the famous writings of Clausewitz underpinning much of it.¹³ Critically, Clausewitz states that war is “a continuation of political intercourse, carried on with other means.”¹⁴ Meaning the actions of the military must be nested within the intentions of government. This is an important concept, and the problems which arising from deviating from it will be discussed.

Butler and Glen Budgell, *Study on Army Professionalism* (Ottawa: Human Resource Systems Group, Ltd., 2015), 21.

⁸ Andrew Exum, "The Russian Military has Descended into Inhumanity," *The Atlantic*, April 6, 2022.

⁹ Canada, *Duty with Honour: The Profession of Arms in Canada*, 4.; Canada, *CFJP 01 Canadian Military Doctrine*, Ch. 4 3-5.

¹⁰ Butler, *Study on Army Professionalism*, 9.

¹¹ Kiszely, "The Relevance of History to the Military Profession: A British View," 27.

¹² Sam C. Sarkesian, *Beyond the Battlefield: The New Military Professionalism* (Willowdale: Pergamon Press Canada, 1981), 8.

¹³ Suzanne C. Nielsen and Hugh Liebert, "The Continuing Relevance of Morris Janowitz's the Professional Soldier for the Education of Officers," *Armed Forces and Society* 47, no. 4 (2021), 734.; Clausewitz, *On War*, 87.

¹⁴ Clausewitz, *On War*, 87.

While such classical thinking notably influences contemporary military professionalism, the works of the late twentieth century most significantly feature in the Canadian Armed Forces (CAF) definition of professionalism, and therefore warrant examination. The three notable contributors, who are frequently recognized in the study of military professionalism, to be examined are Samuel P. Huntington, Sir John W. Hackett, and Morris Janowitz.¹⁵ While their perspectives focused primarily on the U.S. and Britain, military professionalism “is comparable across states, languages, and cultures,” and their work is significant within Canadian doctrine.¹⁶ To understand military professionalism in relation to the contemporary CA, the CAF doctrine and works of Krystal K. Hachey et al and Butler & Budgell are also be examined.¹⁷

Foundations of Military Professionalism

Huntington provides the simple conceptual basis for contemporary military professionalism. In his 1957 seminal work, *The Soldier and the State*, he separates defence policy into two levels: operational and institutional.¹⁸ The operational level policy he defines as elements developed against security threats, including the size,

¹⁵ Nielsen, "The Continuing Relevance of Morris Janowitz's the Professional Soldier for the Education of Officers," , 733.; Shahid Mumtaz Malik, "Professionalism in Military: Theoretical and Practical Approaches," *Journal of Defense Resources Management* 12, no. 2 (2021), 148.; Risa Brooks, "Beyond Huntington: US Military Professionalism Today," *Parameters (Carlisle, Pa.)* 51, no. 1 (2021), 66-67.; Hachey, *Rethinking Military Professionalism for the Changing Armed Forces*, 2. The work of Huntington and Janowitz appear universally in nearly all academic discussion of the subject of military professionalism since the 1970s. Hackett also appears frequently. All three provide the terminology and concepts used within CAF doctrine for professionalism.

¹⁶ Tamir Libel, Krystal Hachey and David Last, "Chapter 7 – Military Professionalism and Professional Military Education," in *Developing a Culture and Gender Inclusive Model of Military Professionalism* (Ottawa: NATO & DRDC, 2020), 7-1.

¹⁷ Hachey, *Rethinking Military Professionalism for the Changing Armed Forces*; Butler, *Study on Army Professionalism*; Canada, *Duty with Honour: The Profession of Arms in Canada* As will be examined, the CAF doctrine incorporates the work of Huntington, Hackett, and Janowitz. Hachey et al and Butler & Budgell review these foundations of CAF doctrine and conclude that, while more research is needed, the CAF's definitions of professionalism are acceptable and current problems lie with culture and failing to meet the espoused aims of professionalism.

¹⁸ Huntington, *Soldier and the State: The Theory and Politics of Civil-Military Relations*, 1-2.

composition, equipping, and utilization of a military. The institutional level policy he defines as “the manner in which operational policy is formulated and executed.”¹⁹ In other words, he is describing the relationship between a military and the government it serves. Huntington argued there is an institutional level tension between the imperatives of securing a society from threat and the imperatives of society’s social norms and ideologies. A military simply reflecting contemporary social norms will fail at fighting whilst one reflecting purely military imperatives will fail to serve the needs of the society. As he succinctly states, “the objective of (military) policy on the institutional level is to develop a system of civil-military relations which will maximize military security at the least sacrifice of other social values.”²⁰

Huntington’s thesis is that the officer corps’ professionalism is the key to this balance. Huntington’s concept of professionalism is composed of *expertise*, *responsibility*, and *corporateness*.²¹ Expertise is the specialized knowledge and skill acquired throughout a career by education and experience, which is intellectual in nature and is grown, shared, and preserved through research and publication.²² Professional military expertise is specifically the *management of violence*.²³ Such expertise justifies professional independence within society. Responsibility is the duty that falls from providing military service to society.²⁴ Given the imperatives to manage violence, selfish

¹⁹ Huntington, *Soldier and the State: The Theory and Politics of Civil-Military Relations*, 1.

²⁰ Huntington, *Soldier and the State: The Theory and Politics of Civil-Military Relations*, 2.

²¹ Huntington, *Soldier and the State: The Theory and Politics of Civil-Military Relations*, 8-10 & 85.

²² Huntington, *Soldier and the State: The Theory and Politics of Civil-Military Relations*, 8-9.

²³ Huntington, *Soldier and the State: The Theory and Politics of Civil-Military Relations*, 11-12.

²⁴ Huntington, *Soldier and the State: The Theory and Politics of Civil-Military Relations*, 9.

motives “would wreck the fabric of society.”²⁵ This concept of responsibility can be likened to *duty* and *honour* within the CAF Ethos.²⁶

Corporateness is the shared sense of unity or group consciousness within a profession, which inspires pride in work and high standards.²⁷ For military officers, the officer’s commission is the corporate symbol which grants individuals membership within the profession, and the authority to exercise its responsibilities.²⁸ This corporateness is important in that it must function effectively to ensure the officers within the profession are harmonized in values and beliefs, and preserve the trust of civilian government and people.

Huntington’s work contains problematic elements, however. He does not view soldiers as part of this military profession, making a distinction between a professional as a master of skill (appropriate for soldiers) and a professional as member of the trade or professional body (which he reserved for officers).²⁹ While this aligns with the political level analysis that civil-military relations he uses, Huntington is expressing the class divide between *blue-collar* soldiers who are not part of the profession and *white-collar* officers who are. This position is not supported by Huntington’s own research, given that soldiers, particularly non-commissioned officers, share in the management of violence, and all other components of his argument to some degree. However, Hackett presents a different view with a significant focus on the role of the soldier within the profession.³⁰

²⁵ Huntington, *Soldier and the State: The Theory and Politics of Civil-Military Relations*, 14.

²⁶ Canada, *Duty with Honour: The Profession of Arms in Canada*, 32-34.

²⁷ Huntington, *Soldier and the State: The Theory and Politics of Civil-Military Relations*, 10.

²⁸ Huntington, *Soldier and the State: The Theory and Politics of Civil-Military Relations*, 16-17.

²⁹ Huntington, *Soldier and the State: The Theory and Politics of Civil-Military Relations*, 8.

³⁰ Hackett, Lt. Gen. Sir John Winthrop, *Officer's Call: The Profession of Arms Lectures* (Cambridge: Trinity College, 1962), 5-7, 8-10, 13-15 & 35-41.

In a series of lectures published as *Officers' Call: The Profession of Arms*, Hackett provides the British perspective on military professionalism around the same era as Huntington, building upon his simplistic model. Hackett acknowledges that militaries, encompassing officers and soldiers, are a profession with their own body of knowledge and doctrine, cohesion, sub-component institutions, education, career structure, and distinct recognition within society.³¹ While Huntington indirectly addresses human factor considerations throughout his work,³² such factors are central to Hackett's discussion of professionalism.³³ This grounding of the military professional in human nature is echoed throughout history, from Clausewitz stating officers "must also take the human factor into account, and find room for courage, boldness, even foolhardiness. The art of war deals with living and with moral forces,"³⁴ to British Lieutenant-General Sir John P Kiszely who, in 2006, argued that his study of history aided his understand of soldiers' psychology during his own command:

The [study of history] applies to understanding the human dimension of warfare, the psychology of the soldier, sailor, and airman. In the absence of combat experience, how can you possibly understand this critical dimension of the military profession without studying military history? I found that on the battlefield I recognized in my company many of the characters I had met before in first-hand accounts about warfare, not only in the twentieth century but also in the accounts – all too rare accounts – of private soldiers of earlier times, such as Edward Costello in the Peninsula, Thomas Morris at Waterloo, and Rifleman Harris retreating from Corunna. Circumstances may have been different, but the psychology of participants on the battlefield remains much the same; learning, for example, how soldiers on other battlefields in other times viewed their officers is not without utility for the officer of today.³⁵

³¹ Hackett, Lt. Gen. Sir John Winthrop, *Officer's Call: The Profession of Arms Lectures*, 3.

³² Huntington, *Soldier and the State: The Theory and Politics of Civil-Military Relations*, 8, 11, 14-15, & 56.

³³ Hackett, Lt. Gen. Sir John Winthrop, *Officer's Call: The Profession of Arms Lectures*, 35-41.

³⁴ Clausewitz, *On War*, 86.

³⁵ Kiszely, "The Relevance of History to the Military Profession: A British View," 28.

Like Kiszely, Hackett appreciates the lessons of history and uses them to illustrate his arguments. His research traces the development of the profession from Sparta to the First World War. Roman legions, with a code of discipline, provided group cohesion and pride, allowing the initial emergence of professional corporate identity.³⁶ The transition from medieval feudal forces to organized militias eventually gave rise to permanent military forces which could preserve corporate experience from one campaign to another and better serve the needs of the nation.³⁷ Indeed, career full-time militaries themselves stabilized nation state identities between the 1600 to 1800s.³⁸ During the Prussia and Napoleonic periods, the logistical effects of modern technology (notably gun powder and muskets), together with challenges of motivating soldiers to go into battle,³⁹ illustrates the growing importance of professional expertise. Increasingly complex military technology demanded greater competence; further, growing national competitiveness, middle class populations, and the development of democracy, all solidified the needs for professional advancement to be based on merit, rather than birth.⁴⁰

From his perspective with a greater emphasis on the soldier in the profession, Hackett defines the necessity of a contract between a society and its soldiers. The contract he proposes is to accept that the burden society places upon soldiers is unique, and that killing as part of their duty will not preclude their citizenship.⁴¹ Despite the notable and important relationship between the military and state, how a soldier is viewed or understood by the society within which it serves is arguably more important. Hackett

³⁶ Hackett, Lt. Gen. Sir John Winthrop, *Officer's Call: The Profession of Arms Lectures*, 5-6.

³⁷ Hackett, Lt. Gen. Sir John Winthrop, *Officer's Call: The Profession of Arms Lectures*, 11-12.

³⁸ Hackett, Lt. Gen. Sir John Winthrop, *Officer's Call: The Profession of Arms Lectures*, 14-15.

³⁹ Hackett, Lt. Gen. Sir John Winthrop, *Officer's Call: The Profession of Arms Lectures*, 17-21.

⁴⁰ Hackett, Lt. Gen. Sir John Winthrop, *Officer's Call: The Profession of Arms Lectures*, 26.

⁴¹ Hackett, Lt. Gen. Sir John Winthrop, *Officer's Call: The Profession of Arms Lectures*, 40.

coined the term *unlimited liability* to describe this contract between soldiers and society,⁴² and it gained popularity with his book *The Profession of Arms* in 1983.⁴³ The CAF adopted the use of unlimited liability, but evolved the definition to the understanding “that (soldiers) are subject to being lawfully ordered into harm’s way under conditions that could lead to the loss of their lives,” and that as professionals they must heed the priorities of mission, troops, and then self.⁴⁴ It still embodies a contract between Canadian society and soldiers, but with greater emphasis on sacrifice.

From the works of Huntington and Hackett, the foundation of military professionalism is defined by responsibility, expertise, corporateness, and unlimited liability. However, another problematic aspect of Huntington’s analysis remains. He advocates for separation of military matters between politicians and the officer corps, with the military monopolizing all matters of defence.⁴⁵ Hackett briefly expresses a concern for this perspective, arguing the military influence on the Spartan state incited unnecessary conflict.⁴⁶ This concern is echoed by Colonel Suzanne Nielsen, professor of political science at West Point. She contends that Huntington’s concept of civil-military relations was overly influential in the U.S., which resulted in the U.S. defence policy being overly focused on military solutions to issues which warrant political ones.⁴⁷

⁴² Hackett, Lt. Gen. Sir John Winthrop, *Officer's Call: The Profession of Arms Lectures*, 38-39.

⁴³ Patrick Mileham, "Unlimited Liability and the Military Covenant," *Journal of Military Ethics* 9, no. 1 (2010), 24.; Hackett, Lt. Gen. Sir John Winthrop, *Officer's Call: The Profession of Arms Lectures*, 40.; Malik, "Professionalism in Military: Theoretical and Practical Approaches," 148.

⁴⁴ Canada, *Duty with Honour: The Profession of Arms in Canada*, 27.

⁴⁵ Huntington, *Soldier and the State: The Theory and Politics of Civil-Military Relations*, 9, 10, 17, 34-35, 48-49, & 56.

⁴⁶ Hackett, Lt. Gen. Sir John Winthrop, *Officer's Call: The Profession of Arms Lectures*, 4.

⁴⁷ Nielsen, "The Continuing Relevance of Morris Janowitz’s the Professional Soldier for the Education of Officers," 736-739.

Nielsen argues Janowitz's theories strike a more appropriate balance regarding the civil-military relationship.⁴⁸

Janowitz does not propose a different framework than Huntington, but rather discusses the same subjects with more sophisticated perspectives. In his book *The Professional Soldier: A Social and Political Portrait*, he describes the unfavourable and unfairly stereotypical view of soldiers and officers at the time.⁴⁹ Like Huntington, Janowitz affirms the importance of expertise, responsibility, and corporateness, however he criticizes Huntington's definitions.⁵⁰ In particular, Janowitz argues Huntington's definition of responsibility overemphasises duty and observes that military leaders must have the capacity to refuse illegal and immoral orders. Janowitz's thesis is that the military profession in the U.S. was facing a crisis of poor public image, and must adapt to cultural, technological, and political changes.⁵¹

Janowitz's research focuses on five hypotheses addressing the professional response to this crisis.⁵² Janowitz's first hypothesis is that there was a "changing organizational authority" within the military.⁵³ He describes this as a move away from reliance solely on authoritative hierarchical structures toward persuasive leadership, which better matches contemporary social expectations, better motivates soldiers, and creates greater organizational flexibility in adapting to social and political changes. Janowitz also highlights the importance of education in developing this flexibility.⁵⁴ This

⁴⁸ Nielsen, "The Continuing Relevance of Morris Janowitz's the Professional Soldier for the Education of Officers," 733.

⁴⁹ Morris Janowitz, *The Professional Soldier: A Social and Political Portrait*, July 2017 ed. (New York: Free Press, 1960), 1-5.

⁵⁰ Janowitz, *The Professional Soldier: A Social and Political Portrait*, 5-6.

⁵¹ Janowitz, *The Professional Soldier: A Social and Political Portrait*, 3-5.

⁵² Janowitz, *The Professional Soldier: A Social and Political Portrait*, 8.

⁵³ Janowitz, *The Professional Soldier: A Social and Political Portrait*, 8.

⁵⁴ Janowitz, *The Professional Soldier: A Social and Political Portrait*, 160 & 381.

contrasts with Huntington's view of the separation between military professional and political concerns. Janowitz's concept of leadership by persuasion vice authority forms the basis of CAF leadership doctrine in the form of influence behaviours and transformational leadership.⁵⁵

Janowitz's second hypothesis builds upon Hackett's call for higher education standards and a greater need for management skills.⁵⁶ Janowitz argues there is a "narrowing skill differential between military and civilian elites."⁵⁷ Increasing technical demands required military professionals develop greater technological competence and social aptitude in order to justify these systems to the public. He sees this as emphasising the need for military leaders to be capable of integrating and managing such technologies.⁵⁸ This is increasingly relevant to military professionalism today, with the continued pace of technological advancement.

Janowitz's third hypothesis is that there was a "shift in officer recruitment," from traditional familial origins to career-oriented motivations.⁵⁹ Such careerist officers might not have the inherent sense of martial duty derived from their familial backgrounds, and therefore military service must build this sense within the profession itself. A group identity, or a common sense of professionalism amongst officers, would inspire

⁵⁵ Canada. Department of National Defence, *A-PA-005-000/AP-004, Leadership in the Canadian Forces: Conceptual Foundations* (Kingston: Canadian Defence Academy, 2005), 64-65. Janowitz argued the draconian stereotype of military leaders issuing blind orders is not acceptable for soldiers born of contemporary western society, where there was a cultural shift toward more egalitarian leadership. CAF doctrine describes the same situation, indicating the spectrum of influence behaviours from authoritarian to laissez-faire and what approaches are acceptable and appropriate to motivate soldiers, and the importance of persuasion and group consensus similar to that described by Janowitz.

⁵⁶ Hackett, Lt. Gen. Sir John Winthrop, *Officer's Call: The Profession of Arms Lectures*, 38-39.

⁵⁷ Janowitz, *The Professional Soldier: A Social and Political Portrait*, 9.

⁵⁸ Janowitz, *The Professional Soldier: A Social and Political Portrait*, 21-22.

⁵⁹ Janowitz, *The Professional Soldier: A Social and Political Portrait*, 10.

cohesion.⁶⁰ Janowitz's fourth hypothesis is that career patterns were significant to the development of general officers: where *routine* career paths favoured the technical requirements of the profession, whereas *unconventional* career paths favoured the development of the creativity, judgement, and political skills necessary for senior military leadership.⁶¹ Though, he cautions that such unconventional career paths must not deviate too far, otherwise such officers risk being disconnected from the profession.

Janowitz's final hypothesis is that there were trends toward the political indoctrination of officers.⁶² He describes this as motivating officers to consider themselves less as narrow military technicians, and more as members of a broad profession, *generalists*, who understand the political implications of their decisions and actions. This relates Janowitz's idea of the importance of self-administration, standards, a code of ethics, and a code of military honour which both motivates and guides behaviour.⁶³ Hackett supports Janowitz's concept of political indoctrination of officers by highlighting that the binary definitions of war and peace do not serve the complex needs of government in global competition, and proposes a more gradual scale is necessary to resolve minor conflicts and prevent escalation to total war.⁶⁴ This is reflected in part in the CA doctrine of the continuum of operations,⁶⁵ but is increasingly relevant with rising global competition and technological advancement.

⁶⁰ Janowitz, *The Professional Soldier: A Social and Political Portrait*, 6.

⁶¹ Janowitz, *The Professional Soldier: A Social and Political Portrait*, 11.

⁶² Janowitz, *The Professional Soldier: A Social and Political Portrait*, 12.

⁶³ Janowitz, *The Professional Soldier: A Social and Political Portrait*, 6 & 215-225.

⁶⁴ Hackett, Lt. Gen. Sir John Winthrop, *Officer's Call: The Profession of Arms Lectures*, 35-36.

⁶⁵ Canada, *B-GL-300-001/FP-001 Land Operations* (Ottawa: Department of National Defence, 2008b), Ch. 3 8-11. The continuum of operations is a concept which describes the types of concurrent or sequential operations that may be necessary to address a variety of security efforts. The spectrum of conflict is a key component of it and describes the types of conflict that may be present in a given mission along a scale, from relatively peaceful to high intensity combat with a "great deal of violence."

Janowitz enhances the modern understanding of military professionalism from Huntington's simplistic model to a more politically, socially, and technologically comprehensive model. He is clear that the profession must be nested within a civil-military relationship where the military cooperates and shares power over security matters with government.⁶⁶ He recognizes that social and cultural changes in society impact the culture of soldiers and how the military is expected to behave and conduct itself. This responsiveness to political and social demands is particularly relevant, given Canada's evolving society and recent criticism of the CAF sexual misconduct scandals which question the professionalism of the military.⁶⁷

The CAF founds its doctrine upon the idea of *military professionalism*, encapsulated in the *Canadian Force Joint Publication (CFJP) 01, Canadian Military Doctrine* and elaborated upon with *Duty with Honour: The Profession of Arms in Canada* (2009).⁶⁸ *Duty with Honour* defines Canada's military professionalism, which incorporates the aforementioned concepts of Huntington, Hackett, and Janowitz.⁶⁹ It utilizes Huntington's concepts of *responsibility* and *expertise*.⁷⁰ It preserves much of Huntington's definitions of these terms, though responsibility mirrors Janowitz's more socially and politically attuned perspective. It emphasises the duty to defend Canada, the maintenance of professional standards, and accountability for actions and behaviours.⁷¹ Additionally, *Duty with Honour* includes *identity* within the definition of

⁶⁶ Janowitz, *The Professional Soldier: A Social and Political Portrait*, vii-ix.

⁶⁷ Callaghan, "Missing the Point: A Critical Reflection on Operation HONOUR and Reactions to Military Sexual Misconduct by Veterans of the Canadian Armed Forces," 78.; Wood, "Gender, Self-Efficacy, and Warrior Identification in Canadian Army Personnel," 747-756.

⁶⁸ Canada, *CFJP 01 Canadian Military Doctrine*, Ch. 4 1-5.; Canada, *Duty with Honour: The Profession of Arms in Canada*

⁶⁹ Canada, *Duty with Honour: The Profession of Arms in Canada*, 82-84.

⁷⁰ Canada, *Duty with Honour: The Profession of Arms in Canada*, 14-19.

⁷¹ Canada, *Duty with Honour: The Profession of Arms in Canada*, 14-16.

professionalism, for which it combines Huntington's corporateness, Hackett's group cohesion, and Janowitz's group identity.⁷² *Duty with Honour* also includes *military ethos* within professionalism, which incorporates Janowitz's codes of ethics and honour and Hackett's concept of *unlimited liability* (self-sacrifice).⁷³ It defines this military ethos as the guiding values and beliefs, including fighting spirit, which bond all soldiers and officers together, and afford the CAF legitimacy in the eyes of the government of Canada and Canadians. All aspects of *Duty with Honour* incorporate both soldiers and officers within the profession. The CAF's definition of military professionalism is critical to soldiers' culture and duties, given that its fundamental purpose "is the ordered, lawful application of military force pursuant to governmental direction."⁷⁴

However, is the CAF's current definition of military professionalism, as described by *Duty with Honour*, suitable to guide soldiers into the future? The CAF is currently redefining military professionalism to explicitly address concerns of gender inclusiveness within a new draft of its ethos, provisionally titled *Trusted to Serve*.⁷⁵ Though within the 2021 draft, little has changed beyond replacing duty and honour with trust and service. Therefore, new perspectives on military professionalism are warranted.

To examine the relevance of our current understanding of military professionalism, the Director General Military Personnel Research and Analysis (DGMPPRA) commissioned two reports. Hachey et al developed a comprehensive report titled *Rethinking Military Professionalism in the Changing Armed Forces*, where they claim military professionalism is challenged by "aspects of gender and diversity, such as

⁷² Canada, *Duty with Honour: The Profession of Arms in Canada*, 20-21.

⁷³ Canada, *Duty with Honour: The Profession of Arms in Canada*, 20-21.

⁷⁴ Canada, *Duty with Honour: The Profession of Arms in Canada*, 4.

⁷⁵ Canada, *Draft: The CAF Ethos - Trusted to Serve* (Ottawa: Department of National Defence, 2021).

the underlying socio-cultural aspects of the dominant male-oriented warrior framework, cross-cultural applications, civil-military and international relations.”⁷⁶ Hachey et al argue that military professionalism in Canada is strained by military’s expansion into new domains, notably participation in the emerging threat in cyberspace and in military professionalism’s misalignment with changing social perceptions toward gender.⁷⁷ However, referencing the evolution of military professionalism with the ideas of Huntington, Hackett, Janowitz, and others, Hachey et al argue that gender discrimination is more a matter of unprofessionalism (not abiding by the espoused tenets of professionalism) rather than a problem with the concepts embodied in the CAF definition of military professionalism.⁷⁸

Butler and Budgell completed a report titled *Study on Army Professionalism* on behalf of DGMPPRA. While this report views professionalism from an army specific perspective, describing army professionalism as the body of “esoteric knowledge and related practical professional skills of land warfare,”⁷⁹ it is essentially a review of the concepts presented by Huntington and Janowitz, and those found within Canadian doctrine.⁸⁰ However, an important aspect addressed by Butler and Budgell is discussion of how to assess whether the army is achieving its espoused professionalism. For this, they propose that the army’s culture should be observed, and cognitive and behaviour

⁷⁶ Hachey, *Rethinking Military Professionalism for the Changing Armed Forces*, 1.

⁷⁷ Hachey, *Rethinking Military Professionalism for the Changing Armed Forces*, v & 3.

⁷⁸ Hachey, *Rethinking Military Professionalism for the Changing Armed Forces*, 2-5 & 192-199. Additionally, Hachey et al addresses the impacts of technology on military professionalism (pages v, 68-69, 132, 149, 201-208, & 219), particularly the cyber domain and artificial intelligence (AI). They argue that such technologies are unlikely to eliminate the fog of war, and that the military’s use of them could complicate the civil-military relationship. Particularly in regards to the CAF participation in the cyber domain. This highlights the need to examine such impacts, as discussed further in Chapter 2, The Implications of Hybrid Warfare and Grey-Zone Conflict.

⁷⁹ Butler, *Study on Army Professionalism*, 10 & 31.

⁸⁰ Butler, *Study on Army Professionalism*, 21-24.

observations then compared to the components of the CAF definition of professionalism.⁸¹ This emphasises the importance of examining the army's culture to understand how soldiers embody the profession.

Army Culture: A Warrior Controversy

The CA possesses a specific approach to military professionalism developed from its collective history, contemporary experiences, function as the fighting force within the land domain, and CA and CAF doctrine. The CA's *warrior* culture embodies this approach, forming a bridge between the theoretical understandings of military professionalism as outline in doctrine and a soldier's lived experiences within the army. Shein & Shein define *culture* as the accumulated shared learning of a group as it problem solves, adapts, and integrates new people and ideas, which influences how people "perceive, think, feel, and behave."⁸² They describe culture as containing three levels: *artifacts*, including visible structures and observable behaviour; *espoused beliefs and values*; and, *basic underlying assumptions*, which are the "unconscious, taken-for-granted beliefs and values." Dandeker and others describe such artifacts and espoused beliefs and values as the *formal* components of culture, and the basic underlying assumptions as the *informal* component of culture.⁸³

The artifacts of the CA include its bases (with monuments, fitness facilities, obstacle courses, military equipment, unit flags, and so on), regimental histories, uniforms, drill, and outward professional conduct such as saluting, allowing civilians

⁸¹ Butler, *Study on Army Professionalism*, 34-46.

⁸² Peter A. Schein and Edgar H. Schein, *Organizational Culture and Leadership*, 5th; 5 ed. (New York: Wiley, 2017), 6.

⁸³ Christopher Dandeker and James Gow, "Military Culture and Strategic Peacekeeping," *Small Wars & Insurgencies* 10, no. 2 (1999), 59-60.
<https://www.tandfonline.com/doi/abs/10.1080/09592319908423241?journalCode=fswi20>.

right-of-way, or maintaining a military bearing (an upright posture presenting confidence). The CA's espoused beliefs and values are derived largely from those of the CAF, espoused within *Duty of Honour*, including unlimited liability, fighting spirit (initiative and perseverance), discipline, duty (pride and selflessness), loyalty, integrity, and courage (moral and physical).⁸⁴ The CA's culture is also influenced by espoused beliefs from its many publications on doctrine and tactics, such as the ten principles of war outlined in *Land Operations*,⁸⁵ or aggressiveness and a manoeuvre mindset called for in trade publications such as *Armoured Regiment in Battle*.⁸⁶

The CA's basic underlying assumptions, or informal culture, are of particular significance. This element of its culture is promulgated from experienced soldiers to new ones, whilst gradually incorporating cultural elements brought by new members. It incorporates unwritten lessons from soldiers' experiences and from allies' influences, especially the U.S. military. An example is the U.S. Army's Warrior Ethos, which is a single sentence mantra, incorporated throughout their training, day to day work, and operations: "I will always place the mission first, I will never accept defeat, I will never quit, and I will never leave a fallen comrade."⁸⁷ This is analogous with components of the CAF Ethos: unlimited liability, fighting spirit, and teamwork.⁸⁸ It also infers that soldiers should not view themselves as victims, rather as selfless volunteers filled with pride. Soldiers are also exposed to the term warrior in military writings and popular culture, for example Gabriel's *The Warrior's Way: A Treatise on Military Ethics, Duty with*

⁸⁴ Canada, *Duty with Honour: The Profession of Arms in Canada*, 27-34.

⁸⁵ Canada, *B-GL-300-001/FP-001 Land Operations*, Ch. 3 5-8.

⁸⁶ Canada, *B-GL-305-001/FT-001 the Armoured Regiment in Battle* (Ottawa: Department of National Defence, 1990), 21-23.

⁸⁷ G-1 Army, *Warrior Ethos* (Virginia: United States Army, 2011).

⁸⁸ Canada, *Duty with Honour: The Profession of Arms in Canada*, 28-29.

Honour's description of *warrior's* honour, or the popular veteran's charitable organization named *Wounded Warriors*.⁸⁹ Such influences contribute to the informal CA cultural practice to employ the term warrior, particularly amongst CA soldiers during the conduct of their duties.

However, use of the term warrior can be problematic. Hachey et al, Callaghan, Wood, and Do deconstruct these ideas of warrior-ness when analysing gender exclusivity.⁹⁰ Kovitz cautions that as long as “the ‘combat-warrior’ remains ideologically conflated with masculinity, and femininity with its antithesis, there will likely be continued resistance to women soldiers.”⁹¹ St. Denis criticizes the use of the term *warrior* by the CA due to its historical connotation with more barbaric fighters of past eras.⁹² However, not all these commentators believe the term must be abandoned. Hachey et al state that “military professionalism and the idea of a ‘warrior spirit’ were shaken in the last five years by an attempt to change the CAF’s organizational culture to be more reflective of Canadian society, with a particular emphasis on gender integration.”⁹³ Yet, Hachey et al argue that this warrior culture can evolve to become more inclusive and adapt to future challenges, and does not call for an end to its use. Indeed, Hachey et al state that “obviously, the military has to pursue a mixture of role models that combine

⁸⁹ Richard A. Gabriel, *The Warrior's Way: A Treatise on Military Ethics* (Winnipeg: Canadian Defence Academy Press, 2007), 1.; Canada, *Duty with Honour: The Profession of Arms in Canada*, 34.; "Wounded Warriors Canada," accessed April 11, 2022, <https://woundedwarriors.ca/>.

⁹⁰ Hachey, *Rethinking Military Professionalism for the Changing Armed Forces*, 1-2, 5, 149-160, 189-195 & 229.; Callaghan, "Missing the Point: A Critical Reflection on Operation HONOUR and Reactions to Military Sexual Misconduct by Veterans of the Canadian Armed Forces," 78.; Wood, "Gender, Self-Efficacy, and Warrior Identification in Canadian Army Personnel," 747-756.; Do, "I Am a Warrior: An Analysis of the Military Masculine-Warrior Narrative among U.S. Air Force Officer Candidates," 26.

⁹¹ Marcia Kovitz, "Sexual (Mis)Conduct in the Canadian Forces," *Critical Military Studies* 7, no. 1 (2021), 94.

⁹² Thomas St Denis, "The Dangerous Appeal of the Warrior," *Canadian Military Journal (Ottawa)* 2, no. 2 (2001), 37. <https://go.exlibris.link/smMRJQwt>.

⁹³ Hachey, *Rethinking Military Professionalism for the Changing Armed Forces*, 189.

traditional warrior's skills with the skills of soldier diplomat, statesmen, mediator, etc."⁹⁴ Likewise, Wood does not identify a problem with the use of the warrior, but instead only points out that servicewomen do not currently associate as strongly with the term warrior.⁹⁵ This provides for an opportunity to reimagine warrior with the positive army cultural components, but without the engendered connotations.

Despite the hypermasculine image that warrior may invoke, it is a common term both within the CA and amongst academics for describing the army's culture. It also connects to Canada's history beyond the army, as the term also has origins in the cultures of North American First Nations.⁹⁶ Warrior is associated with "individual toughness, egalitarian group cohesion, and personal rather than class leadership - all combined with a mastery of technology."⁹⁷ It also invokes a collective war fighter identity, which has been shown to have a positive effect on military competence and skill.⁹⁸ It is for these reasons that this paper uses the term warrior to refer to the CA culture of soldiers ready to fight in war, while acknowledging the current gender criticism of warrior which are examined further in chapter 3.

Conclusion: From the Profession to the Battlefield and the Soldier

Military professionalism has developed gradually throughout history, and the CA's theoretical basis as a profession is founded upon the simplistic structure of *responsibility*, *expertise* (including the management of violence), and *corporateness* that Huntington espoused, as well as on the concept of *unlimited liability* that Hackett

⁹⁴ Hachey, *Rethinking Military Professionalism for the Changing Armed Forces*, 42.

⁹⁵ Wood, "Gender, Self-Efficacy, and Warrior Identification in Canadian Army Personnel," 752.

⁹⁶ St Denis, "The Dangerous Appeal of the Warrior," 32-34

⁹⁷ St Denis, "The Dangerous Appeal of the Warrior," 35.

⁹⁸ Rino Bandlitz Johansen, Jon Christian Laberg and Monica Martinussen, "Military Identity as Predictor of Perceived Military Competence and Skills," *Armed Forces and Society* 40, no. 3 (2014), 537.

contributed. The nuanced influence of Janowitz progress the definition of military professionalism to better address the need for flexibility, technical competence, humanistic leadership, and motivation, as well as signify the importance of the code of ethics and honour, the soldiers' participation in the profession, and the military's role in relation to politics and society. The CAF doctrine consolidates the sociological body of knowledge of military professionalism into the unique Canadian military definition, utilizing responsibility, expertise, identity, and military ethos as its base concepts. This doctrine includes *CFJP 01 Military Doctrine, Duty with Honour*, and the yet to be completed replacement ethos dubbed *Trusted to Serve*. Hachey et al and Butler and Budgell reaffirming the relevance of the aforementioned theories and examining the role played by Canadian cultural change and gender perspectives in our understanding of the profession. In particular, they point to the role of culture in bridging the espoused profession and the lives of soldiers.

The CA culture is comprised of both formal and informal elements. Military professionalism is an important component of the CA's formal (espoused) culture, along with the remainder of its doctrine, policies, and orders. The CA's informal culture is also influenced by military professionalism, as well as history, experience, popular culture, allied influences, and Canadian society. The combined CA culture is a representation of the soldiers within the army and what they do. The CA has faced criticism that its warrior culture is hyper-masculinized and exclusive. While the term warrior is often the focal point, the masculine criticism rests with the CA's culture, whether it is called warrior or not. Warrior as a name encompasses many of the positive components of the CA culture,

born of necessity, and is relatable in a positive way to many. The CA's warrior culture is a critical way in which the army shapes the values, beliefs, and behaviours of soldiers.

If military professionalism and the army's warrior culture are a formula for creating soldiers, then soldiers' resilience and performance are the solution, or outcome. The variables that must be accounted for within this formula are the characteristics of the battlefield and Canadian society's demographics and culture. If these additional variables negatively influence the production of tough soldiers who perform to a high standard, then the formula's existing components of military professionalism and army culture must be reassessed. For this reason, the following chapters will examine the battlefield (including which factors are relevant to the profession, warrior culture, and soldier development) and the soldier (specifically which Canadian demographic and cultural changes impact their development). Doing so shows that the current construct of military professionalism remains relevant, though the CA must continue to adapt its culture and develop soldiers' abilities.

CHAPTER 2 – THE BATTLEFIELD

Introduction

Military professionalism is the foundation of military culture and built upon experiences throughout history, as discussed in the previous chapter. While many tenets of military professionalism have proven enduring throughout centuries of conflict and technological change, the contemporary battlefield warrants examination to understand which elements are still critical and why. The CA must anticipate and prepare for unique and diverse challenges in a constantly changing geo-political landscape. This chapter aims to provide the basic understanding of the challenges soldiers face as context, prior to exploring the pressures upon creating soldiers in chapter three, and to understand how the CA's present and future missions may complicate aspects of military professionalism.

When constructing an army, there are many questions to answer. What challenges do contemporary soldiers face, and will these change in the foreseeable horizon? What is the difference between *conflict* and *war*, and when is it necessary to employ a uniformed military? As state-on-state conflict is ever-present, particularly in the realms of information and technology, where do the Canadian Army (CA) and Canadian Armed Forces (CAF) fit within the Government of Canada's (GoC) fight in the *grey-zone*? Where does the CAF's role in conflict begin and end, and how does this influence our resource allocation and training? Understanding these aspects of the battlefield inform the CA's development of soldiers' culture and abilities. For this paper, battlefield is synonymous with battlespace, and refers to the domains within which the CA operates once mandated to do so by government.

To address these questions, this chapter is structured in four parts. First, an examination of the mandate within which the CA trains, prepares, and deploys. This is necessary to understand what sorts of battlefields soldiers may find themselves operating or fighting upon. Second, the complex modern battlefield is examined. As a continuation of the CA's mandate, this enables one to understand some of the key aspects of the types of potential missions, to understand the motives within the CA's warrior culture and the challenges necessitating the development of soldiers' abilities. Third, this chapter examines the implications of hybrid warfare and grey-zone conflict from the CA perspective to the implications of these concepts on military professionalism and how they may change what is demanded of soldiers. Finally, perspectives on what the future battlefield may entail are examined. This look forward informs what the CA might expect to face, and in turn how it may need to prepare soldiers now to be ready.

Examination of these battlefield perspectives informs understanding of warrior culture and the demands determining the abilities soldiers require. This research also reinforces many of the accepted components of military professionalism, including Janowitz' theories that soldiers and officers must be responsive to social and political factors, and be competent at managing a highly technical force. It highlights the continued need for the army's warrior culture, which prioritizes the competencies necessary to fight and emphasises a code of honour and ethics to guide conduct in complex human security situations. Additionally, this research shows the breadth and complexity of abilities soldiers must possess for success in future conflict. Finally, the research reinforces the view that a monopoly on cyber security is problematic for the

military profession, but that the CA will require the technical capabilities to operate in the cyber domain within the context of hybrid warfare.

The Role of the Canadian Army

The National Defence Act (NDA) establishes the Department of National Defence (DND) and within it the CAF as Canada's military.⁹⁹ It takes for granted the Nation's need for a military and provides little guidance for the military's employment beyond defining *active service* as the status of employing the military. This includes potential use in a national emergency or in relation to the United Nations (UN), the North Atlantic Treaty Organization (NATO), or North American Aerospace Defence (NORAD), as well as operations relating to aid of the civil power.¹⁰⁰ More detailed guidance relating to the expected role of the CAF is found in the Government's defence policy documents, the latest of which is titled *Strong, Secure, Engaged* (SSE).¹⁰¹ Published in 2017, this report recognizes the scale and complexity of the modern battlespace and the many challenges faced by the CAF. Notably these include rapid advancements in technology, terrorism, and the emerging prominence of the cyber domain. This report requires that the CAF defend sovereignty and assist in domestic emergencies, work with the United States for the defence of North America and participate in operations abroad for "a more stable, peaceful world."¹⁰²

⁹⁹ Canada, *National Defence Act, R.S.C., 1985, C. N-5* (Ottawa: Minister of Justice, Government of Canada, 2019b), 7-12.

¹⁰⁰ Canada, *National Defence Act, R.S.C., 1985, C. N-5*, 27-28 & 253-256.

¹⁰¹ Canada, *Strong, Secure, Engaged. Canada's Defence Policy* (Ottawa: Government of Canada, 2017b), 1-113.

¹⁰² Canada, *Strong, Secure, Engaged. Canada's Defence Policy*, 14.

The CA's role is nested within that of the CAF, generating and commanding land forces to execute all types of CAF missions outlined above.¹⁰³ The CA places a particular emphasis on being ready to fight, given its role as the land component of the Canadian military monopoly on violence, pointing out that amongst the potential missions "chief among these is the ability to conduct combat operations."¹⁰⁴ Specifically, the CA's role "is to generate and maintain combat capable, multi-purpose land forces to meet Canada's defence objectives."¹⁰⁵ To do so, the CA maintains a mixture of combat (infantry, armour, and direct fire), combat support (reconnaissance, combat engineer, electronic warfare, and aviation), combat service support (sustainment, including tactical), and command support (communications and intelligence) units which are capable of operating together as combined arms.¹⁰⁶ A diversity of trades exist within each and are necessary to fight or conduct operation effectively, and all are considered soldiers.

The land domain, or environment, within which the CA must operate, includes the physical environment (terrain and infrastructure/buildings), local populace (within the battlespace and necessitating concerns human security), adversary threats (including conventional enemy forces and irregular threats from criminals to insurgents), environmental threat (weather, disease, unexploded ordinance, and so on), and multiple agencies and forces (joint forces, allied and partnered forces, other governmental agencies, and charitable organizations).¹⁰⁷ Additionally, the land environment is intrinsically linked to all other domains of warfare, just as are the air and maritime

¹⁰³ Canada, *CFJP 01 Canadian Military Doctrine* (Ottawa: Department of National Defence, 2011), 5-10.

¹⁰⁴ Canada, *B-GL-300-001/FP-001 Land Operations*, 1-4.

¹⁰⁵ Canada, *B-GL-300-001/FP-001 Land Operations*, 1-3.

¹⁰⁶ Canada, *B-GL-300-001/FP-001 Land Operations*, 1-4.

¹⁰⁷ Canada, *B-GL-300-001/FP-001 Land Operations*, 2-2 & 2-3.

environments.¹⁰⁸ These include the “maritime, air, and space, the cyber domain, and the information domain.”¹⁰⁹ The persistent reality of combat was described by Clausewitz over two hundred years ago and is reflected in current CA doctrine with the enduring characteristics of land combat, including “friction, uncertainty, ceaseless change, and violence.”¹¹⁰

Therefore, the CA must be prepared to complete a variety of missions from peaceful domestic assistance during disaster relief or international peace support operations, to the contribution of combat forces to fight a high intensity war. Within all the potential mission sets, the CA doctrine reflects the difficulty, complexity, and interconnectedness (with other domains and stakeholders) of its role. It is for these reasons the CA warrior culture places a premium upon fighting spirit, being flexible and adaptable, and group cohesion and teamwork. The CA mandate also indicates that respects the military profession’s necessity to be subordinate and responsive to political needs.

The Complex Modern Battlefield

The battlefield has always presented soldiers with incredible challenges, and highlights the necessity of both military professionalism and warrior spirit. As Clausewitz notes, “war is the realm of uncertainty; three quarters of the factors on which action in war is based are wrapped in a fog of greater or lesser uncertainty.”¹¹¹ Improved sensors, such as drones, space-based systems, electronic-detection systems, and cyber based

¹⁰⁸ Canada, *Pan-Domain Force Employment Concept* (Ottawa: Minister of National Defence, 2020), 17.; Canada, *B-GL-300-001/FP-001 Land Operations*, 2-14.

¹⁰⁹ Canada, *Pan-Domain Force Employment Concept*, 41.

¹¹⁰ Canada, *B-GL-300-001/FP-001 Land Operations*, 2-17.

¹¹¹ Clausewitz, *On War*, 101.

surveillance, have not proven a panacea for the fog of war.¹¹² The contemporary battlefield is still consists of the same enduring characteristics, but with ever increasing complexity and tempo.

On the modern battlefield, soldiers often engage one another at greater distances with extended ranges of conventional and rocket artillery, precision guided munitions, armed drones, improved sensors, powerful and well armoured fighting vehicles, and improved small arms to name a few. Additionally, the modern battlefield is characterized by increasing joint interdependency, where land power (the CA) on its own is irrelevant and must collaborate effectively with air, sea, space, cyberspace, and national power.¹¹³ Such collaboration is not trivial, and requires integration at the strategic, operational, and tactical levels. The tactical level integration is particularly relevant to the development of soldiers. Soldiers must operate complex communication and battlespace management technologies, while operating their own weapon systems, interacting with their environment, and facing adversarial threat. Additionally, potential adversaries such as China and Russia possess similar military technologies, and are investing in further development and modernization, including in technologies to speed actions on the battlefield.¹¹⁴ As a result, soldiers face increased tempo (speed of actions and events) on the battlefield, necessitating the ability to rapidly assess, decide, and act (commonly referred to as tactical acumen).

¹¹² Sean M. Elward, *The Fog of War: A Necessary Component of Modern Warfare* (Newport: Defense Technical Information Center, 2010), 13.

¹¹³ William T. Johnsen, "Land Power in the Age of Joint Interdependence: Toward a Theory of Land Power for the Twenty-First Century," *Defense and Security Analysis* 35, no. 3 (2019), 225.

¹¹⁴ Chris C. Demchak, "China: Determined to Dominate Cyberspace and AI," *Bulletin of the Atomic Scientists* 75, no. 3 (2019), 102.; Adam P. Liff and G. John Ikenberry, "Racing Toward Tragedy? China's Rise, Military Competition in the Asia Pacific, and the Security Dilemma," *International Security* 39, no. 2 (2014), 52-55.; Johnsen, "Land Power in the Age of Joint Interdependence: Toward a Theory of Land Power for the Twenty-First Century," 229.

While some combatants, such as drone operators, may be thousands of kilometers away from the combat, the advancements in technology have not removed the human factor.¹¹⁵ In conflict, both sides see up close the results of such weapons with their own wounded soldiers and destroyed equipment, and killed and maimed civilians. Canadian examples throughout recent decades are explored which illustrate that this human component of war is still paramount.

In the former Yugoslavia, Canadian soldiers deployed as peacekeepers witnessed horrific atrocities with the ethnic cleansing of Croats.¹¹⁶ In Rwanda, Lieutenant-General (retired) Romeo Dallaire and his contingent of peacekeepers witnessed horrific genocide.¹¹⁷ An entire generation of CAF soldiers participated in several challenging peace support missions for decades, most notably within the Balkans (Croatia, Bosnia-Herzegovina, Serbia and Montenegro, and Macedonia) and Africa (Rwanda and Somalia).¹¹⁸ Despite many deaths and wounded, it was not until the 2000s and beyond that Canadians began to surpass the myth that peacekeeping was a relatively safe and non-confrontational way to contribute to global peace and stability.¹¹⁹ Peacekeeping,

¹¹⁵ Agnieszka Szpak, "Legality of use and Challenges of New Technologies in Warfare – the use of Autonomous Weapons in Contemporary Or Future Wars," *European Review* 28, no. 1 (February, 2020), 119. <https://www.proquest.com/docview/2345441755>.

¹¹⁶ Carol Off, *The Ghost of Medak Pocket: The Story of Canada's Secret War* (Toronto: Random House, 2004), 58.; "Historical Sheet - the Canadian Armed Forces in the Balkans," last modified November 18, accessed April 14, 2022, <https://www.veterans.gc.ca/eng/remembrance/history/canadian-armed-forces/balkans/information-sheet-balkans>.; "Canadian Peacekeepers in the Balkans," last modified July 25, accessed March 6, 2022, <https://www.thecanadianencyclopedia.ca/en/article/canadian-peacekeepers-in-the-balkans>.

¹¹⁷ Carol Off, *The Lion, the Fox, & the Eagle*, Vintage Canada Edition ed. (Toronto: Random House of Canada Limited, 2001), 47-87.

¹¹⁸ "The Canadian Armed Forces in Somalia," last modified November 27, accessed April 14, 2022, <https://www.veterans.gc.ca/eng/remembrance/classroom/somalia>.; "Rwanda," last modified March 16, accessed April 14, 2022, <https://www.veterans.gc.ca/eng/remembrance/wars-and-conflicts/rwanda/>.; "Historical Sheet - the Canadian Armed Forces in the Balkans,"

¹¹⁹ Michael K. Carroll, "Peacekeeping: Canada's Past, but Not its Present and Future?" *International Journal* 71, no. 1 (March, 2016), 172. <https://www.proquest.com/docview/1768734877?pq-origsite=summon>.; Eric Wagner, "The Peaceable Kingdom? the National Myth of Canadian

peace support, or peace enforcement missions place many unique challenges upon soldiers.¹²⁰ Particularly, in the emotional, ethical, and moral realms. In Croatia, Major-General Lewis MacKenzie told CA soldiers “you should not be overly concerned about your safety - you’re located in a peaceful area,”¹²¹ whilst they faced ambushes, machine gun fire, artillery fire, and roadside bombs regularly. They lived in harsh conditions and witnessed horrific genocide, dubbed ethnic cleansing. “For young soldiers, nurtured in a society that draws energy and inspiration from ethnic diversity, the scenes of destruction were as pointless as they were barbaric.”¹²² With forces woefully inadequate in size and strength to intervene, many soldiers faced significant moral and psychological injuries.

Moral injuries are “psychological distress experienced in response to perpetrating, observing and/or failing to prevent acts that transgress deeply held moral standards.”¹²³ Psychological injuries are stress injuries commonly referred to as Operational Stress Injuries (OSI) and PTSD. Similar experiences of witnessing genocide, suffering violations of their moral values, and experiencing the enduring underlying stress caused by threat of sporadic minor combat were typical in many other missions such as in Bosnia-Herzegovinian, Kosovo, and Rwanda. Substantial challenges and expectations are placed upon soldiers serving on missions with complex human security issues, moral and ethical dilemmas, and complicated legal or rules of engagement (ROE) constraints. This can challenge a traditional, combat oriented military culture if it does not adequately prioritise qualities beyond aggression, to ensure soldiers possess the necessary abilities

Peacekeeping and the Cold War," *Canadian Military Journal* 7, no. 4 (2007), 45.
<http://www.journal.forces.gc.ca/vo7/no4/wagner-eng.asp>.

¹²⁰ Dandeker, "Military Culture and Strategic Peacekeeping," 63-64.

¹²¹ Off, *The Ghost of Medak Pocket: The Story of Canada's Secret War*, 68-69.

¹²² Off, *The Ghost of Medak Pocket: The Story of Canada's Secret War*, 103.

¹²³ Nazarov, "Greater Prevalence of Post-traumatic Stress Disorder and Depression in Deployed Canadian Armed Forces Personnel at Risk for Moral Injury," 343.

for such complexities. Therefore, a CA's warrior culture cannot be a simplistic fighting culture. It must balance the value of expertise in violence with empathy, compassion, and honour.

Afghanistan, Ukraine, and other recent violent conflicts provide further examples of how soldiers are taxed on the battlefield. Whether a counterinsurgency or a conventional war, there will inevitably be civilians in the battlespace. Many of the same moral, ethical, and human security challenges as peacekeeping type missions are present in war. However, in these missions a more significant adversarial threat exists, necessitating an additional emphasis on combat capabilities to counter that adversary. Soldiers find themselves balancing both action to defeat their enemy and actions to protect and care for the people caught up in the warzone around them. This is true for counterinsurgency operations as well, and "many of the skills required to fight so-called traditional wars are the same as those required to defeat insurgencies."¹²⁴ In her book *Fifteen Days*, Blatchford, a reporter embedded with Canadian soldiers in Afghanistan, captures many examples of the very real human reality of war. For example, John Conrad's recollection following the destruction of one of their Bison armoured vehicles: "You open the back, it's just a bloody mess. The doors were awash in blood. Tony Ross, one of the captains, was vomiting; he had shrapnel in his ear. It was just a complete hell gothic."¹²⁵

Such graphic memories are still vivid in many thousands of us within the CA who fought in Afghanistan and served in other peace support operations. The team of

¹²⁴ Antulio J. Echevarria, "Reconsidering War's Logic and Grammar," *The Infinity Journal* 1, no. 2 (2011). <https://www.militarystrategymagazine.com/article/reconsidering-wars-logic-and-grammar/>.

¹²⁵ Christie Blatchford, *Fifteen Days: Stories of Bravery, Friendship, Life and Death from Inside the New Canadian Army* (Toronto: Doubleday Canada, 2007), 233.

comrades with the shared experience and the resilience developed throughout training and operational experience were critical to the maintenance of mental and emotional health following deployments. These experiences are part of the CA's informal *warrior* culture and exemplify why many officers and senior non-commissioned officers place such a premium on toughness, fighting spirit, and team cohesion. From the peacekeeping missions to Afghanistan, these experiences highlight that the CA's warrior culture must maintain its warfighting elements whilst also emphasis empathy and humanity, and that soldiers must possess the cognitive ability to carefully discriminate (sort and choose) targets within the battlefield.

Another important aspect of conflict soldiers must cope with is the act of killing, the psychology of which is discussed in more detail the subsequent chapter. Killing is an act that is inherently contrary to most people's moral and ethical being.¹²⁶ Yet, commitment and enthusiasm toward such violence are significant factors in deciding the victor of a fight. Modern battlefields are characterized by speed, range, and complexity. Soldiers must cope with managing communication systems, complex weaponry, complex terrain, dispersed friendly forces, enemy actions, and civilians in the battlespace. Maintaining situational awareness and effective decision making are challenging. Vast amounts of stimuli overwhelm soldiers' senses, as they attempt to understand the situation around them and act appropriately. These are compounded by the reality that soldiers in these situations are not robots: commonly on the battlefield soldiers experience exhaustion, sleep deprivation, and exposure to heat, cold, dust, smoke, physical pain, and crushing sound. This highlights the necessity that soldiers be prepared

¹²⁶ Lt Col Dave Grossman, *On Killing: The Psychological Cost of Learning to Kill in War and Society*, Revised ed. (New York: Little, Brown and Company, 2009), 4.

with adequate resiliency to cope with the challenges they will face, and a warrior ethos for guidance, cohesion, and motivation.

The Implications of Hybrid Warfare and Grey-Zone Conflict

Huntington defined another type of national security beyond military, arguing that “situational security policy is concerned with the threat of erosion resulting from long-term changes in social, economic, demographic, and political conditions tending to reduce the relative power of the state.”¹²⁷ Hybrid warfare and grey-zone conflict target this situational security within nations. The philosophy of Sun Tzu in the 6th Century BC that “one hundred victories in one hundred battles is not the most skilled. Subduing the other’s military without battle is the most skilled.”¹²⁸ The concept is that potential adversaries can have greater success achieving their aims against western democracies using means that avoid open war, yet enable them to directly influence populations, economies, and political decisions.

This phenomenon has been dubbed grey-zone conflict or competition, or hybrid warfare when it occurs in concert with combat. Competition implies non-violent means, whereas conflict can refer to both violent and non-violent means but often lacks an official declaration of war between states. War is officially declared conflict between states where “violence is the primary means of coercion.”¹²⁹ Grey-zone conflict is the below-the-threshold-of-war conflict between states.¹³⁰ It is characterized by ambiguity

¹²⁷ Huntington, *Soldier and the State: The Theory and Politics of Civil-Military Relations*, 1.

¹²⁸ Sun Tzu and The Denma Translation Group, *The Art of War: The Denma Translation* (Boston: Shambhala Publications Inc., 2002), xii.

¹²⁹ Nick Bosio, "What is War? Defining War, Conflict and Competition," *Land Power Forum*, February 10, 2022.

¹³⁰ Javier Jordan, "International Competition Below the Threshold of War: Toward a Theory of Gray Zone Conflict," *Journal of Strategic Security* 14, no. 1 (2020), 1.; Thomas Dobbs et al., *Grey-Zone Activities and the ADF* (Mandala, AU: Australian Defence Force, 2020), i.

(difficultly identifying the perpetrator or intentions), multidimensional or hybrid strategies (conducting concurrent activities in several domains, such as economic, information, and cyber), asymmetry or dissonance between state interests (generally employed by weaker military states against ones with superior force), and gradual implementation of long-term objectives (seeking cumulative effects over time).¹³¹ Additionally, *grey-zone* conflicts are typically characterized by use of non-military means, though tactics can include the inciting of proxy wars.¹³² To this end, grey-zone makes use of several means, including economic leverage, disinformation, and the cyber surveillance and attack. Common examples of such conflict in media are accusations of Russian interference in United States elections, of Chinese cyber violations of 5G wireless communications infrastructure, and of foreign funding of Canadian Freedom Convoy protests. Another is Russia's reinvigorated use of *active measures*, defined as a form of political warfare where disinformation or fake news are used to undermine the credibility of foreign leaders.¹³³

Concern over grey-zone conflict and hybrid warfare are growing in Canada, as shown by increased funding to counter disinformation,¹³⁴ explicit efforts to counter

¹³¹ Jordan, "International Competition Below the Threshold of War: Toward a Theory of Gray Zone Conflict," 2-4.; David Carment and Dani Belo, "Gray-Zone Conflict Management: Theory, Evidence, and Challenges," *The Air Force Journal of European, Middle Eastern, and African Affairs* (June 9, 2020). <https://www.airuniversity.af.edu/JEMEAA/Display/Article/2213954/gray-zone-conflict-management-theory-evidence-and-challenges/>.; Dobbs, *Grey-Zone Activities and the ADF*, i.

¹³² Jordan, "International Competition Below the Threshold of War: Toward a Theory of Gray Zone Conflict," 4.; Dobbs, *Grey-Zone Activities and the ADF*, i.

¹³³ Martin Kragh and Sebastian Åsberg, "Russia's Strategy for Influence through Public Diplomacy and Active Measures: The Swedish Case," *Journal of Strategic Studies* 40, no. 6 (2017), 774.

¹³⁴ "Government of Canada Reinforces Support to Organizations to Help Counter Harmful Disinformation," last modified March 16, accessed April 22, 2022, <https://www.canada.ca/en/canadian-heritage/news/2022/03/government-of-canada-reinforces-support-to-organizations-to-help-counter-harmful-disinformation.html>.

Russian disinformation relating to the invasion of Ukraine,¹³⁵ and the increased attention toward cybersecurity within defence mandate letters and the *National Cyber Security Strategy*, as cyber and information domains enable foreign actors to directly influence Canadians.¹³⁶ The CAF attempted to orient itself to the problem of grey-zone conflict with *Pan-Domain Force Employment Concept (PDFEC)*.¹³⁷ This concept describes the complexity of how and when to employ the CAF, given the grey-zone blurring of traditional lines between war and peace.¹³⁸ However, much in the same way as Nielsen's criticism of the U.S. military's application of Huntington's military monopoly on defence matters,¹³⁹ the CAF's proactive participation in ever-present international conflict and competition could challenge the civil-military balance of military professionalism in Canada. Specifically, it might result in instances of military solutions to problems more appropriately solved by government, as Nielsen cautions.¹⁴⁰

Despite the orientation provided by the *PDFEC*, the precise role of the CA within grey-zone conflict or hybrid warfare is not yet completely clear. The CA has not yet updated doctrine to reflect the situation described in *PDFEC*, nor is clear exactly how and when the CA is to be employed beyond its existing mandate. However, *PDFEC* does

¹³⁵ "Canada's Efforts to Counter Disinformation - Russian Invasion of Ukraine," last modified April 7, accessed April 22, 2022, https://www.international.gc.ca/world-monde/issues_developpement-enjeux_developpement/response_conflict-reponse_conflits/crisis-crisis/ukraine-disinfo-desinfo.aspx?lang=eng.

¹³⁶ Canada, *National Cyber Security Strategy* (Ottawa: Public Safety Canada, 2018c), 2.; Rt Hon Justin Trudeau, *Minister of National Defence Mandate Letter* (Ottawa: Government of Canada, 2021).; Justin Trudeau, *ARCHIVED - Minister of National Defence Mandate Letter* (Ottawa: Government of Canada, 2015).; Justin Trudeau, *ARCHIVED - Minister of National Defence Mandate Letter* (Ottawa: Government of Canada, 2019). Cyber was not mentioned at all in previous defence mandate letters, yet features prominently in the latest 2021 letter.

¹³⁷ Canada, *Pan-Domain Force Employment Concept*, 4.

¹³⁸ Canada, *Pan-Domain Force Employment Concept*, 35-38.

¹³⁹ Nielsen, "The Continuing Relevance of Morris Janowitz's the Professional Soldier for the Education of Officers," 735-736.

¹⁴⁰ Nielsen, "The Continuing Relevance of Morris Janowitz's the Professional Soldier for the Education of Officers," 733.

describe the necessity for the greater integration and cooperation amongst branches and capabilities (including cyber and space) of the CAF.¹⁴¹ Additionally, it calls for the ability to leverage advanced situational awareness and command and control technologies,¹⁴² and to ensure networked systems are protected and resilient.¹⁴³ Therefore, two important considerations become apparent. First, the CA can expect an even greater capacity for situational awareness and technological competency to be demanded of soldiers. Second, a continued emphasis on being politically and socially attuned with Canadians and the government is required by both officers and soldiers.

Imagining the Future Battlefield

Assessing perspectives of the future battlefield provides relevant insight to how the CAF must prepare soldiers. The continuation of the blistering pace of technological advancement is a common theme among most predictions. Some believe the future battlefield will be dominated by killer robots,¹⁴⁴ while others believe such technology will play a supporting role.¹⁴⁵ Famed scientist Albert Einstein is credited with stating “I know not with what weapons World War III will be fought, but World War IV will be fought with sticks and stones.”¹⁴⁶ This is generally interpreted to mean that nuclear war will revert human society to the Stone Age. However, a similar quote by a serving CAF officer implies perhaps another meaning, relevant to understanding the future evolution

¹⁴¹ Canada, *Pan-Domain Force Employment Concept*, 15-22.

¹⁴² Canada, *Pan-Domain Force Employment Concept*, 23-29.

¹⁴³ Canada, *Pan-Domain Force Employment Concept*, 30-31.

¹⁴⁴ James Johnson, "The End of Military-Techno Pax Americana? Washington's Strategic Responses to Chinese AI-Enabled Military Technology," *Pacific Review* 34, no. 3 (2021), 370.

¹⁴⁵ Antonio Calcara, "Contractors Or Robots? Future Warfare between Privatization and Automation," *Small Wars & Insurgencies* 33, no. 1-2 (2022), 263.

¹⁴⁶ "A Quote by Albert Einstein," accessed Mar 5, 2022, <https://www.goodreads.com/quotes/14977-i-know-not-with-what-weapons-world-war-iii-will>.

of war: “once all of the robots have destroyed each other, the humans will fight.”¹⁴⁷ Recent conflicts in Syria, Iraq, and Ukraine exemplifies this idea, demonstrating that despite current technologies such as drones and cyber warfare, which are present in these conflicts, the violent human on human nature of war remains unchanged. To expand upon this perception of the future battlefield, we must first understand the range of outlooks on future war. To do this, the perspectives of experienced military leaders and military academic think-tanks are to be examined in relation to one another.

In 2018, a study was conducted to examine military professionals’ outlooks on the evolution of the battlefield over the next five to twenty years.¹⁴⁸ This study surveyed experienced military leaders from United States, United Kingdom, Sweden, and Israel. The predictions made by these officers were generally based upon extrapolation of experiences in recent missions. Meaning, if that nation were recently engaged in peace support operations, they were more apt to believe future conflicts would look a lot like those peace support operations they conducted. Trends include increasing operations in urban areas, with complex human security issues, more media and information operations saturation, and greater employment of ranged precision guided weapons and autonomous systems. Morale, fighting spirit, and unit cohesion were also important themes which are noted as important to continuing criticality, reinforcing the need for their place CA’s warrior culture.

Military think-tanks employ experienced practitioners, scientists, and academics in attempts to better understand for what a military must prepare. Many recent

¹⁴⁷ Shane Gapp, Discussion at the Armoured Heights Officers' Mess, March 3, 2022.

¹⁴⁸ Batia Ben-Hador, Meytal Eran-Jona and Christopher Dandeker, "Perceptions of the Future Battlefield in Israel Vs. Western Countries," *Israel Affairs* 24, no. 4 (June 6, 2018), 711. <https://doi.org/10.1080/13537121.2018.1478782>.

publications focus on the advancements of technology, with a wide breadth of perspectives. Themes include information management or command and control, greater integration of technologies, low cost or barrier of entry, and advances in miniaturization and material science.¹⁴⁹ Network Centric Warfare (NCW); command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR); and other initiatives seek to develop a future battlefield wherein technology will permit an overmatch of information management. This is intended to provide an advantage to commanders' decision-action cycles. Technological overmatch involves networking systems and using advanced algorithms, machine learning, and potentially even artificial intelligence (AI). All of these systems are fed by arrays of sensors from planes, drones, ships, land fighting vehicles, radars, and satellites. The idea is that the fog of war is reduced, or eliminated in the case of NCW, to provide commanders near perfect comprehension of the battlefield, and to enable fast sensor-shoot links. Yet, such technologies are often thwarted by simple, inexpensive solutions such as the Ukrainian forces use of foam mats to defeat Russian thermal imaging sensors.¹⁵⁰

There are significant gaps and limitations in this concept for the future. "The hypothetical transformation of war through technological advances is a prevalent thought in the U.S. military; this type of thinking is wrong and potentially dangerous."¹⁵¹ Critics point out that technical limitations of technologies are not properly addressed.¹⁵² These include complexity, the impact of weather, enemy jamming or detection and indirect fire

¹⁴⁹ Tony Bertuca, "Pentagon Vision of Future Battlefields Sounds Alarm on Commercial Tech," *Inside the Pentagon* 32, no. 34 (2016), 1-2.

¹⁵⁰ Tim Judah, "How Kyiv was Saved by Ukrainian Ingenuity as Well as Russian Blunders," *The Financial Times* April 9, 2022. <https://www.ft.com/content/e87fdc60-0d5e-4d39-93c6-7cfd22f770e8>.

¹⁵¹ Elward, *The Fog of War: A Necessary Component of Modern Warfare*, ii.

¹⁵² Mats Persson and Georgios Rigas, "Complexity: The Dark Side of Network-Centric Warfare," *Cognition, Technology & Work* 16, no. 1 (2014), 113-144.

strikes, and cyber disruption to list a few. Consideration must also be given to potential adversaries such as China who are employing similar approaches to the integration of their own advanced technologies, developing artificial intelligence and networks technologies to empower their command and control.¹⁵³ Integration of such technologies contributes to increased volume and pace (tempo) of task saturation for soldiers. Soldiers risk not being able to keep pace with their situational awareness and task load. Other challenges include limited consideration of human factors. This is exemplified in McMaster's study of the strategies used in Vietnam and Iraq, noting that "A fixation on American technological superiority and an associated neglect of the human, psychological, and political dimensions of war doomed one effort and very nearly the other."¹⁵⁴ Additionally, inherent biases exist in any data processed system, and no technology is able to fully disclose the intent and plans of one's human opponent.¹⁵⁵

To counteract advancements in battlefield technology, a renewed importance for units to operate independently and dispersed using human leadership, and therefore a stronger emphasis on the application of the mission command, is warranted.¹⁵⁶ While not always perfectly implemented, mission command is already a central component of CA doctrine and culture:

Because war is a clash between human wills, each with freedom of action, commanders cannot be expected to anticipate, with absolute certainty, the enemy's intentions. The interactive and complex nature of war guarantees

¹⁵³ Senator Pamela Wallin et al., *The Standing Senate Committee on National Security and Defence Evidence* (Ottawa: Senate of Canada, 2012), 375.; Johnson, "The End of Military-Techno Pax Americana? Washington's Strategic Responses to Chinese AI-Enabled Military Technology," 352.

¹⁵⁴ H. R. McMaster, "THE HUMAN ELEMENT: When Gadgetry Becomes Strategy," *World Affairs (Washington)* 171, no. 3 (2009), 33.

¹⁵⁵ H. R. McMaster, "CRACK IN THE FOUNDATION: Defense Transformation and the Underlying Assumption of Dominant Knowledge in Future War," *Centre for Strategic Leadership* 3, no. 3 (November, 2003), 2-3. <https://csl.armywarcollege.edu/usacsl/Publications/S03-03.pdf>.

¹⁵⁶ Niklas Nilsson, "Practicing Mission Command for Future Battlefield Challenges: The Case of the Swedish Army," *Defence Studies* 20, no. 4 (2020), 436.

uncertainty, which to the military mind can suggest a loss of control. There are two ways to react. One is to attempt to seize control through strong centralized command. The other is to accept uncertainty as inevitable and adopt a decentralized philosophy of command that places emphasis on a common intent between all levels of command and trust of subordinate commanders.¹⁵⁷

This approach is credited to the German military of the Third Reich and derived from the three centuries old philosophy pioneered by Prussian Field Marshal Helmuth von Moltke the Elder.¹⁵⁸ Mission command has proven itself superior to other approaches to command in contemporary operations. This is underscored by Nazi successes in the Second World War (prior to changing to centralized command),¹⁵⁹ and by successes in operations in Iraq, Afghanistan, and elsewhere.¹⁶⁰

The future missions and battlefields for which the CA must prepare are characterized by complexity, advanced technologies, human security issues, and the continued relevance of the enduring characteristics of war. Most important, the centrality of the human element in conflict does not appear to be challenged by changes anticipated in the coming decades and anticipated changes do not create obvious complications with the current construct of military professionalism. However, the expected changes mean the CA must ensure it continues to prepare soldiers to fight and lead in a dispersed fashion within complex environments, making effective use of new technologies and enduring all the same frictions which have characterized war for time immemorial. This

¹⁵⁷ Canada. Department of National Defence., *B-GL-300-003/FP-000 Command* (Ottawa: DND Canada, 1996), 1-4.

¹⁵⁸ Eitan Shamir, "The Long and Winding Road: The US Army Managerial Approach to Command and the Adoption of Mission Command (Auftragstaktik)," *Journal of Strategic Studies* 33, no. 5 (2010), 647.

¹⁵⁹ Ian Drummond-Smith, "'Yes, Sir': Leadership and Blind Obedience in Hierarchical Organisations," *International Journal of Emergency Services* 7, no. 1 (2018), 28.

¹⁶⁰ Shamir, "The Long and Winding Road: The US Army Managerial Approach to Command and the Adoption of Mission Command (Auftragstaktik)," 663-665.

means enabling soldiers with a warrior ethos to guide their judgment and actions, and equipping them with the necessary resilience to meet the stresses of operations and combat.

Conclusion

The missions the CA faces are wide ranging, from humanitarian aid to war, at home and abroad. Such missions demand military professionalism and cohesive, competent soldiers. If the CA is prepared to fight in war with all its complexity, then presumably it is well situated to execute all other mission less than war. For this, soldier competence is critical. A robust set of agile capabilities and a culture of professionalism and adaptability, bread through training for war, enables the CA to excel in all other missions. This is demonstrated time and again in domestic operation, peace support operation, and countless examples of military cooperation with other governmental and non-governmental organizations. To do so, soldiers: demonstrate their ability to apply violence willingly and committedly, to deliberately cause death and harm to opponents; maintain composure and focus under stress; endure and thrive in harsh environmental conditions; morally, empathically, and intellectually address complex human security issues; rapidly learn and operate complex technical systems; understand human behaviour to predict friendly, enemy, and civilian actions within the battlespace; operate effectively in team environments, cooperate to quickly execute duties; and apply creativity and initiative to take action against opponents or toward accomplishing own commander's intent. Technological advancements and capabilities do not remove the importance nor the necessity of these soldier capabilities.

All these factors highlight the necessity of military professionalism, a well defined and inclusive CA warrior culture, and the deliberate enabling of soldiers through the development of their skills and resilience. While rapid technological advancement and the cyber age are changing the face of conflict, the enduring characteristics of conflict (uncertainty and chaos, violence and danger, friction, and human stress) will not change.¹⁶¹ Soldiers still require the physical, emotional, and cognitive skills necessary to fight a bloody conflict, and the CA has a responsibility properly prepare them for this regardless of new machinations of future information and cyber conflict. The reality of this is a recurring theme, emphasised by recollection of Willy MacDonald during his experience in Afghanistan:

As I came around the corner, I was assaulted by what I saw. Three soldiers appeared dead, and several more were writhing in agony from their multiple injuries. Those that were not hit by enemy fire were either hysterical or unable to do anything but stare at me in disbelief and shock.¹⁶²

This research of the battlefield reinforces the importance of military professionalism, particularly the civil-military relationship, and provides understanding of the components which make up the CA's warrior culture. Most importantly, the understanding of the battlefield derived from this research provides context for further examination of how changes in Canadian culture and demographics are shaping the challenge the CA faces in creating soldiers who are ready for the future challenges they will face.

¹⁶¹ Canada, *B-GL-300-001/FP-001 Land Operations*, 2-17.

¹⁶² Blatchford, *Fifteen Days: Stories of Bravery, Friendship, Life and Death from Inside the New Canadian Army*, 27

CHAPTER 3 – THE SOLDIER

Introduction

In the early twenty first century, Canadian soldiers were largely mobilized for the sole purpose of deploying and fighting in a singular conflict: the Boer War, or the First and Second World Wars. Following these wars, most soldiers returned to their civilian lives. The military shrank to reflect lower deterrent and defence needs of Canada. Canadian soldiers throughout the later half of the twenty first century were typified by a professional volunteer force. These soldiers' primary focus was training for war with the Soviet Union, and participating in United Nations missions, notably in Egypt and Cyprus. They were generally culturally homogenous, with the combat arms being all male (the overall force had only 2% females in 1972, and females were not yet integrated into the combat arms) and predominately white.¹⁶³ Their role and distinct subculture within Canadian society were taken for granted, until the grotesque events of the Somalia Affair in 1993. This scandal brought to light racial and cultural failings with the CAF that were out of alignment with Canadian society.

Resulting from this scandal, in addition to various cultural shifts including inclusivity and gender equality, much reform within the CAF has taken place. The military justice system was overhauled, and cultural improvements were inculcated, however favourable views toward the CA throughout the early 2000s slowed change. By 2002, the CAF had grown to fifty percent females within its ranks, though this growth stagnated with the same percentage reported in 2019.¹⁶⁴

¹⁶³ Jungwee Park, *A Profile of the Canadian Forces* (Ottawa: Statistics Canada, 2015).

¹⁶⁴ Park, *A Profile of the Canadian Forces; Canada, Men and Women in the Canadian Armed Forces, 2019* (Ottawa: Statistics Canada, 2019).

The contemporary Canadian soldier is not significantly different from those in recent decades. According to Statistics Canada, “recruits generally have been white males with previous familial CF ties...”¹⁶⁵ Female and visible minorities have grown in number within the ranks of the combat arms and served with distinction in combat. Yet, these groups remain a small percentage of the overall force. Politics and women’s studies professor Maya Eichler criticizes the CAF culture alleging that it is “a historic fact that the military as an institution was built around the norm of the white, heterosexual male soldier, both in a material and ideological sense.”¹⁶⁶ Eichler describes how this can be seen in the design of military equipment, uniforms, accommodations, and even bathrooms. She also alleges those who do not fit the white, heterosexual male stereotype face discrimination. Further, the CA’s warrior culture is considered by some to be masculine by nature.¹⁶⁷ The argument made by professor of behavioural science James Do is that it is exclusionary toward women not because of overt sexual misconduct, but because the warrior ethos and combat narrative are considered by western societies like Canada’s to be inherently masculine.¹⁶⁸

¹⁶⁵ Hans Jung, "Can the Canadian Forces Reflect Canadian Society," *Canadian Military Journal (Ottawa)* 8, no. 3 (2007)28.

¹⁶⁶ Mike Lapointe, "'This is Not a New Crisis': Military Experts Weigh in on what's Ahead for CAF in Dealing with Sexual Misconduct Crisis," *Hill Times*, no. 1815 (2021).
<https://www.hilltimes.com/2021/04/05/this/291723>.

¹⁶⁷ Do, "I Am a Warrior: An Analysis of the Military Masculine-Warrior Narrative among U.S. Air Force Officer Candidates," 26.; Linda Heinecken, "Women Still Considered a Threat to Military Effectiveness and Warrior Spirit," *Mail & Guardian Online*, March 23, 2022.; Lapointe, "'This is Not a New Crisis': Military Experts Weigh in on what's Ahead for CAF in Dealing with Sexual Misconduct Crisis,"

¹⁶⁸ Do, "I Am a Warrior: An Analysis of the Military Masculine-Warrior Narrative among U.S. Air Force Officer Candidates," 43. This study was involved the USAF and refers to the U.S. military’s warrior ethos. However, this ethos and that employed by the CAF are comparable in purpose, as addressed in Chapter 1.

This is an issue that concerns Canadian military leadership today.¹⁶⁹ During the period of the late 1990s onward, despite the Somalia Affair, the CAF enjoyed relatively positive reception for the execution of its duties.¹⁷⁰ So called peacekeeping operations were lauded as successes of the Canadian “boy scout” identity.¹⁷¹ The war in Afghanistan amplified the trend of positivity toward the CAF, as the nation rallied in support of soldiers’ sacrifices, regardless of weaker support for the war itself.¹⁷² The positive view toward the CAF aided in recruitment and resourcing.¹⁷³ It may have even prevented significant scrutiny of the CAF internal demographics, culture, and policies.

The CAF is no longer immune to such scrutiny from the media, the public, or the government. However, some of what it now faces may be misguided given the inherent nature of the military and the necessary capabilities of a soldier. The CAF must heed the criticisms outlined in the *External Review into Sexual Misconduct and Sexual Harassment in the Canadian Armed Forces* relating the inappropriately sexualized components of its hierarchal warrior culture, and failings in upholding the espoused

¹⁶⁹ Jacques Gallant, "Too White and Too Male, Canadian Armed Forces are Rethinking Recruiting as Staffing Slides, Senior Officers Say," *The Toronto Star* March 23, 2022.

<https://www.thestar.com/politics/federal/2022/03/23/too-white-and-too-male-canadian-armed-forces-are-rethinking-recruiting-as-staffing-slides-senior-officers-say.html>.

¹⁷⁰ Lane Anker, "Peacekeeping and Public Opinion," *Canadian Military Journal* 6, no. 2 (2005), 27. <http://www.journal.forces.gc.ca/vo6/no2/doc/public-eng.pdf>.

¹⁷¹ Carroll, "Peacekeeping: Canada's Past, but Not its Present and Future?" 167.

¹⁷² Scott Fitzsimmons, Allan Craigie and Marc André Bodet, "Canadian Public Opinion about the Military: Assessing the Influences on Attitudes Toward Defence Spending and Participation in Overseas Combat Operations," *Canadian Journal of Political Science* 47, no. 3 (2014), 509.; Anker, "Peacekeeping and Public Opinion," 27.

¹⁷³ "Military Expenditure (% of GDP) - Canada," , accessed April 21, 2022, <https://data.worldbank.org/indicator/MS.MIL.XPND.GD.ZS?locations=CA.>; The Canadian Press, "Afghan Mission Saw Canadian Forces Recruitment Surge," *CTV News*, June 25, 2011. <https://www.ctvnews.ca/afghan-mission-saw-canadian-forces-recruitment-surge-1.662006>.

tenants of its military professionalism.¹⁷⁴ Yet, the needed changes to do so must be reconciled against the demands of being a soldier.

As will be explored in this chapter, criticism of the masculine nature of the CA's *warrior* culture does not recognize examples where women display the same qualities considered to be masculine, or where men display qualities often branded feminine. For this reason, it is preferable to craft a gender-neutral CA ethos, which incorporates the valuable qualities commonly associated different genders. This includes those criticized masculine-branded qualities, which are vital in war. One can easily marginalize the importance of violence and aggression if they have not personally experienced a real physical, existential threat. In the famous words of Mike Tyson, "everybody has a plan until they get punched in the mouth."¹⁷⁵

There are several ways in which the current and anticipated future situations in Canada and the world challenge the CA's ability to generate soldiers. The health and fitness of Canadians is declining,¹⁷⁶ challenging the CA's ability to generate capable soldiers.¹⁷⁷ Physical and cognitive competencies are changing, as industries, technologies, and cultures within Canada adapt to greater urbanization and intellectual

¹⁷⁴ Marie Deschamps, *External Review into Sexual Misconduct and Sexual Harassment in the Canadian Armed Forces* (Ottawa: Government of Canada, External Review Authority, 2015), ii.

¹⁷⁵ Mike Berardino, "Mike Tyson Explains One of His most Famous Quotes," *Sun Sentinel* November 8, 2012. <https://www.sun-sentinel.com/sports/fl-xpm-2012-11-09-sfl-mike-tyson-explains-one-of-his-most-famous-quotes-20121109-story.html>.

¹⁷⁶ Jennifer E. C. Lee et al., *Physical Activity Trends in Canadian Youth and Implications for the Canadian Armed Forces* (Winnipeg: 17 Wing Winnipeg Publishing Office, for Director General Military Personnel Research and Analysis, 2017), 1.; Ross C. Brownson, Tegan K. Boehmer and Douglas A. Luke, "Declining Rates of Physical Activity in the United States: What are the Contributors?" *Public Health* 421, no. 43 (2005), 440. While Brownson's study was of U.S. population, Canadian society is very similar and likely faces the same issue, as reinforced by Lee.

¹⁷⁷ Lee, *Physical Activity Trends in Canadian Youth and Implications for the Canadian Armed Forces*, 1.

based work.¹⁷⁸ Western societies are continuously adapting to improve quality of life and human security. Relative to the early 1900s, in Canada today, most individuals fret over verbal threat and emotional health, vice physical threat and starvation. This is reflected in the more than halving of youth mortality and doubling of increase in life expectancy.¹⁷⁹ As a result, the difficulties young people face are increasingly emotional and intangible vice physical and existential. Canadian society is also more distanced from the notion of killing, even of animals for sustenance.¹⁸⁰ While challenged by recent medical assisted suicide debates, killing is contrary to Canadian values. This reflected in our legal framework with the lack of a death penalty and laws against murder. This presents a challenge for the CA, given the necessity to train soldiers to kill is exceptional within Canadian society. Finally, Canada is undergoing a gender revolution, seeking to normalize gender diversity and achieve equality.¹⁸¹ Simultaneously, it is tackling systemic racism. The CAF seeks to address both gender and racism failings proactively, with the

¹⁷⁸ Duncan Gallie, "Patterns of Skill Change: Upskilling, Deskilling Or the Polarization of Skills?" *Work, Employment and Society* 5, no. 3 (1991), 349.; Sungsup Ra et al., "The Rise of Technology and Impact on Skills," *The International Journal of Training Research* 17, no. sup1 (2019), 31.; Mark S. Tremblay et al., "Canada's Physical Literacy Consensus Statement: Process and Outcome," *BMC Public Health* 18, no. Suppl 2 (2018), 2.; Ana L. ABELIANSKY et al., "The Future of Work: Meeting the Global Challenges of Demographic Change and Automation," *International Labour Review* 159, no. 3 (2020), 285-286.

¹⁷⁹ Max Roser, Hannah Ritchie and Bernadeta Dadonaite, "Child and Infant Mortality," *Our World in Data* (November, 2019). <https://ourworldindata.org/child-mortality>.; Max Roser, Esteban Ortiz-Ospina and Hannah Ritchie, "Life Expectancy," *Our World in Data* (October, 2019). <https://ourworldindata.org/life-expectancy>.

¹⁸⁰ Marina Sucha Heidemann et al., "Uncoupling Meat from Animal Slaughter and its Impacts on Human-Animal Relationships," *Frontiers in Psychology* 11 (2020), 1.

¹⁸¹ Hon Anthony Rota, *44th Parliament Throne Speech* (Ottawa: Government of Canada, 2021).; LEAH MCLAREN, "Me Too: It's Not just Hollywood, it's Canada," *Maclean's (Toronto)* (2017). <https://go.exlibris.link/6WKGVCgy>.; Neil Guppy and Nicole Luongo, "The Rise and Stall of Canada's Gender-Equity Revolution," *The Canadian Review of Sociology* 52, no. 3 (2015), 260.

creation of a new organization, Chief Professional Conduct and Culture (CPCC), with the intended purpose of “enhancing professional conduct and culture.”¹⁸²

All these issues are germane to how the CA must produce soldiers in the future, as they force the CA to adapt to external change and consider if soldiers are equipped with the necessary abilities, and to challenge several of the CA’s long held beliefs about military professionalism. To understand how, this chapter examines changing Canadian demographic including fitness, physical and cognitive skillsets, resilience, social attitudes toward killing, and how societies perceptions of gender and ethnic diversity relate to the CA. Considering these issues, it becomes clear that the CA must make investments to ensure soldiers are prepared with the necessary skills and resilience. Additionally, this research indicates that the CA must proactively ensure its warrior culture is compatible with Canadian social expectations regarding gender and inclusiveness.

Physical Fitness

Over a century of industrial and technological revolution reshaped our society, and its people. “For our ancestors, physical activity was more than a pastime or a deliberate means for achieving optimal health; it was an essential component of daily life and survival.”¹⁸³ The decline in health and fitness in western society due to the changing nature of work was recognized as early as the mid-nineteenth century, and spurred the inclusion of physical fitness training in educational institutions.¹⁸⁴ Interestingly, this was

¹⁸² "Chief Professional Conduct and Culture," last modified March 11, accessed March 25, 2022, <https://www.canada.ca/en/department-national-defence/corporate/organizational-structure/chief-professional-conduct-culture.html>.

¹⁸³ Lee, *Physical Activity Trends in Canadian Youth and Implications for the Canadian Armed Forces* 1.

¹⁸⁴ Samuel M. Clevenger and Shannon Jette, "From 'Cultivators of the Soil' to 'Citizen-Soldiers': Physically Active Education and the Nation at Maryland Agricultural College," *Sport, Education and Society* 22, no. 8 (2017), 959.

amplified by racial inequality as the fitness of wealthy Caucasians declined at a faster rate due to their privilege away from the toil of hard work.¹⁸⁵ Poor physical health was recognized as a security risk for Britain during and following the First World War.¹⁸⁶ As this trend continues of more workers flocking to intellectual based jobs and automation made agriculture and manufacturing less demanding, the importance of recreational physical activity and diet change increases. Yet, society's youth are trending away from such activities. "It was found in the General Social Survey (GSS) that 59 percent of Canadian youth between the ages of 15 and 18 regularly participated in sports in 2005 compared to 77 percent in 1992."¹⁸⁷ Statistical studies showed a marked decline in Canadians' cardiovascular fitness from 1981 to 2009,¹⁸⁸ and have somewhat stabilized from 2009 to 2017, but remain unhealthily lower than in the past.¹⁸⁹ Obesity is an epidemic and is expected to worsen in coming decades.¹⁹⁰ "High body fat and poor physical fitness have both been found to interfere with the successful performance of military duties."¹⁹¹ All of these factors contribute to concern that much of the potential recruits within Canadian society may require a greater amount of physical training to prepare them for military service.

¹⁸⁵ Clevenger, "From 'Cultivators of the Soil' to 'Citizen-Soldiers': Physically Active Education and the Nation at Maryland Agricultural College," 959.

¹⁸⁶ J. M. Winter, "Military Fitness and Civilian Health in Britain during the First World War," *Journal of Contemporary History* 15, no. 2 (1980), 212.

¹⁸⁷ Lee, *Physical Activity Trends in Canadian Youth and Implications for the Canadian Armed Forces*, 2.

¹⁸⁸ Cora L. Craig et al., "Trends in Aerobic Fitness among Canadians, 1981 to 2007–2009," *Applied Physiology, Nutrition, and Metabolism* 37, no. 3 (2012), 517-518.

¹⁸⁹ Caroline Y. Doyon et al., *Trends in Physical Fitness among Canadian Adults, 2007 to 2017* (Ottawa: Minister of Industry, Government of Canada, 2021), 10.

¹⁹⁰ Zachary J. Ward et al., "Projected U.S. State-Level Prevalence of Adult Obesity and Severe Obesity," *The New England Journal of Medicine* 381, no. 25 (2019), 2440.

¹⁹¹ Lee, *Physical Activity Trends in Canadian Youth and Implications for the Canadian Armed Forces*, 2-3.

Further, recognizing the importance of self-image, obesity becomes normalized.¹⁹² Combating bullying among youth related to obesity is important to guarding the mental health and self-esteem of children.¹⁹³ This normalization of being overweight and unfit creates a social sensitivity toward combating obesity amongst people of all ages. Subsequently, such normalization can spill over into various professions such as the military, wherein fitness standards are adjusted to reflect the shifting population demographics.¹⁹⁴ This can make it difficult for CA leadership to enforce the standards of fitness necessary for soldiers to perform optimally.

However, the situation is not entirely negative. Concurrent to the increase in those who are overweight and unfit, the portion of society who proactively seek to be more fit is increasing: "...adults who are sufficiently physically active increased from 21 percent in 1981 to 37 percent in 1995, and to 41 percent in 2000."¹⁹⁵ Anecdotally, the young soldiers within my Regiment during my last tour there displayed a greater level of physical fitness than those a decade previous. Therefore, the main issue facing the CAF is that the portion of society which is adequately fit for military service is shrinking, as described by the Department of National Defence scientist, Doctor Jennifer Lee: "Since military personnel are recruited mainly from this young civilian population, the ability of

¹⁹² Raya Muttarak, "Normalization of Plus Size and the Danger of Unseen Overweight and Obesity in England: Normalization of Plus Size in England," *Obesity (Silver Spring, Md.)* 26, no. 7 (2018), 1129.

¹⁹³ Dario Bacchini et al., "Bullying and Victimization in Overweight and Obese Outpatient Children and Adolescents: An Italian Multicentric Study," *PloS One* 10, no. 11 (2015), 2.

¹⁹⁴ Patrick Gagnon, *Physical Fitness Evaluations and Programs in the Canadian Armed Forces: Purposes and Evolution* (Ottawa: Department of National Defence, 2017), 21 & 27.; Lee, *Physical Activity Trends in Canadian Youth and Implications for the Canadian Armed Forces*, 3.

¹⁹⁵ Lee, *Physical Activity Trends in Canadian Youth and Implications for the Canadian Armed Forces*, 1.

the CAF to maintain a physically fit force will become increasingly difficult if these negative trends in health and fitness continue.”¹⁹⁶

The decline in fitness within our society and the taboo subject of being overweight presents many challenges for the CA in generating soldiers. Physical fitness correlates with many important factors which are critical to military service, including: cognition, health, emotional intelligence, mental and emotional resilience, the capacity to endure extreme environments, and ability to recover from injury.¹⁹⁷ CAF’s physical performance strategy acknowledges this, stating “research indicates that in order to perform optimally, a service-member’s body must be appropriately trained and fit, properly fueled, well-rested, and free from injury.”¹⁹⁸ Recruitment and physical fitness are likely to conflict given current trends, necessitating the CA continue to monitor the issue and explore ways of improving fitness policy, programs, and culture.¹⁹⁹ More flexible and proactive recruitment can allow the CA to target the portion of young Canadians who are fit, much like how the U.S. Marine Corps recruits from high school sports programs.²⁰⁰ Given that the CA requires higher levels of fitness than other services for soldiers of all trades to wear body armour for extended periods, fight, and operate in demanding conditions, different standards and fitness culture from the Air Force and Navy are warranted. A greater culture of fitness and training programs aiming to close

¹⁹⁶ Lee, *Physical Activity Trends in Canadian Youth and Implications for the Canadian Armed Forces*, 3.

¹⁹⁷ Canada, *Balance: The Canadian Armed Forces Physical Performance Strategy* (Ottawa: Department of National Defence, 2018), 11.

¹⁹⁸ Canada, *Balance: The Canadian Armed Forces Physical Performance Strategy*, 11.

¹⁹⁹ Lee, *Physical Activity Trends in Canadian Youth and Implications for the Canadian Armed Forces*, 8.

²⁰⁰ LOLITA C. BALDOR, "Marines Turn to Girls High School Sports Teams for Recruits," *St. Louis Post-Dispatch*, 2016. <https://www-proquest-com.cfc.idm.oclc.org/docview/1812735742?pq-origsite=summon>.

the gap between recruits' fitness levels and that demanded by army service can be incorporated into the CA's *warrior* culture and enables the army to develop the resilience soldiers need to achieve better personal outcomes from their high stress jobs.

Physical Skillsets

Given the changes in the physical capital with which civilians enter the military, which a high demand job, more resources need to be dedicated to building individuals' skills. Like physical fitness, social and economic trends have changed the skills and competencies within society. "On the eve of the First World War, nearly 80 per cent of the occupied population were manual workers; by 1987, the workforce was roughly evenly divided between manual and non-manual."²⁰¹ The reshaping of the labour force changes the experiences and expectations of children as well. Canadian children are now shockingly sedentary, as "...only 9% of Canadian children and youth aged 5–17 years are getting enough physical activity."²⁰² This correlates with fewer opportunities to develop physical literacy, and generally lower gross motor skills. Therefore, from a young age, opportunities to develop various skillsets is limited, and will likely be reflected in occupation proficiencies as the reach adulthood.

Soldiering still relies upon a diverse repertoire of physical skillsets, and the ability to learn such skills quickly. New candidate soldiers can no longer be expected to possess many basic skills previously taken for granted in past generations that are not part of modern civilian life in Canada. These include those skills necessary for moving oneself through obstacles in complex terrain, carrying weapons systems and equipment, conducting basic vehicle maintenance, or using simple tools such as axes, saws, and

²⁰¹ Gallie, "Patterns of Skill Change: Upskilling, Deskilling Or the Polarization of Skills?" 322.

²⁰² Tremblay, "Canada's Physical Literacy Consensus Statement: Process and Outcome," 2.

shovels. Given greater urbanization and decline in sport hunting in Canada,²⁰³ it is likely fewer soldiers will begin their service with previous marksmanship experience than in previous generations. Changing demographics, improved public transit, and greater urbanization also means more candidate soldiers likely lack experience driving prior to service,²⁰⁴ and may find it more challenging to acquire the situational awareness and coordination necessary to operate armoured fighting vehicles. The lower rates of physical literacy and motor skills results in a greater delta between start state skills and those which the CAF must teach. Yet, this decline in initial abilities for recruits has until recently been met with reduction in military funding whilst maintaining or increasing CA mission tempo.²⁰⁵ This results in reduced training resources including time, ammunition for practice, fuel to master driving, and so on. As a result, the CA must make investments and prepare to train and develop skills, which may have been pre-existing or more quickly learned in previous generations.

Cognitive Skills

The “75” is firing. The “37” is firing, but it’s traversed round the wrong way. The Browning is jammed. I am saying: “Driver advance” on the A set, and the driver who can’t hear me, is reversing. And as I look over the top of the turret and see twelve enemy tanks fifty yards away, someone hands me a cheese sandwich.²⁰⁶

²⁰³ Tim Renken Of The Post-Dispatch, "Outdoors: Duck Hunting in Canada and U.s. is on the Decline," *St. Louis Post-Dispatch* 2002. <https://www-proquest-com.cfc.idm.oclc.org/docview/402113121?pq-origsite=summon>.

²⁰⁴ Carolyn Morris, "Fewer Young Canadians are Getting their Driver's Licence," April 9, 2012. <https://ca.style.yahoo.com/blogs/shine-on/fewer-young-canadians-getting-driver-licence-184210177.html>.; Rachel Maclean, "No Driver's Licence? no Problem, Say Young Canadians | CBC News," *Cbc* August 5, 2014. <https://www.cbc.ca/news/canada/calgary/driver-s-licences-not-a-priority-say-some-young-albertans-1.2728345>.; Grace Maca Aluso, "Teens Not Driven to Get their Licences; Young Drivers Enrolment has Decreased," *Star-Phoenix (Saskatoon)*, 2012. <https://go.exlibris.link/C03LYktr>.

²⁰⁵ Hon Daniel Lang and Jaffer, Hon. Mobina S. B., *Military Underfunded: The Walk must Match the Talk* (Ottawa: Senate of Canada, 2017), 5-6.

²⁰⁶ Keith Douglas, *Alamein to Zem Zem* (London: Faber & Faber, 2014), 119.

-Lieutenant Ken Giles recalling the chaos of his experience as a tank commander in a Second World War battle.

Soldiering demands individuals be capable of conforming and following orders, while also being capable of contextualizing problems and considering the factors of the current environment and situation, to effectively employ initiative, judgment, and morality.²⁰⁷ This requires cognitive skill. Cognition is the capacity to learn, perceive, process, understand, and react, and generally does not encompass social or emotional abilities.²⁰⁸ While gross motor skills may be trending lower, intellectual skills and the ability to learn appear to be increasing amongst the population of potential recruits. This is not to say that intellect or cognitive skills were lacking within militaries throughout history. While health and nutrition are linked to cognitive ability,²⁰⁹ there are no studies covering cognitive skills development over centuries. Certainly, famous philosophers such as Marcus Aurelius, Sun Tzu, and Clausewitz display significant intelligence and likely had exceptional cognitive skills. However, this provides no indication of the norm the average person or soldier.

Cognitive skills such as critical thought, executive management, comprehension, and problem solving are growing in importance within the economy, and consequently within society and education.²¹⁰ This is reflective in the increasing rates of higher

²⁰⁷ Anders McD Sookermany, "What is a Skillful Soldier? an Epistemological Foundation for Understanding Military Skill Acquisition in (Post) Modernized Armed Forces," *Armed Forces and Society* 38, no. 4 (2012), 584-585.

²⁰⁸ "What is Cognition & Cognitive Behaviour - Cambridge Cognition," last modified August 19, accessed March 16, 2022, <https://www.cambridgecognition.com/blog/entry/what-is-cognition.>; "Definition of COGNITIVE," , accessed March 16, 2022, <https://www.merriam-webster.com/dictionary/cognitive>.

²⁰⁹ Jere R. Behrman, John Hoddinott and John A. Maluccio, "Nutrition, Adult Cognitive Skills, and Productivity: Results and Influence of the INCAP Longitudinal Study," *Food and Nutrition Bulletin* 41, no. 1_suppl (2020), S47.

²¹⁰ Ra, "The Rise of Technology and Impact on Skills," 31.

education. From 1996 to 2016, the number of Canadians with a bachelor's degree or higher more than doubled in number, from 3,000,780, 10.4 percent of the population, to 6,659,620, 18.9 percent of the population.²¹¹ Similar increases are seen for post-secondary certificates and skilled trades. This is a reflection of nations investing in increasing opportunities for intellectual jobs, as physical jobs represent an increasingly small portion of the available market due to automation.²¹² As more people than ever indulge in video games, particularly children,²¹³ this creates risks of sedentary and/or addictive behaviour.²¹⁴ Some research indicate video games are "associated with good intellectual functioning and academic achievement,"²¹⁵ while other research indicates they have little to no positive effect on cognitive skills.²¹⁶ Regardless, familiarity with digital technologies is beneficial for soldiers who will operate complex communication, information, and weapon systems. Small surveillance drones for example use an interface like that of a video game, and such technological skills are transferrable to the military profession. However, cognitive skills require experience and training to flourish and adapt in various environments.

²¹¹ "Census Data 1996 to 2016: Education, Training and Learning," last modified April 1, accessed April 1, 2022, https://www150.statcan.gc.ca/n1/en/type/data?portlet_levels=98P&subject_levels=37%2C3715%2C371501&p=4-data/tables#tables.

²¹² ABELIANSKY, "The Future of Work: Meeting the Global Challenges of Demographic Change and Automation," 302.

²¹³ "Video Game Industry Statistics, Trends and Data in 2022," last modified January 18, accessed April 12, 2022, <https://www.wepc.com/news/video-game-statistics/>.

²¹⁴ Stacey Guy, Alexandria Ratzki-Leewing and Femida Gwadry-Sridhar, "Moving Beyond the Stigma: Systematic Review of Video Games and their Potential to Combat Obesity," *International Journal of Hypertension* 2011 (2011), 2.

²¹⁵ V. Kovess-Masfety et al., "Is Time Spent Playing Video Games Associated with Mental Health, Cognitive and Social Skills in Young Children?" *Social Psychiatry and Psychiatric Epidemiology* 51, no. 3 (2016), 354.

²¹⁶ Giovanni Sala, K. Semir Tatlidil and Fernand Gobet, "Video Game Training does Not Enhance Cognitive Ability: A Comprehensive Meta-Analytic Investigation," *Psychological Bulletin* 144, no. 2 (2018), 113.

Soldiering demands the maintenance of situational awareness, prediction of enemy actions, decision making under duress, and operation of complex equipment. The CAF recognizes this, making efforts to develop soldiers' *cognitive dominance*.²¹⁷ Such demands require well developed cognitive skills, namely: mental processing speed, working memory capacity, and fluid reasoning or fluid intelligence.²¹⁸ "Rising demand for high skills combined with shrinking shelf life of specialized skills mean the ability and willingness to learn to unlearn and relearn...is more important than ever."²¹⁹ Adapting to contemporary missions requires the CAF to build upon foundational military skills of "physical fitness and mental toughness, marksmanship, and combat techniques," with greater emphasis on the contextual military skills such as flexibility, adaptability, critical thinking, and diplomacy.²²⁰ Therefore, the CAF benefits from the cognitive adaptations of society, as candidate soldiers are potentially more ready for this adaptation.

Resilience

The *toughness* associated with warrior culture is a definitive factor in the development of soldiers. A soldier's resilience is important not only to their success on the battlefield, but to their ability to live a normal life following the experiences on that battlefield. Demerouti et al argued that burnout, often associated with human service

²¹⁷ Canada, *Cognitive Dominance: Leveraging Your Environment* (Ottawa: Department of National Defence, 2018b). "*Cognitive dominance* refers to the ability of soldiers and systems that can, in a timely manner, outthink the enemy. In practice this is a concept that can be applied by all members of the Army Team to harness their mental skills in order to consistently make rapid and accurate decisions."

²¹⁸ Amy S. Finn et al., "Cognitive Skills, Student Achievement Tests, and Schools," *Psychological Science* 25, no. 3 (2014), 736.

²¹⁹ Ra, "The Rise of Technology and Impact on Skills," 26.

²²⁰ Sookermany, "What is a Skillful Soldier? an Epistemological Foundation for Understanding Military Skill Acquisition in (Post) Modernized Armed Forces," 583-584.

industries such as health care or teaching, is an issue across many job types and required reconceptualization and measurement to address how persons can be better prepared to avoid it.²²¹ Demerouti et al defined burnout as emotional exhaustion, withdrawal or mental distancing, or professional disillusionment as a result of job demands,²²² sharing similarities with stress injuries or moral injuries.²²³ Job demands “refer to those physical, social, or organizational aspects of the job that require sustained physical or mental effort and are therefore associated to certain physiological and psychological costs.”²²⁴ Their study quantified a link between burnout and an individuals resilience and support network of family and colleges.²²⁵ Demerouti et al showed that for demanding jobs, such as being a soldier, burnout was more frequent for those who lacked the necessary resilience and support.²²⁶

For the CA, resilient soldiers are critical to operational effectiveness.²²⁷ Resilience “refers to a class of phenomena characterized by good outcomes in spite of serious threats to adaptation or development.”²²⁸ In this case, resilience is referring to both the drive within people and the physical ability necessary to attain favourable outcomes in the face of the adversary’s actions. “The highest of all moral qualities in time of danger is

²²¹ Evangelia Demerouti et al., "The Job Demands-Resources Model of Burnout," *Journal of Applied Psychology* 86, no. 3 (2001), 499.

²²² Demerouti, "The Job Demands-Resources Model of Burnout," 499-500.

²²³ A. Nazarov et al., "Greater Prevalence of Post-traumatic Stress Disorder and Depression in Deployed Canadian Armed Forces Personnel at Risk for Moral Injury," *Acta Psychiatrica Scandinavica* 137, no. 4 (2018), 343.

²²⁴ Demerouti, "The Job Demands-Resources Model of Burnout," 501.

²²⁵ Demerouti, "The Job Demands-Resources Model of Burnout," 501-502.

²²⁶ Demerouti, "The Job Demands-Resources Model of Burnout," 508.

²²⁷ Cynthia Mikolas et al., "Enhancing Resilience in Canadian Military Families and Communities: A Qualitative Analysis of the Reaching in... Reaching Out and Bounce Back and Thrive! Resiliency Skills Training Programs," *Frontiers in Public Health* 9 (2021), 1.

²²⁸ Ann S. Masten, "Ordinary Magic: Resilience Processes in Development," *The American Psychologist* 56, no. 3 (2001), 228.

certainly courage.”²²⁹ The CAF uses the terms resilience, but it is often referred to as “true grit, mental toughness, hardiness, resourcefulness, psychological resilience, emotional resilience, stress resistance and by countless other names.”²³⁰ The CA’s *Mission: Ready Total Fitness Model* defines six domains, which are generally focused on for the building of resilience: physical, emotional, social, spiritual, intellectual, and familial.²³¹ Theoretically, when these domains are nurtured and balanced, what remains is a resilient soldier. However, social conditions in Canadian society may undermine the fulfillment of these tenets in recruits if resilience is not deliberately developed.

While the world is still characterized by inequality and strife in many places, human existence has never experienced life as easy as it is today with modern medicine and technologies. Most Canadians live in warm and dry homes, sleep in comfortable beds, enjoy generally good health and longer life through sanitation and medicine, and enjoy the conveniences of modern appliances and transportation. In the United Nations Human Development Report, Canada ranks very high at 16th amongst all nations.²³² As a result, most Canadians take their basic physiological and safety needs for granted. Most concern themselves with attaining and maintaining psychological and self-fulfillment needs. This is a stark contrast to the toil of survival our ancestors, or the experiences of those in distant conflicts such as the current war in Ukraine, turmoil in Yemen, or recent conflicts in Syria, Afghanistan, and elsewhere. During both World Wars, Canadians benefited from being geographically distant. Many Canadians had close familial ties to

²²⁹ Clausewitz, *On War*, 85.

²³⁰ Virginia A. Knorr, "What do U.S. Army Field Grade Officers Perceive as their Role in Building Resilience in Soldiers" U.S. Army Command and General Staff College, 2012), 1.

²³¹ Canada, *Introduction to the Mission: Ready Army Total Fitness Model* (Ottawa: Department of National Defence, 2015), 3-4.

²³² UN HDRO, *2020 Human Development Report*, United Nations, 2020).

Europe and felt a strong call to support. Yet even this was not existential for Canada. A great delta exists between most Canadians life experience and the stark realities they may face during military service. However, one cannot be expected to thrive in the face of gore, death, violence, and fear if they are not prepared to do so through experience or training.

The Yerkes-Dodson Law is a common tool for understanding how stress and performance interact.²³³ While not strictly a “law,” it does provide a valid conceptual understanding.²³⁴ It describes the phenomenon wherein performance increases with stress, or arousal, up to a point on a curve where further stress increase causes a decline in performance. Studies have shown that this curve is shifted by past stressful experiences such that optimal performance can be maintained at higher future stress levels.²³⁵ While this scientific approach attempts to quantify the phenomenon, its wisdom has been known for millennia. The concept underpins why militaries train under demanding conditions. It is why militaries around the world conduct basic training as a difficult period of indoctrination, characterized by unfriendly non-commissioned officers applying physical, emotional, and mental stress to candidates. It is also a key reason why all military training seeks to *train as you fight*, replicating as best as possible the conditions of war. The stress intentionally applied during training develops soldiers’ tolerance for stress, allowing better future performance under greater amounts of stress in the future.²³⁶

²³³ Lauren E. Chaby et al., "Can we Understand how Developmental Stress Enhances Performance Under Future Threat with the Yerkes-Dodson Law?" *Communicative & Integrative Biology* 8, no. 3 (2015), 1.

²³⁴ Martin Corbett, "From Law to Folklore: Work Stress and the Yerkes-Dodson Law," *Journal of Managerial Psychology* 30, no. 6 (2015), 748.

²³⁵ Chaby, "Can we Understand how Developmental Stress Enhances Performance Under Future Threat with the Yerkes-Dodson Law?" 2.

²³⁶ Maor Katz et al., "Prefrontal Plasticity and Stress Inoculation-Induced Resilience," *Developmental Neuroscience* 31, no. 4 (2009), 297-298.

In response to the recent sexual misconduct scandal and criticisms of CAF inclusiveness, the CAF issued *The Path to Dignity and Respect* with the aim “to foster a culture in which everyone is treated with dignity and respect.”²³⁷ Indeed, the prevailing response throughout the levels of leadership in the CAF has been a greater consideration of their actions and words, to ensure they reinforce the desired change and are not perceived as disrespectful. This is of course important, and good. However, an instructor pushing an individual to their personal emotional and mental limits, even in a professional manner, may not be perceived as treating that individual with dignity and respect. Moreover, a risk exists that leaders fear the intentional application of stress or the display of aggressive behaviours during training, which are necessary to prepare soldiers to fight.

Anecdotal reports of this occurring at the Canadian Forces Leadership and Recruit School, which basic training is taught, are rumoured amongst some leaders who have worked there during the past six years, with some instructors feeling they are “walking on eggshells.” While one cannot conclusively state that leaders are not training recruits under the same stresses as in the past, the CA should recognize the risk that if this were to occur, it would be doing a disservice to those soldiers by failing to equip them with the necessary *resilience* for the stresses of their job. Failing to do so places soldiers at higher risk of post-traumatic stress disorder (PTSD).²³⁸ If the most stressful occurrence an individual has face is another person swearing in their presence, they are unlikely to

²³⁷ Canada, *The Path to Dignity and Respect* (Ottawa: Department of National Defence, 2020), 5.

²³⁸ Demerouti, "The Job Demands-Resources Model of Burnout," 509.; Terry A. Beehr, Jennifer M. Ragsdale and Jonathan F. Kochert, "Effects of Initial Resources on the Development of Strains during a Stressful Training Situation: Some Counterintuitive Results," *Journal of Organizational Behavior* 36, no. 4 (2015), 467.

thrive after seeing another person's body dismantled by an explosive. This is where military professionalism and an effective army culture becomes critical. A clear line must be drawn between personal and professional criticism, and space made for instructors to be unfriendly, yet professional.

The battlefield is ultimately the domain of chaos, and within it soldiers must be proactive, not reactive. The soldier needs the resilience necessary to not just endure the challenges of the battlefield, but to thrive in the face of those challenges. Examining the contemporary and future battlefields underscores the reasons why such resilience continues to be essential. Examining the changing Canadian demographics and culture highlights the challenges the CA faces in developing *resilient* soldiers. Therefore, it is important to consider the role resilience will play during any professional or cultural change within the army. To ensure soldiers perform optimally on the battlefield and have the best possible mental and emotional outcomes afterward, the CA must prioritize resilience.

Psychology of Killing

“This is the time of year when people would slaughter, back when people did that...”²³⁹ Killing other people is not a morally comfortable act, and arguably never has been. Even within the CAF it is likely that most soldiers do not desire to kill, and those that do harbour such desires may be mentally unfit for their duties. Grossman asserts that “...the vast majority of men are not born killers.”²⁴⁰ Though, Grossman's work has been criticized for incomplete research, and for claiming we are unique amongst animals species regarding killing despite examples throughout history where humans have proven

²³⁹ Grossman, *On Killing: The Psychological Cost of Learning to Kill in War and Society*, xxv.

²⁴⁰ Grossman, *On Killing: The Psychological Cost of Learning to Kill in War and Society*, 31.

more than capable of killing one another.²⁴¹ Even Clausewitz acknowledges that “even the most civilized people, in short, can be fired with passionate hate for each other.”²⁴² However, killing is contrary to most Canadian’s moral values and historical examples do not always highlight the emotional and mental toll upon those involved. The soldiers of the CA as an expeditionary force are likely to enter conflict with a more reserved perspective toward killing than many potential adversaries, whose lives are immersed in such violence and general immiseration.²⁴³

As Sarkesian notes, “killing, even when ordered by the state, is hardly a goal or mission that engenders high ideals of professionalism or is necessarily associated with the public good.”²⁴⁴ Contrary to the relative comfort and distance from the act of killing, society may in some ways be preparing young people for the act of killing. In the call for reform relating to video games and popular culture media, *Stop Teaching Our Kids To Kill*, Grossman argues societies across the globe are conditioning children to be violent.²⁴⁵ He argues that violent learned behaviours are conditioned by video games, though this has been contested.²⁴⁶ Regardless, violent and military themed video games are very popular amongst young adults, including many soldiers. While gaming skills are not universally transferable toward real soldiering, the condition provided by games may

²⁴¹ Robert Engen, "Killing for their Country: A New Look at “killology”," *Canadian Military Journal* 9, no. 2 (2008), 120-128.
<https://web.archive.org/web/20111203141211/http://www.journal.dnd.ca/vo9/no2/doc/16-engen-eng.pdf>.

²⁴² Clausewitz, *On War*, 76.

²⁴³ Jim Storr, *The Human Face of War* (London: Continuum, 2011), 204.

²⁴⁴ Sarkesian, *Beyond the Battlefield: The New Military Professionalism*, 5.

²⁴⁵ Lt Col Dave Grossman and Gloria Degaetano, *Stop Teaching our Kids to Kill* (New York: Crown Publishers, 1999), 9-22.

²⁴⁶ Christopher J. Ferguson, "Does Movie Or Video Game Violence Predict Societal Violence? it Depends on what You Look at and when: Does Movie Or Video Game Violence Predict Societal Violence?" *Journal of Communication* 65, no. 1 (2015), 206.

aid in their capacity to act violently when necessary. While people are most certainly capable of killing, doing so for most is not easy, requires training, and takes an emotional toll. These are realities which the CA must keep front of mind with regard to cultural change and soldier development.

A rare few naturally possess a greater capacity to kill than most and are not clinically mentally unfit for service. Second World War veteran and philosopher Glenn Gray describes the satisfaction, not to be confused with enjoyment, that such people gain from the opportunity for destruction in his book *The Warriors: Reflections on Men in Battle*.²⁴⁷ Grossman argues these individuals play an important role within a fighting force, bearing much of the burden of violence and leading their teams through offensive action.²⁴⁸ Killing is an important part of a soldier's duty and an act for which there is little time for hesitation or contemplation when it is truly necessary.

Every individual undergoes their own personal philosophical journey with death and killing, just as described by Garrison Keillor in Grossman's book *On Killing*.²⁴⁹ The killing and slaughter of animals for sustenance might trigger such journeys for some people. Taking the life of an animal and the process of butchering that animal into meat spurs moral and ethical questions, and highlights in many of us our own frailty and mortality. While hunting remains in western societies as a sport and spiritual connection

²⁴⁷ J. Glenn Gray, *The Warriors: Reflections on Men in Battle* (Lincoln, Neb: University of Nebraska Press, 1998).

²⁴⁸ Lt Col Dave Grossman and Loren W. Christensen, *On Combat: The Psychology and Physiology of Deadly Conflict in War and in Peace*, Third ed. (United States: Warrior Science Publications, 2008), 124.

²⁴⁹ Grossman, *On Killing: The Psychological Cost of Learning to Kill in War and Society*, xxv-xxvi. . In Keillor's description of his own philosophical journey, he describes watching the slaughter of hogs expecting to be disgusted, but instead being fascinated. He describes the ritual and seriousness of the event, and the powerful impression it left. He notes that children growing up in that area will no longer experience the same event, as keeping one's own hogs is no longer common.

to ancestry, it is confined to a relatively small portion of the population, less than 3 ½ percent of Canadians.²⁵⁰ Even in agriculture, the slaughter of livestock has become industrialized and involves a small number of participants, particularly for the initial killing of the animal.²⁵¹ Therefore, most people within our society purchase their meat from a grocer. As a result, most Canadian soldiers do not begin their own philosophical journey until motivated to do so during their training. However, training provides conditioning but does not fully address the moral or emotional factors. “If war is an act of force, the emotions cannot fail to be involved.”²⁵²

The unique requirement to kill highlights the criticality of such training, but also the value of a warrior ethos. “The direction, operation, and control of a human organization whose primary function is the application of violence is the peculiar skill of the officer.”²⁵³ This is because of the risk of moral injury that many may develop after having to kill or having to witness killing.²⁵⁴ “Moral injury is a distinct type of psychological trauma characterized by intense guilt and shame, which may develop after acting inconsistently with one’s moral values or observing moral violations by trusted individuals.”²⁵⁵

²⁵⁰ The Conference Board of Canada, *The Economic Footprint of Angling, Hunting, Trapping and Sport Shooting in Canada* (Ottawa: The Conference Board of Canada, 2019), 5.

²⁵¹ Michael Pollan, Eric Schlosser and Bill Haw, "Inside the Slaughterhouse," *Frontline*, 2014.. This series of interviews illuminates the modern slaughter process, describing the industrial level efficiency.

²⁵² Clausewitz, *On War*, 76.

²⁵³ Huntington, *Soldier and the State: The Theory and Politics of Civil-Military Relations*

²⁵⁴ Jeremy D. Jinkerson and Allison R. Battles, "Relationships between Moral Injury Syndrome Model Variables in Combat Veterans," *Traumatology (Tallahassee, Fla.)* 25, no. 1 (2019), 33.; A. Nazarov et al., "Greater Prevalence of Post-traumatic Stress Disorder and Depression in Deployed Canadian Armed Forces Personnel at Risk for Moral Injury," *Acta Psychiatrica Scandinavica* 137, no. 4 (2018), 345.

²⁵⁵ Jinkerson, "Relationships between Moral Injury Syndrome Model Variables in Combat Veterans," 33.

Many CA soldiers returning from Afghanistan faced such injuries.²⁵⁶ Based upon his experience in the Second World War, Gray describes how most soldiers are able to free themselves from guilt by means of their collective identity as part of a unit carrying out the decisions of higher commanders for the good of their nation.²⁵⁷ Gray's depiction highlights the importance a collective identity and the seriousness of moral repercussions to killing. Indoctrinating soldiers into a *warrior* ethos is not a panacea for the emotional toll of killing for duty, but may assist with the mental defence of justification, and development of the concept of killing for duty as part of soldiers' personal values and before the act of killing is required.²⁵⁸ While unlimited liability protects soldiers from being cast out of society,²⁵⁹ it is their resilience and a warrior ethos which enable better outcomes after such experiences.²⁶⁰

Gender & Sex

Gender is a subject for which Canadian society's perceptions are changing toward greater equity, and *sex* is intertwined with the issue of gender because of biological factors which are brought into the discussion. These changing perceptions challenge the CA's warrior culture and military professionalism. Sex is defined as "the different biological and physiological characteristics of females, males and intersex persons, such as chromosomes, hormones and reproductive organs."²⁶¹ Gender is defined as "the

²⁵⁶ Nazarov, "Greater Prevalence of Post-traumatic Stress Disorder and Depression in Deployed Canadian Armed Forces Personnel at Risk for Moral Injury," 347.

²⁵⁷ Gray, *The Warriors: Reflections on Men in Battle*, 269-273.

²⁵⁸ Jinkerson, "Relationships between Moral Injury Syndrome Model Variables in Combat Veterans," 35.

²⁵⁹ Hackett, Lt. Gen. Sir John Winthrop, *Officer's Call: The Profession of Arms Lectures*, 40.

²⁶⁰ Beehr, "Effects of Initial Resources on the Development of Strains during a Stressful Training Situation: Some Counterintuitive Results," 468-469.

²⁶¹ "Gender and Health," accessed April 4, 2022, https://www.who.int/health-topics/gender#tab=tab_1.

characteristics of women, men, girls and boys that are socially constructed. This includes norms, behaviours and roles associated with being a woman, man, girl or boy, as well as relationships with each other.”²⁶² As will be examined, a key component of the arguments for and against *gender* inclusion in combat forces is the biological differences between men and women, *sex*, which warrants discussion.

The CAF’s current culture change initiatives stems from the crisis of trust created by sexual misconduct scandals, commencing with the 2015 External Review into Sexual Misconduct, reinforced by the Survey on Sexual Misconduct, and exacerbated by scandals of several senior officers.²⁶³ The Canadian government has voiced a need for change to address the changing dialogue surrounding sex and gender.²⁶⁴ At the same time, Canadian society is grappling with many of the same cultural shifts as the military.²⁶⁵ However, most of the public and even other governmental departments appear less frequently within media coverage.²⁶⁶ Therefore, the CAF has become a focal point for these issues within Canada. Most uniquely, the CAF is reconsidering the

²⁶² "Gender and Health."

²⁶³ Lapointe, "'This is Not a New Crisis': Military Experts Weigh in on what's Ahead for CAF in Dealing with Sexual Misconduct Crisis."; Kovitz, "Sexual (Mis)Conduct in the Canadian Forces," , 79-99; Deschamps, *External Review into Sexual Misconduct and Sexual Harassment in the Canadian Armed Forces*; Mohammad Hajizadeh, Alice Aiken and Chelsea Cox, "Risk Factors Associated with Sexual Misconduct in the Canadian Armed Forces: Does it Vary by Sex and Environmental Command?" *Archives of Sexual Behavior* 48, no. 8 (2019), 2592.

²⁶⁴ Amanda Connolly, "Sajjan Announces Review of Military Sexual Misconduct, Plans for Independent Reporting System | Globalnews.Ca," *Global News*, April 29, 2021. <https://globalnews.ca/news/7819294/canadian-forces-sexual-misconduct-harjit-sajjan/>; Trudeau, *Minister of National Defence Mandate Letter*; Murray Brewster, "Anand, Eyre Offer Official Apology to Victims of Military Sexual Misconduct | CBC News," *Cbc* December 13, 2021. <https://www.cbc.ca/news/politics/military-sexual-misconduct-anand-eyre-apology-1.6281762>.

²⁶⁵ Catherine J. Nash and Kath Browne, "Best for Society? Transnational Opposition to Sexual and Gender Equalities in Canada and Great Britain," *Gender, Place and Culture : A Journal of Feminist Geography* 22, no. 4 (2015), 562.; Rt Hon Justin Trudeau, "Canada's Vision for Global Health and Gender Equality," *The Lancet (British Edition)* 391, no. 10131 (2018), 1651.

²⁶⁶ "Google News Search "Sexual Misconduct Canada"," last modified April 13, accessed April 13, 2022, <https://news.google.com/search?q=sexual%20misconduct%20canada&hl=en-CA&gl=CA&ceid=CA%3Aen>. Search of recent articles relating to “sexual misconduct Canada” returns 65 CAF related articles versus 27 others, some of which still refer to the CAF crisis.

foundational concepts of a military which have existed for thousands of years. These include elements of military professionalism such as dress and deportment, its warrior culture and its alleged masculinity as previously discussed in chapter 1. However, the gender criticisms alone do not preclude the necessity of concepts such as warrior and military professionalism, and thus calls for their reimagining or redefining rather than their complete removal in light of shifting understandings of gender.

Sex and gender do not govern one's potential to become a winning warrior. Nor do they impact tactical competence, resilience, determination, or any other of the many factors relevant to soldiering. A common criticism of opponents to females serving in combat roles include the biological sex differences of physical strength. Indeed, scientific studies show males are generally larger in stature, have greater muscle mass, and are stronger than females.²⁶⁷ This is also reflected in professional sports and athletics, with the division of males and females for equitable competition. Advocates of women serving in combat claim that this biological difference is no longer relevant, as "military tasks previously requiring muscular strength, agility and physical endurance in combat have been reduced or eliminated by technology."²⁶⁸ However, this argument does not hold against the enduring reality that soldiers must carry heavy equipment, weapons, communication systems, body armour, and so on in difficult environments over extended distances. Soldiers must also be capable of transitioning to fighting, which even with modern equipment is physically demanding. In fact, the expected load to be carried by

²⁶⁷ Thomas Harbo, John Brincks and Henning Andersen, "Maximal Isokinetic and Isometric Muscle Strength of Major Muscle Groups Related to Age, Body Mass, Height, and Sex in 178 Healthy Subjects," *European Journal of Applied Physiology* 112, no. 1 (2012), 269.

²⁶⁸ Heineken, "Women Still Considered a Threat to Military Effectiveness and Warrior Spirit."

soldiers has increased consistently throughout history.²⁶⁹ Different grip strengths based upon sex have also been shown to impact marksmanship skills.²⁷⁰

While in general the physical demands of soldiering may biologically favour males, females have proven more than capable of meeting such difficult physical demands, serving with distinction in combat in Afghanistan and elsewhere. A study aimed at enabling the integration of females into combat roles for the United States military showed that when females adapt their physical training regime to meet the strength and muscular endurance demands, they are able develop the necessary strength and attain nearly the same capacity as their male counterparts.²⁷¹ Although, both this study and others have indicated females may need to “work at a relatively higher percent of their capacity to perform physically demanding military tasks at the same level as men.”²⁷² Similarly, a study on marksmanship shows that the gap can be closed between male and female abilities with grip strength training.²⁷³ This raises the question that perhaps the disparity between physical strength of sexes is exacerbated by societal expectations and norms relating to types of fitness training promoted toward each gender. While this question is beyond the scope of this paper, it is still worth noting given that cultural shifts do not happen in a vacuum and that there are often many factors which

²⁶⁹ Joseph J. Knapik, Katy L. Reynolds and Everett Harman, "Soldier Load Carriage: Historical, Physiological, Biomechanical, and Medical Aspects," *Military Medicine* 169, no. 1 (2004), 46. <https://www.proquest.com/scholarly-journals/soldier-load-carriage-historical-physiological/docview/217069309/se-2>.

²⁷⁰ Michael T. Charles and Anne G. Copay, "Marksmanship Skills of Female Police Recruits: Impact of Basic Firearms Training," *International Journal of Police Science & Management* 3, no. 4 (2001), 303.

²⁷¹ Bradley C. Nindl et al., "Functional Physical Training Improves Women's Military Occupational Performance," *Journal of Science and Medicine in Sport* 20 (2017), S93-S95.

²⁷² Stephen A. Foulis et al., "Body Mass does Not Reflect the Body Composition Changes in Response to Similar Physical Training in Young Women and Men," *International Journal of Obesity* (2005) 45, no. 3 (2021), 662.

²⁷³ Charles, "Marksmanship Skills of Female Police Recruits: Impact of Basic Firearms Training," 307.

contribute to biological development. In addition, given the overall decline in fitness within society, most males in Canada are incapable of meeting the physical demands necessary. As such, candidates must undertake physical training regardless of sex to prepare for army service.

As countless examples have shown sex does not preclude service as a soldier,²⁷⁴ the social constructs of gender pose a greater challenge which the CA must overcome. The CA successfully integrated women into the combat arms, before most western allies, and proved over decades that women can fight as effectively as men. However, a relatively small portion of women chose to pursue this path. Professor of sociology Marcia Kovitz, who studied the CAF's integration of women for over thirty years, concludes that the traditionally male dominated profession masks its resistance to the integration of women behind its war fighting imperative.²⁷⁵ The CA must wrestle with the so-called masculine nature of many of its fundamental tenets. Though there are some exceptions, most militaries' combat forces were nearly exclusively male for millennia, and society considers the violent attributes of warfighting to be inherently masculine. The CA demands toughness, meaning all types of resilience (physical, mental, emotional, moral, ethical, and so on) and the capacity to fight in a violent endeavour, particularly for those who will service in the *combat arms*.²⁷⁶ As such, there is a desire for toughness for candidacy to become a soldier, though it can be developed if candidates are willing. Kovitz claims society inherently identifies such *toughness* as masculine, leaving no room

²⁷⁴ Helena Carreiras, *Gender and the Military : Women in the Armed Forces of Western Democracies* (Florence: Taylor & Francis Group, 2006), 6-7.

²⁷⁵ Kovitz, "Sexual (Mis)Conduct in the Canadian Forces," 81.

²⁷⁶ Canada, *Introduction to the Mission: Ready Army Total Fitness Model*, 1-6.

for femininity in the warrior identity.²⁷⁷ Additionally, she claims that the imperative of unlimited liability demands sacrifice, which our social construct considers a masculine right.²⁷⁸ This is exemplified by Ukraine's prioritization of evacuating women and children, while demanding men remain to fight. It is also implied that such unlimited liability compounds the normalization of oppression of women within the ranks, with an alleged view that military culture does not see women as holding an equal right to self-sacrifice in combat.

The masculine branded warrior identity conflicts with efforts to make the CAF more inclusive. "If one examines what the warrior ethos entails, such as bravery, endurance, physical and mental strength, tactics and use of weaponry, honour, loyalty and selfless service, there is nothing inherently masculine or feminine about these ideals."²⁷⁹ Yet, society does not promote a self-view of the desired character traits evenly for both women and men, raising children to view such traits as masculine. Until recently society through popular culture and media traditionally highlight qualities such as strength, courage, drive, and toughness within men, and focus on the qualities of humility, humanity, empathy, and duty within women. Yet, any parent knows that being a mother demands excessive courage, drive, and toughness, and any experienced combat veteran knows war demands humanity, empathy, and duty. Canadian societies preconceptions about gender are likely to change for future generations, as more girls and boys are permitted or encouraged to partake in activities previous generations considered only appropriate for the opposite gender. More female role models such as famed hockey

²⁷⁷ Kovitz, "Sexual (Mis)Conduct in the Canadian Forces," 93.

²⁷⁸ Kovitz, "Sexual (Mis)Conduct in the Canadian Forces," 83.

²⁷⁹ Heineken, "Women Still Considered a Threat to Military Effectiveness and Warrior Spirit."

player Hayley Wickenheiser, or the many female warriors in the popular Marvel comic-based movies, are representing to girls that it is acceptable to display characteristics previously reserved for masculine role models. Likewise, the social constructs of masculinity imposed upon boys is changing with greater acceptance of fashion, arts, and emotional expression. Beyond social constructs, men have no monopoly on toughness or challenge. The experiences many females endure, including pressure from societal expectations and biological reproductive demands, are arguably far more difficult than their male counterparts.

The CA must also adapt to the acceptance of peoples from the Lesbian, Gay, Bisexual, Transgender, Queer or Questioning, Plus (LGBTQ+) community, which includes those with non-binary gender identities. While discrimination against LGBTQ+ members of the CAF does not appear as prevalent in media reports as the current sexual misconduct scandal, such discrimination does occur and such soldiers' challenges at integrating into the traditional warrior role are different than those faced by females.²⁸⁰ Often men who embodied masculine qualities did not feel welcome or were not welcome because of their sexual orientation or gender identity. Despite the pioneer of gay rights Alexander Wood's service in the Canadian militia in the early 1800s,²⁸¹ persons from the LGBTQ+ community were previously banned from service in the CAF by an order with a title one would consider disturbing by modern standards: the *Canadian Forces Administration Order (CFAO) 19-20: Homosexuality – Sexual Abnormality*

²⁸⁰ Michael Kellermann, "Self-Selection and Opposition to Gay Rights among Military Career-Seekers," *Politics, Groups & Identities* 2, no. 3 (2014), 443-444.

²⁸¹ Thomas R. Dunn, "Remembering "A Great Fag": Visualizing Public Memory and the Construction of Queer Space," *The Quarterly Journal of Speech* 97, no. 4 (2011), 443.

Investigation, Medical Examination and Disposal.²⁸² This was partially revoked with the interim policy of 1988, and fully revoked as a result of legal challenge in 1992.²⁸³ Since 1992 the CAF, from a policy perspective, was intent on non-discrimination based on gender identity. Unfortunately, some soldiers still faced unfair treatment from peers based upon their gender in the following decades. The CAF has apologized and pledged to support members discriminated against by past policies and ongoing behaviours.²⁸⁴ Canada leads its nearest cultural allies, with the United States having only lifted bans on homosexuality in 2013 and transgender in 2021.²⁸⁵ Gender diversity and choice is normalizing within Canadian society, though not all members of the CAF feel their gender is fully accepted. Countless CA LGBTQ+ soldiers have served with distinction on operations.

The discrimination based upon sex and gender which occur within the CA and the CAF are a microcosm of that which occurs in Canada at large.²⁸⁶ However, this does not excuse the CA from the issue. Indeed, the demands of military service require that

²⁸² B. S. Petzinger, *Memorandum: Amendment to CFAO 19-20 Homosexuality – Sexual Abnormality Investigation, Medical Examination and Disposal, and Introduction of CFAO 19-36 Sexual Misconduct* (Ottawa: National Defence Headquarters, DPPCS, 1992).

²⁸³ CTV News, "Timeline of Gay Rights in the Canadian Military," *CTV News Montreal* 2021. [https://montreal.ctvnews.ca/timeline-of-gay-rights-in-the-canadian-military-1.3010597#:~:text=No%20restrictions,CAF%20including%20at%20senior%20levels.](https://montreal.ctvnews.ca/timeline-of-gay-rights-in-the-canadian-military-1.3010597#:~:text=No%20restrictions,CAF%20including%20at%20senior%20levels.;); Jacques Gallant, "'They Forgot the Human — Me': This Transgender Veteran Says Canada's Military Needs to Improve the Way it Treats LGBTQ Soldiers," *The Toronto Star*, April 8, 2021. <https://www.thestar.com/politics/federal/2021/04/08/lgbtq-members-must-be-recognized-in-culture-shift-for-canadian-military-veterans-say.html>.

²⁸⁴ Harjit Singh Sajjan, *Statement by the Minister of National Defence on the LGBT Purge Fund Report* (Ottawa: Minister of National Defence, 2021). <https://www.canada.ca/en/department-national-defence/news/2021/05/statement-by-the-minister-of-national-defence-on-the-lgbt-purge-report.html>.; Olivia Chandler, "'A Battle that we've Won': LGBTQ Military Members Get Personal Apologies," *CBC News* November 25, 2019. <https://www.cbc.ca/news/canada/ottawa/lgbtq-military-canada-history-trudeau-apology-letter-1.5371444>.

²⁸⁵ "LGBTQ in the Military • Military OneSource," last modified March 19, accessed April 3, 2022, <https://www.militaryonesource.mil/military-life-cycle/friends-extended-family/lgbtq-in-the-military/>.

²⁸⁶ Nash, "Best for Society? Transnational Opposition to Sexual and Gender Equalities in Canada and Great Britain," 562.; Trudeau, "Canada's Vision for Global Health and Gender Equality," 1651.

soldiers hold themselves to a higher standard than the public, and inclusiveness is critical to the development of a cohesive team of warriors. Despite the growing need and ongoing shift towards reimagining sex and gender, many hurdles remain for the CA, and society. The warrior identity, or the informal culture it describes, needs to be delinked from these social underpinnings, rather than removed from the CA. There is no defensible reason why one's sex or gender should preclude becoming a soldier or identifying as a warrior.

Ethnic Diversity

The current demographics of the CA, and those throughout the past century, do not fully reflect those found within Canadian society. As of 2005 the CAF still recruited largely “fit young men between the ages of 17 and 24, coming from rural areas or from urban areas with a population of less than 100,000.”²⁸⁷ This only reflects around 57 percent of Canadians whose ethnicity are of European descent according to the 2016 census.²⁸⁸ The other 43 percent are commonly referred to as visible minorities, with the largest groups being persons of Asian descent at 17.7 percent and First Nations descent at 6.2 percent. The CAF recognizes that its demographics do not reflect Canadian society, and that if the military is not attractive to Canadians of diverse backgrounds, it misses a significant portion of the potential recruits. While recruitment campaigns have sought to change perceptions, the CA today still consists mostly of white males of European descent and some fear discrimination based upon their ethnicity and race is to blame.

Research conducted by the Director Health Services Human Resources concludes that this is in part because ethnic minority communities consider “a relatively low

²⁸⁷ Jung, "Can the Canadian Forces Reflect Canadian Society," 28

²⁸⁸ Statistics Canada, *Census Profile, 2016 Census* (Ottawa: Statistics Canada, 2017).

ranking of military service as a career,” and see the military as a “negative image experienced by many cultures, as perpetrated by their own native militaries.”²⁸⁹ Military service does not appear to be valued in many of the diverse Canadian subcultures, and is sometimes feared. Yet, many underrepresented demographics have histories and traditions of warrior culture and service, such as Sikh communities and many First Nations tribes and bands. Consistently failing to attract proportional numbers of Canadians from the diverse ethnic backgrounds within society to the regular force, the *Canadian Armed Forces Diversity Strategy* was created.²⁹⁰ It’s stated vision is to attract a diversity of Canadians “who are recognized and encouraged to maintain and contribute through their unique experiences, abilities, and perspectives within a respectful and inclusive environment.”²⁹¹ As the CA struggles with its personnel shortage, ensuring it can attract persons from these communities is critical. Additionally, such diversity contributes to a greater range of skills and qualities, such as traditional hunting and tracking or cultural philosophies toward duty, which can be incorporated into the CA warrior culture. Most important however, the CA must ensure its espoused warrior culture cannot be exclusionary to diversity, nor elements of military professionalism undermine the perception amongst Canadians that they are welcome. The challenge the CA faces is ensuring its culture is outwardly attractive to all Canadians, yet sufficiently indoctrinates all members into a homogenous ethos where the needs of the profession are paramount.

²⁸⁹ Jung, "Can the Canadian Forces Reflect Canadian Society," 34.

²⁹⁰ Canada, *Canadian Armed Forces Diversity Strategy* (Ottawa: Department of National Defence, 2017), 1.

²⁹¹ Canada, *Canadian Armed Forces Diversity Strategy*, 2.

Conclusion

The duties of a soldier are exceptionally demanding, and divergent from Canadian norms. Canadian society is changing shape, and so are its people. Citizens are less fit, more obese, and less accustomed to existential difficulty. Though, they are better educated and more technically capable. One of the greatest challenges in turning citizens into soldiers is the imperative for soldiers to kill. These factors necessitate that the CA take a proactive approach to understanding the gap between recruits' abilities and resilience and that which is required of soldiers, and plan to provide soldiers with the necessary training.

Thirty years ago, stating that soldiering is an inherently masculine endeavour was unproblematic or not controversial. Today, given society's focus on social constructs and deconstructing assumptions based on sex and gender, such a phrase would invoke controversy. The CAF is working toward untangling this complicated issue. However, the CA has yet to determine how and what to preserve from its warrior culture. Often it seems that abandoning a term in light of these controversies and cultural entanglements is the productive way to address this challenge. However, when such terms have historical and professional relevance to an entire organization and its members, removing it completely can be problematic in terms of identity, training, and recruitment. As a start, removing gendered terminology from military vernacular begins to enable the CA to ensure soldiering is perceived as an available profession for all persons, while retaining the components of the warrior ethos that are critical to being a soldier.²⁹² A risk exists

²⁹² Bourgon, MGen M. H. L., *Message from the Acting Chief of Military Personnel on Diversity, Inclusion, and Culture Change Short-Term Initiatives* (Ottawa: Department of National Defence, 2021).

that this is perceived as simply rebranding to avoid having to demasculinize CA culture. On the contrary, the CA must ensure it can determine which imperatives, values, and characteristics are necessary for success in combat, regardless of historical gender branding, and ensure those are built into its concepts of military professionalism and warrior culture.

CHAPTER 4 – CONCLUSION

Findings

This paper sought to determine if the goals of generating competent soldiers for the rigors of the modern battlefield can be matched with the ideals of creating an equitable army team fit for Canada's growing diversity. The answer is yes, and more specifically the tenets of military professionalism indicate it is not possible to have fighting-ready soldiers without also having an equitable and diverse army team. Military professionalism calls for a socially and politically attuned CA, which is adaptable to the changes in Canadian culture. CA doctrine reflects this, stating that "the Canadian soldier is a volunteer citizen who represents the essential attributes of the society (they) protect. Applicable Canadian social values and standards of behaviour, as represented by the Government, must be maintained."²⁹³ Concomitantly, military professionalism demands that the CA must also develop within its culture and soldiers the competencies and abilities needed to wage war, including selflessness, fighting spirit, and the professional application of violence.

The first objective of this paper was to examine the trends surrounding the contemporary battlefield to better understand how the demands upon soldiers and military professionalism are changing. Examining the role of the CA shows that it is nested within the Canadian government's mandate for the CAF, and is clearly subordinate and responsive to political demands. Additionally, the formal components of the CA's culture become clear, including the emphasis upon fighting spirit, flexibility, adaptability, and group cohesion and teamwork. Examination of the complex modern

²⁹³ Director Army Doctrine, *B-GL-300-003/FP-000 Command* (Ottawa: Department of National Defence, 1996), 1-5.

battlefield further reinforces the necessity of these components, and exemplifies why the *informal* part of CA's warrior culture emphasises toughness, aggression, empathy, humanity, and cohesion. The modern battlefield shows that soldiers must be prepared to cope with increased tempo, and require the necessary resources to cope with complexity and danger. Therefore, the modern battlefield requires seamless integration between the informal and formal components of the CA's culture, while operating within Canadian social and governmental expectations.

Examining the potential implications of hybrid warfare and grey-zone conflict does not provide conclusive understanding for the CA's role. However, it does reinforce the increased demand for soldiers' situational awareness and technical competencies, and highlights the requirement that both soldiers and officers must exist in harmony with Canadian government and society's needs. Examining perspectives on the future battlefield shows that the primacy of the human element in conflict will endure, in addition to the fog, friction, and complexity which characterize war. This highlights the continued need for soldiers to develop the necessary *resilience* and strength to fight, and that the CA's warrior culture remains relevant. Finally, no aspect of the present or future battlefield indicates a significant flaw with the current construct of military professionalism.

The second objective of this paper was to examine the studies of changing demographics within Canadian society, and how they relate to the abilities soldiers require to thrive in combat, handle stress, and have positive moral and emotional outcomes. Fitness is critical to physical performance and mental health. Examining the physical fitness and health of Canadian society shows a trend toward obesity and lack of

fitness amongst the population of young Canadians who may become soldiers. This reduces the potential recruiting pool, and necessitates that the CA prepare to develop the needed level of fitness within recruits. The social link between the CA and society necessitates the CA continue to prioritise fitness within its warrior culture, with soldiers positively encouraging one another. Further, the types of skillsets developed within young Canadians are changing, and recruits can not be expected to possess the physical literacy necessary for marksmanship and many of the demanding labour tasks they may encounter. Therefore, greater investment in training resources is necessary to develop the required abilities for soldiers. However, given the increasing complexity and technological demands of war, soldiers also require increasingly greater cognitive abilities. Society is arguably developing such abilities better in young Canadians than in the past. This provides an opportunity for the CA, however deliberate training is still necessary to adapt such abilities to the military context and training soldiers on the needed processes and equipment. In light of the changing Canadian demographics, the CA must adapt and transform current training priorities to recognize this change.

Chief amongst soldiers' abilities is their resilience, which is critical both for performance under stress and for better emotional and moral outcomes afterward. Relative to most societies in the world, most Canadians experience safe and comfortable lives, which do not foster the physical, emotional, or mental toughness demanded of soldiers. While the CA recognizes this and proactively attempts to develop the needed *resilience*, this research highlights the criticality of such effort. Particularly, it emphasises the need for demanding and stressful training of soldiers to develop their *resilience*. While this is best done early in a soldier's career, demanding and realistic training must

continue throughout one's career. However most importantly, the CA's culture must develop resilience through pride in toughness, service, and selflessness.

Examining the psychology of killing is particularly relevant, as it is often underdiscussed in military doctrine and culture, which prefer indirect and impersonal terms such as destroy or eliminate. However, this research highlights that such matters cannot be trivialized, and that the ability to kill must be developed in soldiers not only by training and conditioning, but with a professional warrior culture. This is necessary to ensure soldiers are equipped with the resilience necessary to have positive emotional and moral outcomes after having been called upon to kill. Unlimited liability (self-sacrifice and killing for the state) and the management of violence are key components of military professionalism, and this research shows why they must remain at the forefront of CA warrior culture despite the changing Canadian social landscape.

The third objective of this paper was to examine how extant notions of warrior culture can be adapted to make them more gender neutral and inclusive. Examining gender and sex with regards to service as a soldier are highly relevant given the sexual misconduct scandals and current culture change initiatives. Building upon the research of Hachey et al, Lapointe, Do, Kovitz, and others, this research emphasises the important distinction between sex and gender. In particular, it shows that biological sex does not determine whether one does or does not possess the necessary abilities to be a soldier or exemplify the principles of warrior culture. Further, it shows that criticisms of the masculinized warrior culture are based upon societal constructs of what is appropriate for a given gender. In fact, some necessary components of warrior culture, such as empathy, are often branded by society as feminine. This research demonstrates that engendering

the qualities which compose warrior culture is unproductive, and it suggests that warrior culture will exist as an informal part of CA culture, even if it is referred to by another name.

Finally, examination of diversity in the CA shows that it still falls short of representing the diversity within Canada itself. Yet, many of the underrepresented demographics possess rich history and tradition of warrior cultures. The development of soldiers is moot if there are not adequate numbers of soldiers to develop, and recruitment is currently a problem for the CA. This highlights that regardless of the content of the CA's warrior culture, public perceptions of the culture must be changed.

Gaps and Opportunities

Hybrid warfare and grey-zone conflict are likely to endure as approaches used by adversaries to achieve their aims against Canada. While much research into these subjects exists, the impact grey-zone conflict has on military professionalism in Canada is not yet clear. More research is necessary to understand how the CAF's potential participation in activities to counter grey-zone conflict might complicate the civil-military relationship in Canada. Or, how this participation may challenge the fundamental purpose of the military as the nation's monopoliser of violence for defence. Additionally, further research is necessary to understand how the CA should adapt its doctrine, tactics, and soldiers' development in order to meet the challenges of hybrid warfare and the multidomain threats described in the *PDFEC*.

Furthermore, this paper does not explore ethnic diversity in the CA to the extent necessary to fully understand how perceptions can be changed and greater recruitment diversity attained. However, it does indicate possible opportunities for new marketing

avenues. Further research should be conducted to understand how the cultures, traditions, and histories of various Canadian subcultures can enable the CA to attract recruits by appealing to their existing values and beliefs. Additionally, such research may enable the CA to incorporate such diverse cultural experience into its own warrior culture and profession.

Suggestions and Resolutions

The research within this paper highlights that the CA must continue to respect the tenets of its military professionalism, understand and improve its culture, and invest in the development of its soldiers. Particularly, the research highlights an opportunity for the CA to address concerns of its masculinized warrior culture. The CA does not need to use the term warrior, but it should recognize that the term is in common use, and that the aspects of the term which are branded masculine are present in the CA's informal culture regardless of the word used to describe them. The term warrior resonates with many soldiers and is used positively in many ways beyond the CA. Further, critics do not unanimously call for the abandonment of its use based on its masculine perception. If the word warrior were not used to describe the culture, it is likely that the same masculine criticisms would still apply. Therefore, the problem is with the culture, and a greater effort is necessary to influence and unify this culture. The CA can create its own ethos, nested within the CAF Ethos, that encompasses the values and beliefs necessary for the success of soldiers fighting in the land environment. This ethos can employ the term warrior as the U.S. Army ethos does, or another suitable word which will appeal to soldiers. It must clearly express the expectation the CA has of soldiers, including the acceptance of diverse genders and ethnicities within the team and the selflessness, pride,

fighting spirit, and other qualities necessary to win wars. Such an ethos adds to the CA's espoused formal culture, enabling greater influence and unity of the informal culture that exists within CA units across the nation.

Final Remarks

As the CA forges toward much needed change with *Force 2025* and improved gender inclusivity, this research provides relevant perspectives which must be considered. The world remains a dangerous place, Canadians continue to change, and the CA needs its soldiers more than ever. Johansen et al state that "society has developed in a direction where the rise of individualism and self-interest has weakened the authority and collective values of the national state, while rights seem to have increased at the cost of obligations," and their research indicates that such an individualist identity negatively impacts military competence.²⁹⁴ The Army may face significant challenges in future battles if the CA becomes a collection of individuals who are fragmented in purpose, values, and beliefs. Fighting in war is a complex endeavour, necessitating teamwork and self-sacrifice.²⁹⁵ The imperatives of the battlefield and changing Canadian society highlight that military professionalism, the CA's warrior culture, and the tough and determined soldiers within the CA are only growing in relevance and importance.

²⁹⁴ Johansen, "Military Identity as Predictor of Perceived Military Competence and Skills," 524.

²⁹⁵ Canada, *Duty with Honour: The Profession of Arms in Canada*, 4.; Sarkesian, *Beyond the Battlefield: The New Military Professionalism*, 7 & 26.

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